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Socio-economic development through the exploitation of natural resources in rural South Africa

Abstract

South Africa has many developmental challenges but three of them have been identified as affecting each other. The three challenges are unemployment, poverty and inequality. The Second Quarter Report by Statistics South Africa (STATSSA) confirms that poverty, unemployment and inequality are highest in rural areas and most especially among people with no or little education. Meanwhile, many people in rural South Africa have access to land which can be used to produce food for the ever increasing population in both the rural and urban areas, as well as for export and other value adding agribusinesses. The task of addressing the challenges of poor communities calls for a multi-stakeholder approach which can include the private sector, NGOs, communities, traditional leaders and the state coming together to pursue economic transformation in rural South Africa by tapping into the natural resources nature has provided for the communities. This article reports on how some stakeholders have come together to transform a rural community in South Africa. The paper uses qualitative data from personal and focus group interviews and observations as the main data collection instruments. The findings indicate that the stakeholders have been able to empower a community by tapping into and effectively using the natural resources in an area to transform it through collaborations and partnerships. The model is recommended to the government and development practitioners for adoption on how the natural resources that exist within communities can be exploited and effectively managed to transform rural economies to ensure inclusive growth and development.

Keywords: agriculture, community, education, stakeholders, transformation.

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Introduction

The apartheid and colonial history of South Africa have been blamed for most of the challenges the country continues to face today. The apartheid policy which was based on racial discrimination deliberately deprived the black majority in the country from obtaining quality education which could enable them to pursue opportunities in the country. Some of the consequences of apartheid which are being felt today include the unacceptably high levels of unemployment, inequality, high poverty levels and low levels of education and skills among a large section of the population. Three of the challenges often cited are poverty, inequality and unemployment which influence each other. The ruling African National Congress party (ANC) in South Africa at its 53rd National Conference in Mangaung in 2012 reiterated that unemployment, poverty and inequality were the triple scourges plaguing the country. Although the three challenges mentioned above are often cited as the most pressing issues affecting a large section of the

population and influencing each other, one may argue that the three challenges often referred to above are the symptoms of the real issues. The main challenges appear to be slow economic growth, lack of proper education and skills and low levels of entrepreneurship among a large section of the population. These problems then manifest themselves into unemployment, poverty and widening inequality in the country.

Merten (2017) intimates that the Second Quarterly Report by Statistics South Africa (StatsSA) in 2017 confirmed that poverty, unemployment and inequality are highest in rural areas and most especially among people with no or little education. StatsSA (2017) adds that in general, children (aged 17 years and younger), black Africans, females, people from rural areas, those living in the Eastern Cape and Limpopo, and those with little or no education are the main victims of abject poverty. There is increasing pressure on the government of the day to address the high levels of poverty and unemployment across the country. The ANC led government of late has adopted Radical Economic Transformation (RET) as a policy to address the socio-economic challenges confronting the country. The ANC (2012, p. 4) at its 53rd National Conference in Mangaung declared, “[W]e are boldly entering the second phase of the transition from apartheid colonialism to a national democratic society. This phase will be characterized by decisive action to effect economic transformation and

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democratic consolidation, critical both to improve the quality of life of all South Africans and to promote nation-building and social cohesion.” The ANC (2012, p. 2) elaborates that, primarily, radical economic transformation is about fundamentally changing the structure of South Africa’s economy from an exploitative exporter of raw materials, to one which is based on beneficiation and manufacturing, in which people’s full potential can be realized. It adds that, to ensure increased economic participation by black people in the commanding heights of the economy, radical economic transformation must have a mass character. The objective of radical economic transformation according to the ANC (2012) is to reduce racial, gender and class inequalities in South Africa by ensuring more equity with regards to incomes, ownership of assets and access to economic opportunities. The need to find different and effective ways of addressing radical economic transformation in South Africa in general and rural South Africa in particular becomes imperative. Meanwhile, many people in rural South Africa have access to valuable resources such as land which can be used to produce food for the ever increasing population in both the rural and urban areas, as well as for export and various value adding agribusinesses. Hlomendlini (2016, p. 6) points out that population projection indicates that the current world population of 7.3 billion will reach 8.5 billion by 2030 and 9.3 billion by 2050 with more than half of the estimated growth expected to be in Africa. The population projections of Africa present both threats and opportunities for the continent. The continent is estimated to possess over 60% of the uncultivated arable land in the world, as well as a high potential human capital base. Maree (2017, p. 30) argues that Africa is recognized as the continent that has the potential to ‘feed the world’. On the other hand, Hlomendlini (2016, p. 6) warns that high population growth poses challenges that can lead to civil unrest, food insecurity and deepening malnutrition in sub-Saharan Africa (SSA). Meanwhile, the National Planning Commission (2011, p. 218) visions that by 2030, South Africa’s rural communities must have better opportunities to participate fully in the economic, social and political life of the country. It adds that rural people should be able to access high-quality basic services that enable them to be well nourished, healthy and increasingly skilled. Furthermore, the NPC (2011) indicates that rural economies will be supported by agriculture and, where possible, by mining, tourism, agro-processing and fisheries. The NPC (2011) estimates that the agricultural sector has the potential to create close to one million jobs

