# 'We only need a fence':

# Essentials for modern-day agriculture and rural development in the Eastern Cape

### By Aphiwe Mgushelo and Alex Bara

Aphiwe Mgushelo is a PhD Candidate in the Department of Development Studies, Nelson Mandela University, Gqeberha, South Africa. Dr Alex Bara is a Senior Economist at the Agriculture Finance Corporation Holdings, Harare, Zimbabwe.

Rural infrastructure – fencing and irrigation systems – are essentials for modern day rural agriculture. This is the conclusion of the authors, based on research on the abandonment of agricultural land in an Eastern Cape community.

ast tracts of agricultural lands have been abandoned, worldwide, over the last decades (Filho et al., 2016). Agricultural land abandonment (ALA) has been extensively studied in Europe, but it also exists in Africa (Tesfaye and Seifu, 2016). This phenomenon is apparent when you travel in rural areas of the Eastern Cape and see the scars of past cultivation carved into the landscape. Yet there is limited literature focusing on the extent, causes and socio-economic consequences of ALA in South Africa. Existing research mostly entails a variety of geomorphological studies focusing on ecological impacts such as vegetation changes and degradation, gully and soil erosion as well as a need for sound environmental

or land management (Kakembo, 2001 and 2009; Kakembo and Rowntree, 2003). The Parliament of the Republic of South Africa's passing of a motion for "expropriation of land without compensation" (Parliament of RSA, 2018: 433) left analysts with a conundrum; politicians are seeking to expropriate land at the same time as much agricultural land is being abandoned.

Today, more than 66% of the total population live in urban areas and cities compared to 61% in 2009 (O'Neill, 2021). This raises a question: who will work the land and maintain the rural socioeconomic infrastructure when available lands and agriculture are abandoned as the rural population relocates to towns? Yet, herein also lies an opportunity to tackle poverty, unemployment and inequality.

Agriculture retains a crucial role in the socio-economic development of the country, as enshrined in the National Development Plan (NDP). It is acknowledged as the primary rural economic activity with the potential to create close to one million new jobs in the sector by 2030. The NDP also sees an increase in agricultural production as a key requirement to address, mainly, rural poverty and food insecurity. Addressing ALA is also imperative for ultimately realising Sustainable

Development Goal 1 – ending poverty in all its forms.

## CONSIDERATIONS FROM JULUKUQU

Julukugu, the study area, is located in the Eastern Cape province in the King Sabata Dalindyebo local municipality. It is south-west of Mthatha. Census 2011 recorded a population of 664, in 135 households. Analysing satellite imagery of the area over a 15-year period has established the occurrence and extent of ALA. Purposive sampling was used for this study to help choose the respondents from the study population. Altogether, data collection yielded 17 usable interviews (ie one focus group discussion (or Imbizo) including the headman, Sibonda, and villagers as well as individual interviews with respondents (they have been given pseudonyms), including one of the most senior villagers, Nyange; one woman, Nontlutha; and the ward councillor, Ceba. The interviews were subjected to thematic analysis - to provide an understanding of the official positions and grassroots lived experiences. Their views are presented verbatim for discussion and to support the assertions, conclusions and recommendations we have made.



The once totally cultivated croplands of Julukuqu are now almost totally abandoned with only one household still cultivating only a hectare of their cropland.

### FINDINGS AND DISCUSSION

All the respondents were South Africans, of which only one was female. The respondents represented a generational mix of adults and youths between the ages of 18 and 80 years, with most between 40 and 60 years old. Lack of education is one of the prevailing challenges confronting Julukugu and it was highlighted by the fact that none of the respondents completed schooling while some, such as the headman, Sibonda, never went to school: "I did not complete any standard, because my household had livestock. Therefore, I was not able to go to school because I had to herd the livestock." Only two respondents were employed, Ceba and Nontlutha.

Notwithstanding the participation of only one woman, it was also evident that it is not the norm in Julukuqu to exclude women from attending and participating in *embizweni* or *kwimbizo*, particularly on the topic of agriculture, which affects everyone in the community.

