Chapter 9
Attitudinal Changes Towards Agriculture Through the Generational Lens and Impact on Engagement in Related Activities: Case Study From a Mountainous Area

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Introduction

Mountains in Africa collectively occupy approximately 3,000,000 km2 of its surface area (Bagoora 2012; UNEP 2012). These mountainous areas aside from their aesthetic value also provide critical livelihood-sustaining services such as supply of water, food and energy as well as other essential needs of people across the social strata especially vulnerable groups (UNEP 2012). In addition, mountains supply more than half of the African populace with water as most of Africa's principal rivers have their source from mountains that sustain the fundamental needs of both up- and downstream communities (Alweny et al. 2014).

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Moreover, by virtue of their high fertility, mountain areas sustain highly intense agricultural practices ranging from commercial to subsistence smallholder systems (Mugagga et al. 2010). Furthermore, the slopes of mountains support a variety of ecosystems mirroring the differences in climate, soils and landscapes (Alweny et al. 2014). For example, the fynbos biome in South Africa hosts circa 6200 flora species regarded as endemic which is not an isolated case. The associated biodiversity cum ecosystem services sustain the production of both timber and non-timber forest resources, including nutrition and essential medicines, whilst the spectacular massifs afford alluring panoramas with viable potential for tourism (Alweny et al. 2014).

There exists a plethora of land-based livelihood activities in mountain environments, which together support the livelihoods of large sections of the South African populace especially in the rural areas (Hoffman 2015). However, the manner in which the environment is utilized and valued has essentially changed over the last century (Hoffman 2015). Land was a chief resource in the pre-industrial era, when the economy and social relations were founded on agriculture (Cousins and Walker 2015). However, the number of people directly engaged on agriculture has significantly dwindled with the onset of the mining revolution towards the end of the nineteenth century which is akin to the quota of agriculture to the country's gross domestic product (Cousins and Walker 2015). In 1980, 57% of the population was categorized as rural, but this was reversed by 2001 as 57 % of the population was reported as urban rising to 63 % in 2014 (Cousins and Walker 2015). Furthermore, the chief sources of livelihoods have shifted from being disproportionately land-based to depend on wages, remittances and (increasingly) on social welfare grants. Consequently, in contemporary times, agriculture forms the chief livelihood of a tiny minority even so, small-scale farming in the former homelands is vital for household food security (Cousins and Walker 2015). For example, whilst there were 120,000 South African farmers in 1994, this had dwindled to 37,000 by 2012 (Farmers Weekly 2012). This has led some to posit that there is a shift towards 'deagrarianization' of rural areas (Neves and Du Toit 2013) which affects the rural economy and the rural youth who perceive little potential in the sector (FAO 2016). Despite this assertion, agriculture still has a vital role to play in sustainable development in Southern Africa and globally. Thus it could be surmised that the future of food security would depend on these rural youth. However, across the globe, youth hardly ever identify themselves with agriculture or rural areas (FAO 2016). Rural youth in particular are confronted with several challenges in their attempt to make a livelihood (FAO 2016). Increasing pressure on arable land the world over is an impediment for starting a farm.

Agriculture and Youth Employment in South Africa

South Africa's relatively good infrastructure, counter-seasonality to Europe, abundant biodiversity and aquatic resources, as well as competitive farm input prices can propel it into a global leader in the agricultural sector (European Parliament 2015).

Agriculture's potential to create jobs for the nation's teeming youth is one reason for its prominence in South Africa's National Development Plan (NDP) which seeks to provide a million jobs by 2030. Hence there are developing state interventions to enhance the country's agricultural training institutions so as to draw more youth into the sector (Farmers weekly 2012). The goals of NDP pertaining to agriculture require a skilled human resource base. It also demands delivering comprehensive support for smallholder farmers such as accelerating land reform and provision of technical, infrastructural and financial support (DAFF 2016). This has become urgent as South Africa is third in the world for countries with high levels of employed young people within the age cohort of 15–24, as over 50% of South Africans in this age bracket are projected to be unemployed (South Africa info 2014).