by 2030. The lack of basic education and skills and the effective exploitation and management of the natural resources at the disposal of communities however limit the ability of the rural poor from tapping into the resources they possess to improve their lives. Hlomendlini (2016) meanwhile has identified the lack of technical farming skills, capital and mechanisation as the main challenges facing most farmers. Similarly, Sekhoto (2017) adds that financial management and technical production skills are lacking among most agricultural entrepreneurs. The task for addressing such complex phenomena calls for a multi-stakeholder approach which can include the private sector, NGOs, communities, traditional leaders and the state coming together to pursue government’s radical economic transformation agenda in rural South Africa. Citing Polman (2011), Confino (2014, p. 1) reiterates, “The issues we face are so big and the targets are so challenging that we cannot do it alone. When you look at any issue, such as food or water security, it is very clear that no individual institution, government or company can provide solution”. KPMG International (2016, p. 8) points out that partnership is more than just collaboration on ad-hoc projects. It adds that it is about moving beyond responsibility for independent results to a relationship that involve co-creation, shared risks and responsibilities, interdependency, and organizational transformation. True partnership is about identifying shared value and leveraging the combined strengths of each partner to achieve a level of impact that cannot be achieved by one entity (KPMG International, 2016, p. 8). Bokamoso Impact Investment, a non-profit organization (NGO) has managed to bring stakeholders such as the University of South Africa, AFGRI, the traditional authority and others together to exploit and manage the land and the other natural resources which abound in most rural communities. This initiative is helping to address some of the socio-economic challenges such as poverty, unemployment, food insecurity confronting a rural community in South Africa. There have been a lot of rhetoric by politicians and various stakeholders on the need to transform the South African society to ensure that all sections of the population most especially the previously disadvantaged black majority are able to fully participate in the socio-economic life of the country. Some of the policies that have been implemented as an attempt to transform the economy of the country include affirmative action, land reform, the Reconstruction and Development Programme (RDP), Growth, Employment and Redistribution (Gear), Broad-based Black Economic Empowerment (BBEEE) just to name a few.

Unfortunately, some of the policies and programs have not benefited most of the people on the ground, most especially those living in rural areas.

Henderson (2017) reports that a research conducted by the South African Institute of Race Relations (IRR) in 2016 showed that just 13% of black people benefited from employment equity, 14% from BEE ownership deals and 9% from BEE tenders. It is also widely reported in the media and the farming sector that most of the land restitution programs have failed dismally as the beneficiaries have not been supported well with infrastructure and the skills they needed to succeed in the difficult area of agriculture. Most of the transferred land has either remained fallow or been used for productive activity that has not been profitable (Lahiff, 2007). Several reasons have been given as to why the land reform programme has not achieved its initial policy goals, taking into account the strong agricultural bias in policy as land reform beneficiaries to a large have struggled to convert the acquired land into productive use. This is because the beneficiaries often do not have sufficient access to credit, equipment and technical assistance, and only a small percentage of the land owned is irrigated (Dawood, Flanagan, & Pilusa, 2016, p. 77). Dawood et al. (2016) add that agriculture depends on good infrastructure, but rural areas are still characterised by significant infrastructural backlogs, despite the progress made since 1994 in addressing the challenge in rural areas. The need to find different and effective ways of addressing radical economic transformation in South Africa in general and rural South Africa in particular through the exploitation and effective management of the natural resources in rural communities becomes imperative.