Concerning their work in the croplands, women are not different from men. Likewise, poverty is gripping all of us, including women – Imbizo.



The responses provided by Nontlutha did not contradict the responses provided by the rest of the respondents, but rather gave more detail and a feminine point of view. Given the dominance of males in the sample, interviewing a female respondent was very important and deliberate. As Peek and Fothergill (2009) found, individual interviews can be an advantage where the key informants may not be included in a focus group or where they may not be comfortable talking openly in a group. Separate interviews provided individualised experiences, perceptions and behaviours.

Key to the study is that all of the respondents had cropland in the area. However, none indicated agriculture (particularly crop production) was their source of income – which is indicative of a great fall from glory. The main sources of income in the community were identified in order: child support grant; old-age pension; casual labour and government programmes (eg the Extended Public Works Programme for road building); subsistence smallholding (eg pig and poultry farming); deceased pension fund annuity; and public service. The

respondents said that they spent their money mostly on food and burials, debts and health care, among other basic expenses.

## The extent of abandoned agricultural land

### The history of crop production in Julukugu

Crop production once thrived in Julukuqu as a key socio-economic activity and Julukuqu fed its inhabitants and the surrounding villages, selling surplus produce. The cultivation of the croplands (amasimi in isiXhosa) was, therefore, a source of household food security, income, development and pride. The indigenous practice of ilima (co-operativism) was Ubuntu in practice, wherein those with oxen and households with men or children extended help - free of charge - to cultivate each other's land. The goal was to uplift everyone. Ilima is the antithesis of individualism - "we" the people rather than "I", or concern only about oneself. Thus, Ubuntu was deeply embedded in the people and was a common way of life. The respondents indicated oxen were very useful in >>>

cultivating the land, while school-age children played an instrumental role in crop production and in keeping livestock from grazing crops. Croplands were a lot more valued than gardens – which were relatively small and limited to providing for household sustenance – and people grew maize (mainly), soya beans and pumpkin.

## Government intervention and the extent of agricultural land abandonment

Globally - including in Europe and Asia - ALA has been prevalent in marginal areas, such as steep mountainous areas (Shengfa and Xiubin, 2017; European Commission, 2015). Julukugu is relatively flat, but its location in the former homeland of Transkei makes it a marginal area. There has been an observable and significant change in the use and extent of croplands over time (2002-2017). According to the respondents, the croplands of Julukuqu were once fully cultivated (especially between 2002 and 2010), but they are now almost all abandoned. Only Sibonda, the headman, was still cultivating his reduced household's cropland, but even it is semi-abandoned given the reduction of the cultivation land area. Sibonda obtained an old fence, which is how he managed to fence off about a hectare of his household's cropland.

According to Mlomzale (2014) in rural areas family-owned croplands are underutilised to such an extent that in the Eastern Cape very little fertile arable land is used as many households have abandoned crop production. Yet, Africa could feed the world as it holds more than 60% of the worlds uncultivated arable land. When people cultivate their land, the risk of food scarcity would be mitigated.

Government intervention projects played a huge role in the cultivation of the croplands. The Ntinga O.R. Tambo Development Agency (Ntinga)<sup>2</sup> was established at a time when people had

stopped cultivating the croplands due to reduced cattle and the increased importance of sending children to school. Ntinga introduced fencing of the croplands and they were guarded by a government ranger. Modern fertilizers and pesticides were provided and replaced indigenous practices, such as the use of kraal manure (umgguba). Ntinga promoted the Green Revolution in the agricultural sector and for a period of nine years, from 2002/03, the croplands were cultivated. However, the Ntinga project ended in 2010 (due to lack of funds, according to Ceba) and the people stopped cultivating the croplands and abandoned them.

Today, there are signs of minor soil erosion, which follows ALA, although fortunately grass covering seems to be keeping much of the land from more severe erosion. The rivers are dry, signalling a lack of rainfall, water or irrigation in the area. One used to see cultivated household gardens next to the fallow croplands, especially in the November to March ploughing season. Now only contour lines are left of the croplands, a visible reminder of the lands' former glory.

