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Journal of Rural Studies

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https://doi.org/10.1016/j.jrurstud.2018.01.004

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### ARTICLE IN PRESS

Journal of Rural Studies xxx (xxxx) xxx-xxx

ELSEVIER

Contents lists available at ScienceDirect

#### Journal of Rural Studies

journal homepage: www.elsevier.com/locate/jrurstud



# More than just fields: Reframing deagrarianisation in landscapes and livelihoods

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#### ARTICLE INFO

# Keywords: Fields Landscape Livelihoods Natural resources Rural home Transformation

#### ABSTRACT

This paper discusses the emergent properties of deagrarianisation processes in two villages in the central Eastern Cape, South Africa. The claim of is that much of the deagrarianisation literature and debate does not acknowledge the importance of landscapes and the interaction between their constituent elements, notably people, forests, grasslands, fields, grazing lands, open spaces, built environments and homesteads, all of which contribute to shaping and, in turn, are shaped by livelihoods. Conceptualising a landscape as a spatial entity and associated assemblage of practices, discourses and history, this paper dissects the landscape in terms of land uses for residential and cultural purposes, growing, grazing and gathering. These land use categories together represent the rural domain to which the villagers are attached as a place and a home. Their use of the land is not necessarily oriented to fully exploring its productive potential. The article explores the transformation from a productive landscape to one which largely hinges on consumption. The blurring of boundaries between the formally designated land use categories signifies the transformations occurring in many of the rural areas in the former homelands of South Africa.

#### 1. Introduction: deagrarianisation and landscapes

The claim of this paper is that much of the deagrarianisation literature and debate do not explicitly acknowledge the importance of landscape and the interaction between its constituent elements, notably people, forests, grasslands, fields, grazing lands, open spaces, built up environments and homesteads, all of which contribute to shaping and, in turn are shaped by, livelihoods. The deagrarianisation literature only cursorily examines the decline in the share of agriculture in rural incomes without further consideration of how the broader landscapes and seemingly un- or under-used arable spaces are then used or interpreted. The literature pays little attention to the meaning of land and how the landscape has transformed in time from a 'productive' to a 'consumptive' or 'extractive' landscape. The paper draws on data collected in two villages, Guquka and Koloni, situated in the former Ciskei in the Eastern Cape, South Africa, to depict what happens with regard to the use of landscapes, land and its constituent elements.

The transformation of the landscape and the communities and their livelihoods that occur in areas like the former Ciskei is best conceptualised as an emergent property, with landscapes being continuously reassembled through a gradual reordering and use of the

varied and multiple elements of the landscape. This results in reshaping of landscape elements and boundaries such that the boundaries between landscape elements become blurred and the use of land has changed dramatically, although some interpretations persist. Such a conceptualisation acknowledges that on the one hand social actors (e.g. villagers, planners, researchers, policymakers) make and transform landscapes as much as landscapes form and shape livelihoods and ideas of planners and surveyors to (re)order the landscape. Such reassembling can only be examined as practical enactments by those staying and living in the villages and actions and views by governance institutions. Reassembling is thus varyingly underpinned, e.g. by the kind of livelihoods that evolve in the villages and also by physical planners, land administrators and policymakers in their attempts to re-order property rights to, and uses of, land and natural resources.

On the other hand, the processes of reassembling are neither linear nor homogenous and that we need to recognise heterogeneity as an emergent property of landscapes (see Greenough and Tsing, 2003). The reassembling does not occur in similar ways and practices, and may not always be agreed upon and shared. We will show that whilst the land use description applies at village level, not all households use landscapes or parts thereof in similar ways and they often diverge from the

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https://doi.org/10.1016/j.jrurstud.2018.01.004

Received 1 August 2017; Received in revised form 18 January 2018; Accepted 20 January 2018 0743-0167/ © 2018 Elsevier Ltd. All rights reserved.

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village level trajectory to construct their livelihoods. This in turn complicates narratives of unidirectional change, including deagrarianisation. Given space constraints, we limit our analysis to depicting the major trends in the two villages.

Much of the writing and research on rural development in southern Africa, and the two villages are no exception, conforms to the deagrarianisation thesis. The occupational movement away from relying on agriculture as a sole or primary source of livelihood and well-being is a reality and has been well documented in southern Africa and elsewhere (Bryceson, 1996; Twyman et al., 2004; Bank and Minkley, 2005; Hajdu, 2006; De Wet, 2011; Shackleton et al., 2013; Hebinck and Van Averbeke, 2013; Trefry et al., 2014). Such trends parallel increasing diversification of livelihood strategies at household level (Ellis, 2000: Twyman et al., 2004) and the multi-locational nature of many nominally rural peoples' livelihoods (Francis, 2000; Ramisch, 2014). Whilst this is not a recent phenomenon (Hebinck and Lent, 2007), the degree of deactivation from agriculture has increased with the growing effects of urbanisation, out-migration, a growing reliance on urban incomes, the 'granitisation' of rural incomes, modernisation and globalisation at household, community, village and also policy levels (Shackleton and Luckert, 2015; Masterson, 2016).