1. Research questions

The main question for this article is: *What approach has the stakeholders in the North West Province in South Africa use to radically transform a rural community through the exploitation and effective management of the natural resources and other support services?*

Sub-questions:

- ◆ What role can the different stakeholders play in equipping rural dwellers to exploit and effectively manage the natural resources they have to ensure the socio-economic development of their communities?
- ◆ What resources do rural communities possess that can be used for their socio-economic development?

- ◆ What skills do rural communities need to be able to use to exploit the agricultural resources they have in their communities?

2. Literature review and conceptual framework

This paper is underpinned by the sustainable livelihoods framework which Scoones (1998) and Carney (1998) are its key proponents. The sustainable livelihoods framework of Scoones (1998) emphasizes the economic attributes of livelihoods as mediated by social-institutional processes. The framework links inputs (designated with the term 'capitals' or 'assets') and outputs (livelihood strategies), connected in turn to outcomes, which combined familiar territory (of poverty lines and employment levels) with wider framings of well-being and sustainability (Scoones, 2009, p. 177). The framework depicts the socio-economic contexts that exist in countries or communities; the livelihood resources that exist in the communities that can be mapped and mobilized through the institutional processes and organisational structures in the system which have to be developed into livelihood strategies that will result in sustainable outcomes.

The framework is relevant and very much applicable to how poor marginalized communities can exploit the natural and other human resources they have in their communities to achieve socio-economic development that can radically transform their communities. The situation the country finds itself in today that is characterised by the triple challenges of unemployment, inequality and poverty are to a large extent the consequences of its history, politics, demographic profiles and social differentiation just to name a few. In all these, the communities irrespective of where they are located possess some form of livelihood resources which they can tap into for their livelihoods. As the framework suggests, various livelihood strategies have to be adopted and applied which can lead to some sustainable livelihood outcomes. The input-output relationships on which the framework is based do not occur in a vacuum but is often mediated by institutions, organisation, and other structures. In the case under study here, the history, politics and social differentiations in South Africa has put the majority black population most especially in the rural areas into marginalization. The communities however have access to certain livelihood resources such as land, social capital through their close-knit systems and communal ownership of land and other resources under the chieftaincy system. A large section of the population depends on agriculture for their livelihoods through various subsistence activities. Various institutions

and organisation which in this case include Bokamoso Impact Investment, the North West Provincial government, AFGRI, the traditional authority and the local community and the University of South Africa have come together as institutions to put resources together to mediate in creating sustainable livelihood outcomes as a model of radical economic transformation thereby giving agency to a marginalised community.

3. Methodology

This study used the qualitative method of enquiry through semi-structured individual interviews, a focus group and observations to collect data from respondents on three training activities in the agriculture, basic literacy and numeracy and basic entrepreneurship. The observation included the practical application at the hub where the training is conducted as well as the application of what the learners have learnt in their homes and communities. The purposive sampling technique was used to select the participants who included the CEO of Bokamoso Impact Investment, 6 adult learners who have gone through the training, the chief of the village where the project is located. The other participants included an official from the office of the Premier of the North West Province of South Africa, which represents the government, and one academic from the University of South Africa's Department of Adult Basic Education and Training and Youth Development. The data were collected for three days (July 19-21, 2017) at Manyeledi village where the entire stakeholders met for the official hand over of equipment and materials to the project by the Provincial government. The phenomenon of stakeholders collaboration of to address socio-economic challenges through the exploitation and effective management of the land and the other natural resources in rural communities is what is being investigated in this study. A phenomenological study is a study that attempts to understand people's perceptions, perspectives, and understanding of a particular situation (Leedy & Ormrod, 2005).

3.1. Population. Population is defined as the aggregate of cases with a common assigned criterion and features as subjects for a study. The target population for this study comprises all the adult learners who are currently registered for the ABET classes, past ABET graduates, current and past trainees in the agricultural training, all the staff of BII, project members from the (DABETYD) and all the members of the chief's council and officials from the office of the premier who are assignment to the Province's Township, Villages and Small Dorpies Program in the office of the Premier of the North West Province of South Africa.