### Major causes of ALA

Lack of infrastructure: fencing and irrigation systems:

The community of Julukuqu has abandoned the cultivation of the croplands, according to the respondents, due to the lack of fencing and nonavailability of children who are now going to school, allowing the livestock to graze on the cultivated croplands with no one and nothing to stop them. Single women or widows are most vulnerable (especially at night when some people deliberately graze their livestock in the croplands). They suffer the most from both herded and freeranging livestock (including horses). Women have always dominated crop production, given that most men 'are no more', said Sibonda.

These croplands are not cultivated. I tried my best that we should be financed and fence them, but government [in] one of its policy statements said that a group of people ... should be cultivating the croplands before it can help. This is also what disables us ... the people cannot go and cultivate the croplands when they are not fenced off and their crops [are] grazed by livestock. And government says children must be at school. - Ceba

The children are not here to herd. They are in schools ... the Department of Agriculture says we must first cultivate. We see it does not trust us anymore and it has forgotten who we are. We stopped cultivating the croplands because they were not fenced .... – Nontlutha

This is the present as history. In the former Transkei sub-district of Shixini, Andrew and Fox (2004) observed an increase in abandoned agricultural land between 1962 and 1982. This was caused by cultivation intensification in gardens, the diminishing fertility of croplands and damage from livestock, as well as compulsory schooling that removed child herders from the rangeland. The lack of fencing and oxen to cultivate the land were also found to be the cause of the decline in agricultural production in the Cata rural community in the former Ciskei (Mlomzale, 2014). Other reasons for not practicing crop production in Cata, besides the lack of labour and the high production costs, included global warming (climate change) and lack of agricultural infrastructure (Mlomzale,

Yet, the cultivation intensification in gardens does not seem to be a cause



One of the conundrums for analysts is that politicians are seeking to expropriate land at the same time as much agricultural land is being abandoned.

of ALA in Julukugu, but rather it is a consequence due to food insecurity. Moreover, there was no indication of diminishing fertility in the croplands of Julukuqu. However, climate change and variability (erratic rainfall and drought) has led to land abandonment.

> We are troubled by drought and livestock ... and few people continued to cultivate the croplands. You see that now they are no longer cultivating. - Sibonda

It is possible that you will get a proper harvest when there is frequent rainfall, but when there is no rain, you will not get what is appropriate. Therefore, rain and drought contribute to the abandonment of the croplands. - Ceba

There is a shortage of water, and a lack of a reliable source of irrigation in the village. The respondents submitted that the community needs an irrigation system for the purpose of crop production.



Co-operation: abandonment of ilima and the rise of individualism

It seems that with government projects, such as Ntinga, co-operation among the people deteriorated and individualism arose. People no longer combined their resources and efforts, such as oxen and manpower, to cultivate their land.

### Toward reviving agriculture and rural socio-economic development The desire and will to cultivate the abandoned

croplands

The respondents were very keen to recultivate their croplands: Yet, their desire and willingness to cultivate their abandoned croplands clearly needs to be complemented with activism and cooperation on their part, as well as agriinfrastructure, for which agri-finance is required.

Agri-infrastructure: fencing and irrigation system

Due to the rising importance of education, children who would ordinarily be herding the livestock are going to school, making them unavailable for continuing with this heritage. Given that livestock farming is also an important livelihood in the rural areas, the respondents noted that the most logical and immediate thing to do was to fence their croplands to protect

them from being grazed or encroached upon during crop production season by free-ranging or deliberately led livestock. Given that surrounding villages whose croplands were fenced were cultivated, there is a reason to believe that if the croplands of Julukuqu could be fenced off, crop production would thrive again in this rural village.

The respondents concluded that the only thing they need is their croplands to be fenced off - and they were frustrated by the chief's lack of support. There is hope for socioeconomic development in Julukuqu, but the people were faced with the dilemma of being required according to the rules of government aid schemes to cultivate their unfenced croplands before they could get support. The cultivation of gardens serves as factual evidence that the people of Julukuqu have not abandoned crop production, but only their croplands - due to lack of fencing.