Furthermore, with climate change and variability becoming more palpable, it has become imperative to adopt best management practices and to improve agricultural resilience (Bezu and Holden 2014; FAO 2014). This involves having the requisite skilled human capital to make such resilient agriculture successful. The youth represent a potential human resource base which can be nurtured with the necessary skills to realize such resilient agriculture. However in spite of the potential of agriculture to help create income-generating opportunities for the world's teeming rural youth, problems associated predominantly with youth participation in the sector bedevil its development and progress in the rural milieu (FAO 2014). Placing a premium on rural development and agricultural investment – crops, livestock, forestry, fisheries and aquaculture – is crucial to ending poverty and hunger.

This study reported here thus contributes knowledge on enhancing youth involvement along the agricultural value chain. The core objective is to interrogate the causal factors that impede or disincentivize the youth from engaging in agriculture and proffer some possible remedies to addressing these challenges. Given that a key narrative in the Sustainable Development Goals (SDGs) is *Not Leaving Anyone Behind*; addressing the needs of vulnerable groups such as the youth is necessary to realizing such noble objectives. The effective intergenerational cross-pollination of ideas is crucial to the successful management of ecosystem services that sustain agriculture and the associated rural smallholder systems (Fig. 9.1).

United Nations member states have acknowledged that the dignity of persons is essential and that the SDGs should be realized for all people and segments of society. Moreover, they have committed to redouble efforts at meeting the basic needs of those furthest behind (UNSTATS 2018). Mountain communities by virtue of their remoteness and rugged landscapes are often marginalized – benefiting very little from development dividends. Moreover, the youth and elderly represent vulnerable groups which are disproportionately affected by such skewedness. In addition, the environmentally sensitive livelihoods of these rural mountain dwellers and related fragile ecosystems make them vulnerable to climate change and compromised ecosystem service functions (Mutoko et al. 2015). Agriculture represents a key lever for sustaining these vulnerable communities and their livelihoods (Hoffman 2015). The elderly generation embody the indigenous knowledge or biocultural heritage which has been bequeathed from past generations. By virtue of the fact that indigenous peoples have adjusted to severe climatic conditions across several generations, this

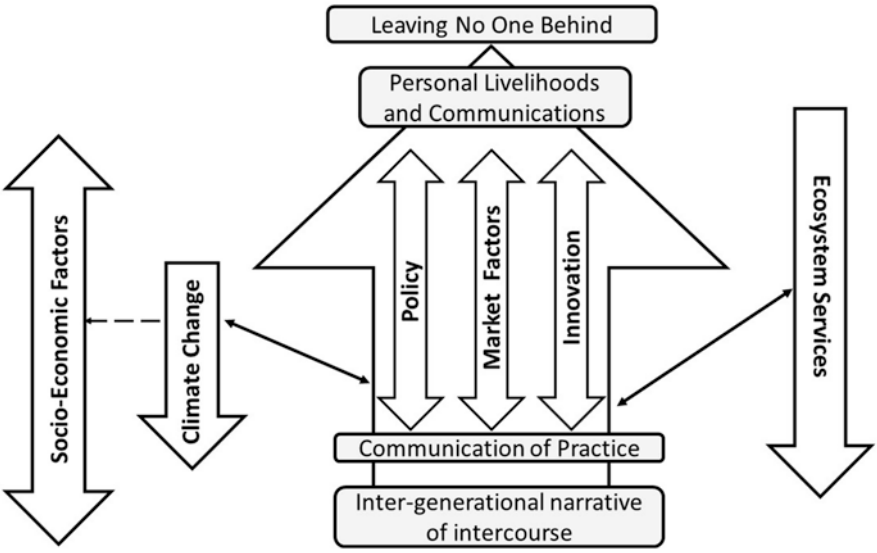

Fig. 9.1 Flow diagram of thematic areas of the study

heritage is vital for food security in the light of climate change (IIED 2018). This is transferred to the youth by way of socialization. The youth are also exposed to new knowledge which calls for an intergenerational intercourse to build communities of practice that will propel the entire agricultural value chain (Mutoko et al. 2015). This is complemented by an enabling policy framework, favourable market conditions and the innovation or adaptive capacity of the farmer (Tibesigwa et al. 2016). Ultimately, this process feeds into building resilient agricultural systems and livelihoods that help to Leave No One Behind (Fig. 9.1).