3.2. Sampling. The non-probability sampling approach based on the convenience technique was applied in this study as it was deemed relevant for collecting data from few participants who could provide credible and relevant information on the phenomenon under study. The use of non-probability sampling in research does not guarantee that each of the elements of the population will be represented in the sample. This study is based on a single case study in a small community in the North West Province of South Africa involving a small number of participants. The findings are based on limited information which may apply to this case and can thus not be generalized.

3.3. Criteria for inclusion in the study The people who were considered for the study had to meet the following criteria:

- ◆ should be past or currently registered youth the ABET learner in the ABET and agricultural training at the BII hub;
- ◆ should be a BII staff member;
- ◆ should be from the office of the premier;
- ◆ should be a lecturer at the Department of ABET as a member of the project team;
- ◆ should be from the chief's council.

3.4. Data collection. The researcher used his past contacts with the CEO of BII to arrange with all the stakeholders and to obtain permission to do the observations at the hub and at the homes of the ABET learners on how they are applying what they have learnt to grow vegetables. He conducted a semi-structured interview with the past students. Six other past learners were contacted who agreed and participated in the focus interview 20 July 2017. The convenient sampling is a technique in which particular settings, persons or events are selected deliberately in order to provide information that cannot be obtained from other choices (Wilson, 2010). In this study, the participants were adult learners and the youth in the training in ABET and agriculture, staff of BII under the CEO as the initiators of the project, and academics from UNISA's who are offering the support for the ABET training, as well as the training in entrepreneurship for the beneficiaries. The individual interviews took place at the homes and work places of the past ABET learners at the times they indicated were convenient to them.

The interviews were tape recorded in addition to a journal that was used to record issues which frequently occurred during the interviews with the participants. Each of the interviews lasted for between 20 and 30 minutes.

4. Results and discussion

The analysis of the semi-structured interviews from the participants was done through constant comparison analysis method to identify the common themes, issues and words that recurred in the interviews which enable me to answer the research questions. The recorded transcripts of the interviews were analysed to determine a number of levels of text analysis which occurred as suggested by Schwandt (2007). The process involved the unedited initial draft, the second edited version which was developed to support the data analysis before the coding of the text was conducted. After that, I read and reviewed the transcript a number of times to record thoughts, questions and the ideas as recommended by Strauss and Corbin (1998). The overall picture of the cases, as well as integrating the meanings of issues of the typical experiences of the participants were developed as the themes, based on the research questions. Some selected responses from the interviews were translated verbatim to capture the experiences and feelings of the participants. The main themes that emerged from the study include collaboration and partnerships, empowerment, effective exploitation and management of land and natural resources for socio-economic development, taming the environment through technology and restoring hope in a marginalized community.

4.1. Collaboration and partnerships. It emerged from the interviews and observations that, there is evidence of collaborations and strong partnerships that have been built between the different stakeholders to train and support the members of a marginalized community. As indicated earlier in this paper, some of the partners in the initiative include BII, the North West Provincial government, Unisa and the traditional authority. BII as the initiator of the project provides the training at the hub in agriculture, incubation of the trainees, conducted the study to locate underground water and drilled for the water which is being used to irrigate the crops, while UNISA'S Department of Adult Basic Education and Youth Development (DABETYD) is supporting the basic numeracy and literacy training and the training in entrepreneurship for the participants. The North West provincial government since coming on board has provided considerable amount of resources including clearing a 100-heactare plot of land and fenced it, built a big storage facility, provided a 140-meter pivot irrigation system and a brand new tractor with its tools and implements among others. The traditional authority under the chief which is the custodian of the land has mobilized the community to be part of

the project and has generously availed over 1000 hectares of communal land to the project where community members and trainees can cultivate vegetables for the market, home and consumption and exporting to neighbouring Botswana. At the graduation and handing over of equipment ceremony at the hub on July 21, 2017, the Premier of the North West Province praised the collaboration and partnerships between the stakeholders.

The CEO of BII applauded the collaboration and partnership which is yielding positive results saying:

"It has been a long journey establishing this partnership and collaboration between our different stakeholders but today, we are all witnesses to what we as stakeholders can do if we come together to address challenges confronting our communities. We have in effect developed a model that can be used to radically transform marginalised communities both socially and economically in a sustainable manner".

The project leader from the UNISA's DABETYD applauded the initiative and said

"We have different capabilities and strengths to make this initiative sustainable. From our side as an educational institution, we have realised that a lot of initiatives fail because those who are supposed to be helped are not given the education and training they need to sustain projects. That is why we are supporting in providing the basic education and entrepreneurial skills the trainees need to run their farms as proper businesses".