> ... we concluded that what we needed was fencing, because cultivation is our enterprise ... most of the croplands in other communities are fenced. We are actually part of Mqhekezweni and it is only the chief of Mqhekezweni that is yet to fence the >>>

croplands. The fence that was first requested by us is now going to people who came later, because they have chiefs who support [them] ... we only need a fence. – Nyange

The respondents said that their primary need is fencing, but the scarcity of rainfall (especially during winter) and drought are also major challenges in the area. The respondents indicated that the community needs an irrigation system for their croplands and their gardens. To date, they are not able to cultivate even their gardens in dry seasons. Bank and Meyer (2006) found the climatic conditions in the Eastern Cape province not conducive for crop production, while grain is obtained from large commercial farmers and group projects under irrigation. Given that the provision of, and access to, water is an important determinant of crop yield, rural communities such as Julukugu need to collectively adapt to the prevailing climatic conditions or fall victim to them. Perhaps group projects are a solution to the lack of irrigation.

Conditions, limitations and benefits of fencing

There have been difficulties with fencing communally used lands for centuries but it is important to appreciate the differences between the British 17th, 18th and early 19th century enclosures, and the continuing infringement of the people's land rights in, for example, northern Tanzania. The progressive enclosure of common lands over several centuries deprived British people of access to agricultural land. The Enclosure Acts essentially brought an end to the open field system of agriculture, which had been the practice in England for centuries. Any rights they had over the land were taken from them. The means and the method to achieve this were physical fences and hedges that staked out the private ownership of the fields of England. Ultimately, the

aim was to turn open fields, pastures and wastelands into more productive arable and mixed farmland – under the name of 'improvement' – to both create and feed an increasingly large proletariat.

Indigenous people in Africa continue to suffer massive land loss with the arrival of international companies, including so-called safaris and exotic hunting companies (Cultural Survival, 2014). Over time, the Maasai in Tanzania have been marginalised from decisions regarding the management of land, making "Maasai throughout Tanzania strangers in their own land, whenever conservation concerns are involved" (Goldman, 2011). Their land had been taken by the wazungu or white people. According to Cultural Survival, whose work is predicated on the United Nations Declaration on the Rights of Indigenous Peoples, in Kenya and Tanzania several court cases are pending of indigenous Maasai pastoralist communities pressing charges against the illegal appropriation of their land. Borders and fences have delegitimised the Maasai's way of life in favour of permanent agricultural-based economies.

However, in South Africa, in village communities such as Julukuqu there would be no loss of land rights in fencing the land as it belongs to the people who live there. As landowners, the very poor people have collectively decided to co-operate to fence a portion of their household's croplands to meet their socio-economic needs. There is a memorandum of understanding by which the households will retain the ownership of their croplands, and their common pastoral land will not be fenced. This is a step towards local agricultural revival.

The community has been calling on their chief and the government to assist in providing fencing, but to no avail. The power of strong and effective fencing should not be underestimated in smaller-scale agricultural development. Without fencing, the villagers are

reluctant to cultivate their croplands only for their crops to be grazed by uncontained livestock. When croplands are fenced and cultivated, livestock also benefit from maize stalks (amadiza) post-harvest. For this reason, 'good fences make good farming neighbours' and plant and animal production can co-exist (Zvomuya, 2012:10).

We want to cultivate the croplands, but we do not have the power to do so. We do not herd our livestock well ... livestock grazes on our croplands ... If government could help and fence for us the area that we want to cultivate. – Imbizo

Community pro-activism and co-operation

The ward councillor, Ceba, explained that the government requires people to form a co-operative before funding is granted to support their activities. This means the prospects of agricultural revival and development in Julukuqu hinges on the community being proactive and co-operative. To this end, the people are consolidating a portion of their croplands that they can manage to cultivate. The people desire socio-economic development and they will form and register an agricultural co-operative as a catalyst for socioeconomic development, economic growth and innovation. They have a history of pooling their resources and working together - ensuring that every household's land is cultivated using the indigenous practice of ilima – a socio-cultural approach to development. Co-operation is indigenous to the people of Julukuqu as an equaliser and a co-operative appears to be a modern-day ilima.