Methodology

Narrative inquiry or narrative analysis is a qualitative research technique which employs field texts, like conversations, interviews and life experience amongst others, as the units of analysis to study and comprehend how people make meaning in their lives as narratives (Clandinin and Connelly 2000). From the point of educational research, some argue that human beings are essentially storytellers who, as individuals and communities, lead storied lives. Hence an analysis of the narrative is the key to understanding the ways people experience the world (Connelly and Clandinin 1990). Ultimately education and educational research are the production and reproduction of individual and social stories; students, teachers and researchers are regarded as story reciters and characters in their personal and other's stories (Connelly and Clandinin 1990). In this study, analysis is hinged on the conversations and interviews on the changing attitudes towards agriculture between the youth and the older generation with the aim of understanding causative factors and the dynamics of this phenomenon.

Research Design and Data Collection

Data collection was done in October 2015 and March 2016 employing household interviews and key informant interviews. The data comprised of biographical information, views on attitudes and changing nature of rural agriculture. Socio-economic data were collected by medium of a semi-structured questionnaire in households. For the interviews, 50 community members were randomly sampled from the 4 constituent zones of the study site (Fig. 9.2). In addition, interviews were conducted with 20 key informants who were selected due to their unique insights on the thematic area under study (USAID 1996). The informed consent of each interviewee was sought

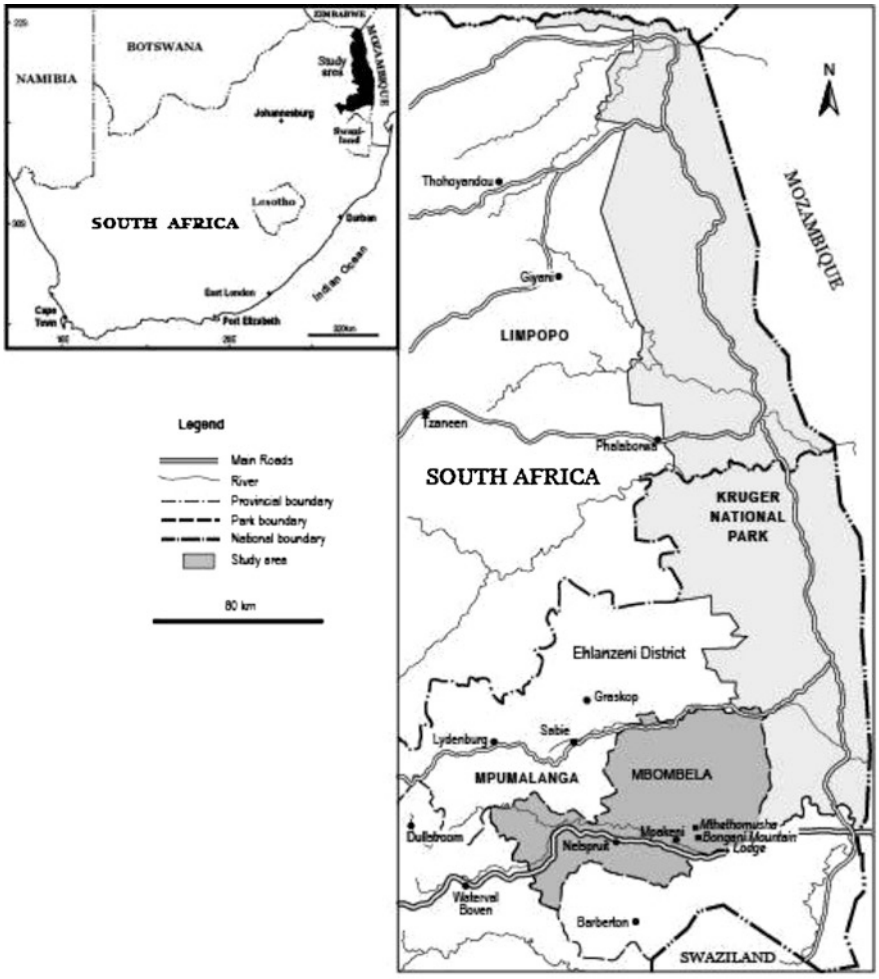

Fig. 9.2 Location of the study area
Overview of the study site (Mpakeni)

before the interview was conducted. As the study involved issues on ethics, ethics clearance was gained from the University of the Witwatersrand non-medical human subjects research committee with a certificate number H15/09/05.