The views expressed here by the different stakeholders are in line with the NPC's (2011, p. 220) for the need for cooperation and support for rural agriculture noting, "Creating jobs in agriculture will not be easy as it will require credible programmes, sound implementation, significant resources and stronger institutions, such as agriculture departments in local and provincial government".

The need for collaborators and partners to support radical economic transformation which ensures inclusive growth is in line with Dawood, Flanagan, and Pilusa's (2016) observation that "South Africa's land reform program has not reached its policy objectives for various reasons; among these are the failure by government to provide adequate services to make the redistributed land productive, and the lack of access to credit, equipment and technical assistance, which makes it difficult for land reform beneficiaries to put land to productive use". Phillips

(2017, p. 21) confirms that some of reasons for the much talked about failure of land reform initiatives that are aimed at transforming the agriculture sector are confirmed which include government's focus on land reform process focusing on land acquisition with little consideration given to the requisite post-settlement support, skills development and financial assistance. Coleman (2017, pp. 30-31) confirmed the need for collaborations and partnerships to be able to transform the agriculture sector, arguing that transformation in the sector should take a holistic approach and not in isolation by taking into account the complete picture of what has been done, and identify where more needs to be achieved. She adds that the "biggest success stories are those where people form partnership, knuckle done and get the job done". She further recommends that a hurdle that has to be overcome is for transformation to be seen within the context of win-win partnership, instead of saying the cake is a certain size and need to be shared equally, rather, the focus should be on the ways and means to grow the cake bigger through agropreneurship. The initiative in this case appears to be a positive development which can change the tide in the right direction.

4.2. Sense empowerment. From the observation and the interviews, it emerged that the beneficiaries of the training at BII have been empowered through education, as well as through the support services such as the incubation which is being provided by the different stakeholders. From the focus group interview and the individual interviews, the participants expressed their views on how they have been empowered. For example it was reported at the focus group that

"All the six of us here have started our own vegetable gardens where we are producing vegetable for ourselves and sometimes we are able to sell to our surpluses to neighbours. Before we had the training we did not know that we could grow vegetables in this sandy soil here but we are now doing and saving money".

During the observations at the hub and the homes of the participants which were visited, it was noted that the vegetables are grown in lines where drip irrigation using small plastic pipes which are connected to pipes. When asked why this method of irrigation is used, one of the interviewees answered

"We learnt during our training that we have to conserve water and do not also have to over irrigate so if you can see (pointing to the root of the plants), the water only gets to the root of the plant when required which deprives any weed the water. This is the reason why you hardly see any weeds in the plot.

Besides that, I know exactly the number of plants on the plot and maximise the space I have here".

The statements from the respondents clearly indicate empowerment as it is clear that transformative learning has taken place as the participants through education have been empowered to take action about the situations they found themselves in. The sense of empowerment expressed here is in line with Freire's educational ideas which shed light on the important contribution to understanding educational practices and the relevance to education and development in contemporary Africa in terms of the extent to which they are still applicable to addressing the socioeconomic challenges societies and marginalised communities face. These ideas include Freire's theory of conscientization and dialogue, liberation education, a criticism of banking education, and a criticism of the concept of extension as cultural invasion. Nyirenda (1996) points out that the examination of these ideas shows that, given the existing realities in African societies today, particularly in the rural areas, Freire's ideas now appear more relevant to education and development in Africa than ever before. The empowering role of basic education is affirmed by the United Nations Education, Scientific and Cultural Organization (2005, p. 1) which observed that 'literacy for all is at the heart of basic education for all ... [and] creating literate environments and societies is essential for achieving the goals of eradicating poverty, reducing child mortality, curbing population growth, achieving gender equality and ensuring sustainable development, peace and democracy'. The trainees in this initiative appear to have gained consciousness and acted to improve their lives as well through basic education and training.