### CONCLUSION AND RECOMMENDATIONS

The compelling reason provided for the abandonment of croplands in Julukuqu was lack of co-operation and infrastructure, ie fencing and irrigation systems that are essentials for modern day agriculture. Without fencing, the villagers are reluctant to cultivate their croplands only for their crops to be grazed by uncontained livestock. Since water is an essential determinant of crop yield, an irrigation system is necessary to mitigate the risks of erratic rainfall and drought. Unfortunately, the rural socio-economic situation is such that the rural households are so poor that even collectively they cannot afford the fencing of their croplands. They need financial support for agricultural infrastructure, or the provision of agricultural infrastructure itself. With the land and willing people in place, co-operativism prevails as a necessary strategic means to attract the needed financial and non-financial support, especially from government.

Julukuqu is a typical case study of land abandonment in rural areas of South Africa. As foreign interest mounts in the land, the people in communities such as Julukuqu should:

- Form and register at least

   a primary co-operative as
   an extensive and intensive
   catalyst for socio-economic
   development, economic growth
   and innovation, with the
   assistance of government, and
   be capacitated by government
   financially and otherwise to
   develop the requisite rural
   agriculture infrastructure –
   including:
  - Strong and effective fence to protect their croplands;
  - An irrigation system (eg boreholes) to mitigate the risks of erratic rainfall and droughts; and
  - Security measures to secure the fence and irrigation system – which will also reduce

the vulnerability of women at night.

For policy consideration, it is recommended that –

- Instead of viewing land abandonment only as a problem, government, researchers and development practitioners should see it as an opportunity to assist the community to implement these recommendations in order for them to advance socially and economically; and
- The role of kings and chiefs in community development needs to be investigated and enhanced.

#### REFERENCES

- Andrew, M. and Fox. R.C. 2004. "Undercultivation" and intensification in the Transkei: A case study of historical change in the use of arable land in Nompa, Shixini," Development Southern Africa, 21, 4, pp. 87-706. Available at <a href="http://www.tandfonline.com/doi/pdf/10.1080/0376835042000288851">http://www.tandfonline.com/doi/pdf/10.1080/0376835042000288851</a>. Accessed on 20 March 2018.
- Bank, L. and Meyer, L. 2006. Rapid Eastern Cape Provincial Assessment and Socioeconomic Survey, Summary Report. The Fort Hare Institute of Social and Economic Research (FHISER) and Development Research Africa (DRA).
- Cultural Survival. 2014. 'Continued Land Grabbing from the Maasai of Kenya and Tanzania.' Available at <a href="https://www.culturalsurvival.org/news/continued-land-grabbing-maasai-kenya-and-tanzania">https://www.culturalsurvival.org/news/continued-land-grabbing-maasai-kenya-and-tanzania. Accessed 27 July 2021.</a>
- European Commission (EC). 2015. Rural development 2014-2020.
- Fairlie, S. 2009. 'A Short History of Enclosure in Britain,' *The Land Issue 7*. Available at <a href="https://www.thelandmagazine.org.uk/articles/short-history-enclosure-britain.">https://www.thelandmagazine.org.uk/articles/short-history-enclosure-britain.</a> Accessed 28 July 2021.
- Filho, W.L., Mandel, M., Al-Amin, A.Q., Feher, A. and Jabbour, C.J.C. 2016. 'An assessment of the causes and consequences of Agricultural Land Abandonment in Europe,' International Journal of Sustainable Development & World Ecology. DOI: 10.1080/13504509.2016.1240113.
- Goldman, M. J. 2011. 'Strangers in Their Own Land: Maasai and Wildlife Conservation in Northern Tanzania,' *Conservation and Society*, 9, 1, pp. 65-79. Available at <a href="https://www.jstor.org/stable/26393126">https://www.jstor.org/stable/26393126</a>. Accessed 27 July 2021.
- Hemson, D., Meyer, M. and Maphunye, K. 2004. Rural development: the provision of basic infrastructure services. Position Paper. Human Sciences Research Council: Integrated Rural and Regional Development. Available at <a href="http://hdl.handle.net/20.500.11910/8215">http://hdl.handle.net/20.500.11910/8215</a>
- Kakembo, V. 2001. 'Trends in vegetation degradation in relation to land tenure, rainfall and population changes in Peddie District, Eastern Cape, South