Data Interpretation and Analysis

During the key informant interviewing process, pertinent points were noted and the interviews recorded and transcribed. Through a thematic content analysis, the principal recurring themes relating to the nature of attitudes and importance given to agriculture by the youth and the elderly were integrated as per *meaning condensation*. Consequently, the accounts of interview subjects were condensed into phrases mirroring the principal idea expressed (Kvale and Brinkmann 2009). All interviews were coded to guarantee the anonymity of respondents. The data interpretation and analysis is summarized in Fig. 9.3.

Study Site: Mpakeni Village

Mpakeni village is one of the four constituent communities which form the Mpakeni Tribal Authority together with Daantjie (where the chief resides), Luphusi, Zwelisha and Mpakeni. It is located in the Nsikazi District of the Mpumalanga Province

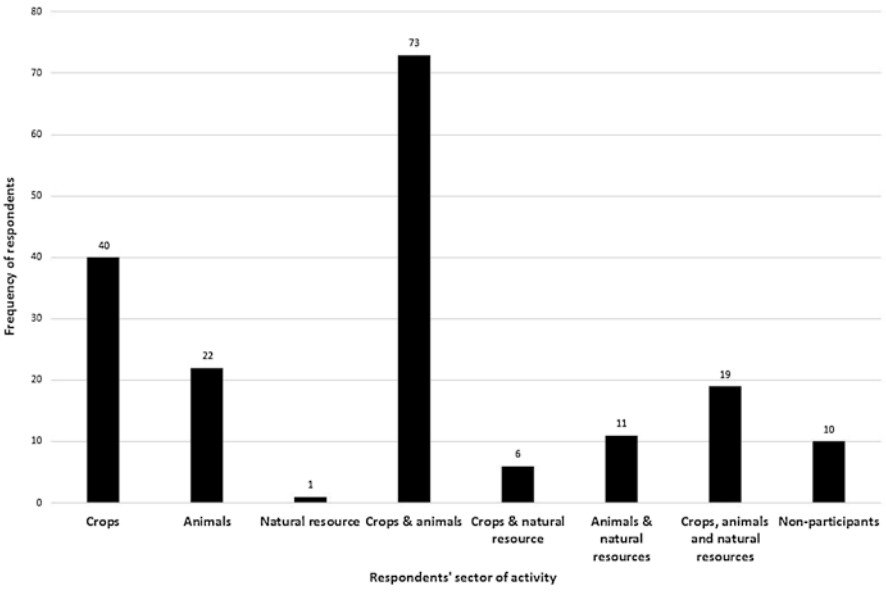

Fig. 9.3 Breakdown of livelihood options of sample population
Distribution of respondents across different sectors of land-based livelihood activities

(north-eastern South Africa), in close proximity to Swaziland and Mozambique. It is represented by the geographical coordinates 25° 29' 08" South, 31° 16' 38" East with an altitude of 821 m above sea level. Most people in the area of siSwati (Swazi) – and Xitsonga (Tsonga) (–) descent (Van Riet et al. 1997).

A homestead refers to the living space of a household and may comprise of a single or several houses (Ellis 2000). Furthermore a household is composed of single or several individuals who share a dwelling as well as meals (Haviland 2003). The household also represents the rudimentary unit of analysis in several socio-economic models (O'Sullivan and Sheffrin 2003). Nonetheless, there was lack of official census data on the population of the study site at the time of study (E., personal communication, July 5, 2015; N., personal communication, October 5, 2015). In order to gain an accurate projection of the Mpakeni population, relevant government agencies were consulted (L., personal communication, July 30, 2015). Other people who have done studies on related topics in the Mpumalanga province were also consulted and juxtaposed with published material on the area (Twine et al. 2003) to suggest an average of six individuals for a household. This household mean was also confirmed in the course of a community mapping process. In addition, Google Earth was employed in counting homesteads in Mpakeni. This involved performing a search on Google Earth with the target site being Mpakeni in Mpumalanga Province of South Africa at diverse scales (1 km, 500 m) to make the homesteads visible for computing. A hard copy was also made and compared with the digital version. Circa 270 homesteads were counted. An average of six people per household was multiplied by the overall number of homesteads computed from Google Earth to arrive at a population of 1620 individuals ($270 * 6$). The spatial outlook of the study site is depicted in Fig. 9.2.