4.3. Effective exploitation and management of land and natural resources for socio-economic development. The participants described in detail how they have exploited and managed the land and other natural resources such as the underground water and the vegetation to produce food and the creation jobs for themselves and their community. The need to use the resources nature endows communities with for sustainable development is emphasised by the World Conservation Strategy (IUCN, 1980) that "the maintenance of essential ecological processes and life-support systems, the preservation of genetic diversity, and the sustainable utilization of species and ecosystems", with the overall aim of achieving 'sustainable through the conservation of living resources'. For example, the Chief of the village who is the custodian of the land on behalf of the community said

"The community has taken a decision that we should not sell any portion of the land which belongs to the community to anybody. We have agreed that the land should be kept for the use of members of the community where they will be able to use the natural resources for farming and projects that can benefit all or most of its members. We have demarcated 1000 hectares of the land for this project which is going to benefit any member of this community who is interested in farming".

One of the participants during the interview pointed to the nearby vegetation and echoed

"We as a community are very jealous of our inheritance which is the land our forefathers left for us. That is where our animals graze which is the main economic activity here. Now we are going into subsistence and commercial agriculture because of the underground water which Bokamoso has drilled for us. In addition to that, we have now been introduced to bee farming as you can see all around where the honey we harvest is now being exported".

The manager of BII confirmed that the traditional authority had made about 1000 hectares of land available to the project. She indicated that the land and the other natural resources such as the underground water in the areas are being used optimally to produce food for the community and beyond. She said

We have cleared 100 hectares of the land and channeled the water from where it was located three kilometres away to the fields. The machines are busy clearing another 200 hectares of the land for the next season. We hope to put at least 500 hectares under cultivation in a year's time. This is going to be a game changer here!

The exploitation and management of the natural resources by the participants and BII to produce vegetables and other food items is contributing to economic growth and ensuring sustainable livelihoods in the area. The approach is in line with Scoones' (2009) sustainable livelihoods framework which links inputs (designated as 'capitals' or 'assets') and outputs (livelihood strategies) which if combined and managed properly in turn lead to outcomes, which address the challenges of poverty and employment in communities with wider framings of well-being and sustainability.

4.4. Taming the environment through technology. The use of technology to tame the environment is evidenced everywhere at the hub. The whole region is semi-desert where only certain types of shrubs are found. Technology it was observed has been used to locate underground water

in large quantities about three kilometres away from the hub which has been drilled to irrigate the crops. The technology is allowing the participants to grow crops twice a year. On the prospecting for the water and applying technology for production at the hub, the CEO of BII said

"When we said we were going to grow crops here and needed support, we were told that there was no water that is why crops are not grown in the area. We engaged Ages Hydrology to see where we could find water in the area and guess what. They found so much water than we need for the whole area and the rest is what you see here today. You also see the central pivot irrigation system there (pointing to the system) and the tractor and other equipment. We are applying all the scientific methods to ensure that the participants become commercial vegetable farmers and not just subsistence farmers. In addition to that, we have introduced them to bee farming where each participant is starting with four beehives which will be a by-product from the farming activities here where they can generate income from the honey they produce while waiting for the crops to mature. Besides that, you can also imagine the symbiotic relationship that is going to develop here regarding the pollination of the crops by the bee and the bees from the flowers of the crops. The very day we brought the first two beehives here, the bee came and filled them up".

The view of the CEO of BII on applying technology to tame the environment for productive purposes was evident at the hub. She explained to the researcher in detail how her organisation contracted a company specializing in hydrology to prospect for underground water using RIVER – F device. The RIVER – F device is one of the latest technologies used to detect underground water with ability to determine the type of the water, and the depth of water up to depth up to 1200 m and Front Range is 3000 m square. Water was found, drilled and taken to the hut three kilometres away for watering the crops. The other technologies applied at the hub for precision agriculture she explained include testing the soil for the crops that are suitable for the area, improved seeds, drip irrigation to conserve water just to mention a few. The need to use technology in production in agriculture is supported by Hruby (2017, p. 12) who intimate that farmers in Africa need to modernize their agricultural practises by not "not shying away from – the globalized economy, technology, open trade, and markets".

4.5. Restoring hope in a marginalised community. The sense of restoration of hope in this marginalized community is evidenced through the observations and the stories of the different

stakeholders. The trainees expressed hope for their activities. The officials from the provincial government and the manager of BII all expressed optimism of the way the lives of individuals, families and the community are going to be radically transformed in few years ahead. From the focus group it was reported that:

We mainly depend on social grants for our survival, supplemented with the rearing of animals but we see that very soon we are going to be able to employ ourselves and other members of our community and possibly from outside the community as well. We will need permanent and casual labor throughout the year on the two hectare plots we are going to work on. Our children relatives will stop going to towns and cities to look for non-existing jobs”.