- Africa,' Environmental Management, 28, pp. 39-46.
- Kakembo, V. 2009. 'Land Abandonment in the
  Eastern Cape, South Africa: Implications for
  vegetation invasions, soil surface conditions
  and gully erosion'. Available at <a href="https://www.researchgate.net/publication/288356985">https://www.researchgate.net/publication/288356985</a> Land
  Abandonment in the Eastern Cape South
  Africa Implications for vegetation invasions
  soil surface conditions and gully erosion.
  Accessed 14 March 2018.
- Kakembo, V. and Rowntree, K.M. 2003. 'The relationship between land use and soil erosion in the communal lands near Peddie town, Eastern Cape, South Africa,' Land Degradation and Development, 14, pp. 39–49.
- Matsimela, M. 2020. Minister Didiza: 'There's wealth in farming.' Available at <u>https://www.mzansiagritalk.com/archives/5335</u>. <u>Accessed 20</u> February 2020.
- Mlomzale, M. 2014. 'The decline of agricultural production in rural areas of the Eastern Cape.' Unpublished MA dissertation in Development Studies, Nelson Mandela Metropolitan University, Gqeberha, South Africa.
- O'Neill, A. 2021. 'South Africa: Urbanization from 2009 to 2019'. Available at <a href="https://www.statista.com/statistics/455931/urbanization-in-south-africa/">https://www.statista.com/statistics/455931/urbanization-in-south-africa/</a>. Accessed 6 May 2021.
- Parliament of RSA, 2018, Minutes of Proceedings of National Assembly. 6 December. No 53 – 2018. Fifth Session, Fifth Parliament. Available at https:// www.parliament.gov.za/storage/app/media/Docs/ min/685b8f9a-6025-4654-b5d1-d2184e8d090e.pdf
- Peek, L. and Fothergill, A. 2009. 'Using focus groups: lessons from studying daycare centers, 9/11, and Hurricane Katrina,' Qualitative Research, 9, 1, pp. 31-59.
- RSA. 2005. Guide to the South African Co-operatives Act 2005. Department of Trade and Industry. Pretoria: Republic of the Republic of South Africa.
- Shengfa, L.I. and Xiubin, L.I. 2017. 'Global understanding of farmland abandonment: A review and prospects,' Journal of Geographical Sciences, 27, 9, pp. 1123-1150.
- Tesfaye, W. and Seifu, L. 2016. 'Climate change perception and choice of adaptation strategies,' International Journal of Climate Change Strategies and Management, 8(2): 253–270.
- Zvomuya, F. 2012. 'Good fences make good farming neighbours,' Ubisi Mail, 8, 1, pp. 10-11; 6-19. Available at <a href="https://hdl.handle.net/10520/EJC148063">https://hdl.handle.net/10520/EJC148063</a>. Accessed 27 July 20219.

### ENDNOTES

- While Africa holds more than 60% of the world's uncultivated arable land, the continent's share in global agricultural production remains low...
   '(Oxford Business Group, 2019). '... even if the pandemic slowed down economic activity, the agriculture sector showed a strong resilience' (senior programme officer for global policy and advocacy at the Bill & Melinda Gates Foundation, Faustine Wabwire, in News24, 2020).
- 2. Ntinga O.R. Tambo Development Agency is a state-owned company established by the O.R. Tambo District Municipality as a Special Purpose Vehicle responsible for spearheading local economic development in the O.R. Tambo district. See <a href="https://www.ntinga.org.za/">https://www.ntinga.org.za/</a>