Results and Discussions

To the best of our knowledge, this is the first study that looks at the intercourse of intergenerational dialogue premised in our mountainous context and its relation with sustainable agriculture and goal of Leaving No One Behind. It is pertinent to engage with the relations between individual stories and popular discourses or dominant narratives and evaluate the implications for requisite interventions.

Moreover, respondents provided diverse perspectives on the themes under investigation which were expounded in the aforementioned narratives. Consequently, the views of key informants concerning the dwindling interest of the youth in participating in agriculture compared to the older generation are woven around the tapestry of divergent narratives.

The majority of household heads were females with households receiving an average of three social welfare grants. There were a total of 183 respondents made of 81 (44.3%) males and 102 (55.7%) females (Table 9.1). The households had an average of six (6) household members, one person permanently employed and receiving an average of three social welfare grants.

Table 9.1 Breakdown of the sample population according to age and gender
Sociodemographic profile of study respondents (n = 183)

	Frequency	Percentage
Age range		
[a]18–24	7	3.8
25–34	27	15.3
35–44	50	27.3
45–54	30	16.4
55–64	25	13.1
65–74	31	16.9
75–84	9	4.9
85+	4	2.2
Total	183	100
Gender		
Male	81	44.3
Female	102	55.7
Total	183	100

[a]*NB. The age range starts from 18 in consonance with ethics requirement*

Table 9.2 Breakdown of agriculture-related activities of the respondents
Age distribution of respondents vis-à-vis their agriculture-related activities (n = 183)

	Frequency	Percentage
Age range		
[a]18–24	7	4.1
25–34	22	12.7
35–44	49	28.3
45–54	28	16.2
55–64	25	14.5
65–74	29	16.8
75–84	9	5.2
85+	4	2.3
Total	173	100

[a]*NB. The age range starts from 18 in consonance with ethics requirement*
The most predominant age groups in agriculture were 35–44 years, 65–74 years and 45–54 years in descending order

Agriculture is a key source of livelihood sustenance in many rural areas such as the study site (Fig. 9.2). Given the narrative of the importance of agriculture in the rural sphere, the agriculture-related activities of the respondents were appraised (Fig. 9.3). Furthermore the participation in agriculture in light of age cohorts was also considered (Table 9.2). Thus Table 9.2 highlights the age distribution as per the agricultural related activities of the study participants. In all 173 (94%) of respondents were involved in agriculture, whilst 10 (6%) were not involved in any form of agriculture (Table 9.2 and Fig. 9.3).

Study results also indicate that most respondents were involved in some form of agriculture-related activity (Table 9.2 and Fig. 9.3).

Thus 21.9% (40) and 12.0% of respondents were engaged exclusively in crop production and animal production, respectively, whilst 39.9% (73) were involved in crop and animal production, with the remainder engaged in a combination of different agricultural activities (Fig. 9.3).

Intergenerational Narratives on Agricultural Livelihood and Charting a Path for the Future

The intergenerational narrative thread shows that the elderly generation largely regard tilling the land and life in the rural context in a more positive light than the youth (Cousins and Walker 2015). This is encapsulated by respondent I, who serves as chairperson of the local farmers association, in response to a question on the claim that the youth are not as interested in agriculture as the older folk:

> To be honest with you. The youth don't like agriculture. They are lazy; all they just want is the finished product.

Conversely, the youthful narrative paints a picture of resistance to rural life and to the possibilities of agricultural work (Farmers Weekly 2015). This is vividly expressed in the words of respondent K, a former agricultural engineering (bioresources) student from one of the nation's reputable universities. This was a rebuttal in reaction to a question on the claim that there is a marked attitudinal change towards agriculture amongst the youth:

> Old people have always been interested in agriculture but young people are disinterested. Blame the media; they advertise to the youth that they can do more with their lives than being stuck in a rural area doing agriculture.

Such youthful narratives contrast with the popular discourse in relation to questions of food security and sustainability. However, it is also understandable given historical conditions, the perpetuation of racialized unequal access to arable land that would make agriculture viable (Cousins and Walker 2015) and contemporary popular discourses that emphasize that freedom and achievement lie in escaping to cities and urban life (FAO 2014) as surmised from the narrative of respondent K.