One official from the office of the Premier added:

“This initiative is in line with our Township, Villages and Small Dorpies concept, which the Premier has been drumming up and supporting in our province. Our communities are predominantly rural which should depend on the resources nature has provided for us. This initiative has the potential to drastically reduce the challenges of unemployment and poverty in rural communities and should be propagated in the whole province and the other parts of the country, mostly especially in the rural areas where land and other natural resources abound. This is the hope for the future for poor and marginalised communities”.

The CEO of BII also expressed optimism about the manner in which the initiative can radically transform rural communities. She outlines some of the initiatives her organization and the other stakeholders are taking to make the project sustainable. She mentioned that the participants are being registered to form a cooperative to market their produce around the area and just across neighbouring Botswana where markets have been secured in the short-run but also get into agro-processing in the long run. Among others, she said

“We will continue to incubate the participants after their training and wean them off after some time to bring more community members into the programme. They are to focus their energies on the production of the crops as we have secured markets with the challenge being our capacity to supply the market. We see so much hope for the future through this partnerships and collaborations”.

This hope for creating sustainable livelihoods including the reduction of poverty and reduction in the levels of unemployment in rural areas is in line with the objectives of the NDP, which envisages creating about one million jobs by 2030 and

contributing to the reduction of poverty in rural communities. For example, the NPC (2011, pp. 219-220) points out that agriculture has the potential to create close to 1 million new jobs by 2030, a significant contribution to the overall employment target. This it emphasizes can be achieved through:

- ◆ expanded irrigated agriculture by putting 1.5 million hectares under irrigation (which produce virtually all South Africa’s horticultural harvest and some field crops) which can be expanded by at least 500 000 hectares through the better use of existing water resources and developing new water schemes;
- ◆ earmarking some underused land in communal areas and land-reform projects for commercial production;
- ◆ picking and supporting the commercial agriculture sectors and regions that have the highest potential for growth and employment;
- ◆ supporting job creation in the upstream and downstream industries;
- ◆ developing strategies that give new entrants access to product value chains and support from better-resourced players.

The objectives above from the NDP to a large extent are being addressed through this initiative but what is most admirable is the practical and sustainable ways that are applied by the collaborators in the endeavor. Some of these include the education and training, incubation of the trainees after the training coupled with the entrepreneurship education for them to see and run their activities along sound commercial principles.

Conclusion

The article investigated how various stakeholders through collaborations and partnerships have managed to cooperate by pulling resources together to empower a rural community using the assets they possess such as the natural resources and human capital. The sustainable livelihoods framework was used as the conceptual framework for the study. The framework depicts the socio-economic contexts that exist in countries or communities; the livelihood resources that exist in the communities that can be mapped and mobilized through the institutional processes and organizational structures in the system which have to be developed into livelihood strategies that will result in sustainable outcomes. The challenges facing rural communities were discussed briefly. The policy of radical economic transformation as an approach to tackling the socio-economic challenges confronting the country and the rhetoric of politicians were also discussed in brief. The pragmatic approach of the stakeholders resulted in developing five themes from literature

and the empirical study which include collaboration and partnerships, empowerment, exploitation and effective use of the land and other natural resources to produce food, taming the environment through technology and restoring hope in a marginalised community.

Recommendations

On the basis of the positive outcomes from the approach used by the stakeholders in this research, it is recommended that the government, researchers, development practitioners and the other interested stakeholders should who want to radically transform rural areas should:

- ◆ Embrace a holistic approach that combines education and training, entrepreneurship education, incubation of trainees and mentorship programmes.
- ◆ Help trainees to have access to technology and apply them in their productive practices.
- ◆ Adopt the model for other rural communities that want to improve their living condition.
- ◆ Support communities which adopt the model to have access to government and private tenders to supply their produce to institutions such as hospitals, schools, prisons etc. for them to have secure markets.

References

1. African National Congress (2012). 53rd National Conference Resolutions. *The 53rd National Conference held from 16-20 December 2012 in Mangaung*.
2. Carney, D. (1998). Sustainable livelihoods approaches: Progress and possibilities for change. Department for International Development (DFID).
3. Coleman, A. (2017.) Agri transformation: the time for talking is over. *Farmer's weekly*, 30-31.
4. Confino, J. (2014). Unilever's Paul Polman: Challenging the corporate status quo. *The Guardian*. Retrieved from <http://www.theguardian.com/sustainable-business/paul-polman-unilever-sustainable-living-plan> (accessed on April 24, 2017).
5. Dawood, G., Flanagan, J., & Pilusa, T. (2016). The National Land Reform Programme and Rural Development. Chapter 3 in FFC. 2016. 2017/2018 Submission for the Division of Revenue, Technical Report. FFC: Midrand.
6. Henderson, R. (2017). BEE has failed, introduce voucher-based EED. *Business Day*. Retrieved from <https://www.businesslive.co.za/bd/business-and-economy/2017-04-04-bee-has-failed-introduce-voucher-based-eed/> (accessed on 15 May 2017).
7. Hlomendlini, H. (2016). SA commercial farmers key to Africa's food security. *Farmer's weekly*, 6-7.
8. Hruby, A. (2017). How to close Africa's jobs gap. *Lesotho Times*, 12.
9. IUCN (1980). *World Conservation Strategy: Living Resource Conservation for Sustainable Development*. IUCN-UNEP-WWF, Gland, Switzerland: pack of c. 50 unnumbered pp., illust., in stiff folder.
10. KPMG (2016). Unlocking the power of partnership: A Framework for effective cross sector collaboration to advance the global goals for sustainable development.
11. Lahiff, E. (2007). State, market or worst of both? Experimenting with market-based land reform in South Africa. Occasional Paper No 30, Programme for Land and Agrarian Studies, University of the Western Cape.
12. Leedy, P. D., & Ormrod, J. E. (2005). *Practical research. Planning and design*. Eighth edn. International edition. New Jersey: Pearson Merrill Prentice Hall.
13. Maree, D. (2017). Creating a climate for African agricultural boom. *Farmer's weekly*, 30-31.
14. Merten, M. (2017). StatsSA Poverty Report 2017: Policies fail the people of South Africa. Daily Maverick. August 23, 2017. Retrieved from <https://www.dailymaverick.co.za/article/2017-08-23-statssa-poverty-report-2017-policies-fail-the-people-of-south-africa/#.Wg7galWWaN4> (accessed on September 14, 2017).
15. National Planning Commission (2011). *National Development Plan 2030. Our future-make it work*. The Department of the Presidency. Republic Of South Africa.
16. Ngwenya, G. (2017). Put education first to transform the economy. *City Press*, 5.
17. Nyirenda, J. E. (1996). The Relevance of Paulo Freire's Contributions to Education and Development in Present Day Africa. *The African e-Journals Project*. Retrieved from <http://digital.lib.msu.edu/projects/africanjournals> (accessed on 20 June 2017).
18. Phillips, L. (2017). Smarter land reform a key focus of Kwanulu strategy. *Farmer's weekly*, 21.
19. Polman, P. (2011). The importance of collaboration. *The Guardian*. Retrieved from <https://www.theguardian.com/sustainable-business/unilever-ceo-paul-polman-interview> (accessed 3 August 2016).
20. Schwandt, T. A. (2007). *The SAGE dictionary of qualitative inquiry*. Los Angeles, CA: Sage.
21. Scoones, I. (1998). *Sustainable rural livelihoods: a framework for analysis* (IDS working paper, 72). Brighton: IDS.
22. Scoones, I. (2009). Livelihoods perspectives and rural development. *Journal of peasant studies*, 36(1), 171-196.
23. Sekhoto, N. (2017). How young black farmers can make headway in the industry. *Farmer's weekly*, 30-31.
24. Statistics South Africa.(2017). Poverty on the rise in South Africa. Retrieved from <http://www.statssa.gov.za/?p=10334>. (accessed on September 20, 2017).
25. Strauss, A. L., & Corbin, J. (1998). *Basics of qualitative research techniques and procedures for developing grounded theory* (2nd. ed.). Thousand Oaks, CA: Sage.
26. UNESCO. (2005). *EFA Global Monitoring Report 2006. Literacy for Life*. Paris: UNESCO Publishing.
27. Wilson, J. (2010). *Essentials of business research. A guide to doing your research project*. London: Sage Publications Ltd.