It is thus evident that whilst the elderly narrative on agriculture and rural life borders on reverence, youth value it less highly. This shift in concentration from agriculture to alternative sources of income has led to the phenomenon of *deagrarianization* (–) characterized by increased feature of wages, remittances and social welfare grants on the rural landscape (Neves and Du Toit 2013). Education and modernization are often cited as causes for this change as well as eroding the influence of traditional institutions and culture (Cousins and Walker 2015). Hence, although improved educational levels in the rural areas have become evident (Rosenberg et al. 2015), it may have increased career options for the youth but not necessarily in agriculture. This is in contrast to the argument of 46% of respondents (B, F, H, K) that introducing agriculture to learners will bolster the adoption of agricultural livelihoods amongst the youth (FAO 2014). For example, respondent B

(a youth leader) in response to a question on the youth's perception and involvement in agriculture surmised:

> Yeah they (the youth) feel farming is for the old and vulnerable but farming is a way of life. We (the youth) don't see the importance of farming when we have the money to buy what we can farm.

Similarly, respondent F (a former apartheid government employee in the Kangwane government) commented:

> Because the government we have now is different from the past. In the apartheid era, we were taught at a young age to farm. But now the young are smoking 'nyaope' (an addictive drug) which was not previously the case.

This is further buttressed by the account of respondent H, a local supervisor of the Expanded Public Works Programme (EPWP) which supplies poverty and income relief by offering temporary work for the unemployed to undertake socially useful activities:

> It is laziness. Young people are lazy. In EPWP (Expanded Public Works Programme) we are 30 people but those who are serious about agriculture are very few.

It is noteworthy that these comments were in response to a question on the claim that there is a marked attitudinal change towards agriculture amongst the youth.

Furthermore education and modernization facilitated by the post-apartheid era may have filtered those who genuinely are interested in farming from those who may have been coerced into it, as argued by respondent K. Under apartheid regulations, many were forced to remain rural dwellers (Neves and Du Toit 2013). This argument also smacks of political ecology and betrays the socio-economic changes which may be affecting the interest of the youth in agriculture.

The youth by nature are less risk averse compared to the elderly generation. This may account for their penchant to explore other sources of livelihood unlike their elderly folks who would prefer the stability of their farming activities. Nevertheless it has been observed that the youth are often on the fringes of the job market, without the requisite work experience and networks to secure employment (Rankin et al. 2016). This is buttressed by the accounts of respondents C and G. Thus during a focus group discussion with four unemployed youths, respondent C explained:

> Because it (desisting from farming) is a modern lifestyle (attitude). All the things being planted you can buy in the shops so there is no need to farm again.

However respondent G (a local farmer) gives another perspective to the debate in opining that:

> Some young people want to farm but they don't have money.

These were responses to a question on the claim that the youth are less enthused about agriculture in comparison to the older folk.

Moreover, even when employed, their status is often precarious as they are limited to temporary contracts. In addition, they are found in the job categories most sensitive to economic fluctuations and hence face higher likelihoods of retrenchment (Rankin et al. 2016). Nevertheless, in the face of rising youth unemployment,

entrepreneurship such as in agribusiness provides an avenue to help the youth harness their potentials and contribute to rural development even as they escape poverty (Rankin et al. 2016). This may explain why some respondents label the youth as *lazy* (E, I) as they refuse to embrace available agricultural opportunities in the hope of finding non-existent jobs as portrayed in the narrative of respondent H. This point is clear from the account of respondent E (a local farmer) who in stating his opinion on the claim that the youth are not as interested in agriculture as the older folk argues that:

> The change in attitudes is because young people now eat food from restaurants. In my time we had to go to the farm to get farm produce to prepare food. We teach young people to farm but they are stubborn. They eat what we plant but refuse to go to the farm.

Respondents G and A, however, point to other background issues, such as climatic and financial challenges disincentivizing young people from agriculture activities. For example, respondent A (an agricultural extension officer) in a rebuttal as to whether growing of crops has reduced in rural areas:

> Yes people have stopped growing vegetables due to shortage of rain.

This suggests the elderly generation may have enjoyed more favourable climatic conditions and extension support (F, A) to incentivize their agricultural engagement compared to present times (Neves and Du Toit 2013). The issue of how favourable climatic conditions relates is confounded with the availability of arable land.

However the debate over land reform is a heated one which the Department of Rural Development and Land Reform (DRDLR) of South Africa, despite its far-reaching proposals, has largely failed to effectively address (Cousins and Walker 2015). When it comes to land, young people are less likely to buy land due to the high levels of youth unemployment, poor income of majority rural youth and escalating land prices (FAO 2011). Furthermore, loans allocated for land purchase are not easily accessed by the rural youth who are in dire need of such resources. In addition, in many cultures, the youth normally have to wait until adulthood to have their own piece of land as it is also often considered an abomination for young people to appropriate family land when their parents are not yet deceased (UN-HABITAT 2011). Whilst awaiting their patrimony, several young people are confined to subsidiary land rights and perform labour on kinship land which is often poorly remunerated. This could serve as further disincentive for their engagement in agriculture.

Respondent E surmises that agricultural and farming skills are often transferred from parents to their children. Such informal mentoring may have proved effective in ushering young people into rural agriculture in times past, but the youth deem this unwarranted as they can find whatever is planted on the farm in the shops as indicated by respondents B, C and D.

Respondent D (a traditional healer) exemplifies this in her account on the claim that the youth are not as interested in agriculture as the older folk:

> The young ones like me have attitude and think of farming as old fashioned lifestyle. Because they are eating well that is why they are not taking agriculture serious.

Nevertheless, there is a call for such education to be carried out in a more synchronized and organized way, instead of an informal basis (PAFPNet 2010), as opined by respondents F and J.

Thus respondent J (a local ward councillor) posits that:

> Young people are not motivated as the old people. Due to lack of education in agriculture, people need courses in agriculture to engage young people from schools and teach them the importance of agriculture in our country.

Furthermore providing mentors or exhibiting the success stories of other young farmers and 'agripreneurs' can inspire the youth to adopt agriculture as a career according to respondent K. Additionally, it could aid in overcoming the stigma associated with agriculture as failure-prone and labour-intensive and rather portray the limitless potential of the agricultural sector as a worthy career option (FAO 2014). Novel training methods such as 'sustainable socio-economic entrepreneurship' by incorporating human capacity development (such as cultural, social, technical, organizational and economic) integrate agriculture with industry and services by embracing its wider scope (FAO 2014). Similarly, in the face of increasing food insecurity, the Sustainable Development Goals (the 2030 Agenda) also argue for an integrated approach to addressing food, livelihoods and the management of natural resources (FAO 2016). These approaches help package agriculture as an attractive livelihood option to the youth rather than as an 'old fashioned' activity. Furthermore, they incorporate themes of the green movement, a return to the 'natural', climate issues, political ecology which the youth find 'cool' and á la mode. This contrasts with the mundane lifestyle of the older generation, from which young people wish to flee, as portrayed in the accounts of respondents B, C, D and E.

Conclusion

Understanding from the past through the narratives of the older generation helps in drawing useful insights from the youth's narrative and charting a future for food security and sustainable rural development. As South Africa's population grows and becomes more urbanized, the dynamics of the agricultural landscape also changes which requires skilful human capital to meet the fluctuating consumer needs. Increasing the interest of the youth in agriculture includes revamping the several abandoned agricultural projects on the rural landscape and showcasing the success of thriving young businesses in the sector. This must be coupled with addressing fundamental challenges within the sector related to accessibility to information, finance, land, markets and infrastructure. Enhancing the skill level of the youth will improve their employment opportunities and produce a critical mass of young agricultural entrepreneurs. Another approach to improve job prospects in agriculture would be to build the capacity of the agricultural colleges to escalate the number of skilled-labour training centres. Currently there is an inadequate focus on education

to develop skilled labour in the primary agricultural industry. Skilled farmers can be produced by introducing agriculture-related programmes in the school curricula such as the primary and secondary levels whilst modernizing the outdated agricultural curricula. This can also be enhanced with practical training, like repairing and maintaining farming equipment, production capability, farm management and literacy in information technology. There is the need to engage more with the youth in policy development related to agriculture to make such measures attuned to their unique needs. Similarly increased public private partnerships can make agricultural projects constantly relevant to the needs of the market and consumer demands. These measures will develop dynamic communities of practice that will enhance food security and facilitate sustainable development in mountain communities. With the capacity of the agricultural value chain to alleviate the plight of the most vulnerable in society, ultimately the Leave No One Behind concept as per the Sustainable Development Goals (SDGs) becomes tangible amongst those farthest behind.

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