The objective of this article is not to deny the net and real trend in many regions of the declining contributions of cropping, livestock and gathered products to household or individual incomes. However, although agriculture may not be the principal source of livelihood for many rural households in South Africa, we show that this does not mean that the growing of crops and rearing of livestock do not make economic, lifestyle, or other contributions which are regarded as significant by rural people. We argue rather that the once actively and intensively lived lifestyle that hinged on ploughing and planting, gathering natural products and rearing livestock in combination with migrant labouring (Hebinck and Smith, 2007) has gradually been replaced by a different type of agrarianism in which the homestead and the need for its social-material reproduction remain central but in different ways. Such transforming agrarianism hinges predominantly on a consumptive use of the landscape and less on a productive exploration of the social and natural resources. People live in a rural setting that holds strong cultural values, history, memories and a home to stay in and return to. For the majority of villagers - but certainly not all - rural life no longer revolves around using and making the various elements of the landscape as a productive resource per se.

Building on and inspired by the work by Basso (1996), McAllister (2001), Masterson (2016) and Cocks et al. (2017) who have in common to conceptualise place - or home or the homestead - as lived experience<sup>1</sup>, we (now) prefer to speak of a rural lifestyle rather than only an agrarian one and associated livelihoods that persistently are analysed as rural. The transformation from agrarian to rural produces a landscape that combines cultural, emotional, psychological and community values (Cocks et al., 2012, 2017; Trefry et al., 2014; Masterson, 2016; Connor and Mtwana, 2017) but simultaneously fragmented spaces of even increased biodiversity which continue to provide a range of goods and services to local livelihoods (Shackleton et al., 2002, 2013; Mtati, 2013) and at broader scales. The productive use of land for the provision of consumptive products for own use or sale, revives regularly and unexpectedly; perhaps not at the scale that would impress policy makers and agricultural economists, but at the local level it is significant for some household trajectories and identity (Shackleton et al., 2008). By elevating the level of analysis to the landscape, we will, however, show how the various elements of the landscape are used and interact, that particular pockets of agrarianism remain visible in the form of marginal

cropping, rearing of small and large stock, gathering of non-timber forest products (NFTPs) combined with home gardening and staying in the homestead. Only a nuanced and detailed exploration of the land-scape will show this.

While debating deagrarianisation processes and outcomes we need to realise the complexity in that they are likely to affect various forms of land-based livelihoods in different ways. For example, a decline in livelihood opportunities associated with arable farming due to, say, declining soil fertility, which would then be interpreted as deagrarianisation, may be compensated by increased engagement with livestock or gathering of wild products, which would counter a deagrarianisation narrative. Indeed one cannot explain agriculture, or the demise of agriculture, with reference solely to arable fields. Loss of livestock due to disease or drought might prompt deeper engagement in gathering and selling of wild resources (Chagumaira et al., 2016), or an abandonment of arable cropping as manure and draught power are no longer available (Shackleton et al., 2013). Similarly, not working one's fields does not necessarily mean a total disengagement from agricultural fields and landscapes as a livelihood option, but also as a cultural and mental construct that provides a sense of place and individual and collective identity (Masterson, 2016).

#### 1.1. Blurring boundaries

The significance of the blurring of categories lies, on the one hand, in the strategies that rural people use to make ends meet in circumstances for which the rural areas in South Africa are well known: poverty, inequality, aging populations, migrating youth, unemployment and the challenges of multi-locational livelihoods. As Twyman et al. (2004: 71) commented "Too often, in the quest to produce understandings of poverty and livelihoods, the complexity, incongruity and reality of day-today practices are overlooked". It is not just farming that keeps people afloat or in touch with local landscapes. On the other hand, the analysis of current land use practices underpins the need to theoretically refine and update our understanding of precisely what constitutes agriculture, and how agriculture is situated in both dynamic landscapes and in complex livelihoods. Livelihoods and landscapes change over time in response to local and external drivers as well as to the changing modalities of state interventions in the rural domain. This necessitates conceptually and empirically infusing a time dimension and a robust historical framing (Murray, 2002; Hebinck, 2007; Fay, 2009; Dahlberg, 2015). Rethinking what we mean by 'agriculture' entails broadening what is seen as 'the farm' to 'sites of production and consumption' to also include the encompassing physical and cultural landscape, utilised through harvesting or otherwise. This broadening frames farming and livelihoods as more robust and possibly more sustainable in the long

It is the continuous reassembling of the landscape that the deagrarianisation literature could be enriched with to fill the gap that historically rural livelihood diversification was largely between and within the land-based activities of arable agriculture and rearing cattle along with some off-farm cash generating strategies. It is the thrust of this paper to show that the reassembling varies in time and place and does not follow a linear pattern, although trends can be discerned. Unpacking this requires not only a necessary depth of understanding of local livelihoods and institutional processes, but also of local landscapes and natural capital as moulded by human interaction and interference, all within the broader contextual drivers and pressures. Thus, households vary the proportion of cash and non-cash household income generated by these landscape elements, as well as the nature and relative quantities of products from each element, for example the types and mix of crops grown or animals kept. This is not to ignore that some households may choose to specialise in specific, potentially more profitable sectors, which if successful for a period, provides them with sufficient income to accumulate capital reserves to weather most shocks and stresses (Sallu et al., 2010).

<sup>&</sup>lt;sup>1</sup> The notion lived experience builds on the work by Lefebvre (2001). He distinguishes between conceived experiences (e.g. by planners), perceived (e.g. everyday life) and experienced (e.g. adapted). Together these result in the lived experience we empirically can investigate.

#### 1.2. Landscape assemblages

The appropriate and nuanced scale and unit for such landscape and livelihood analysis needs to reflect the land and natural resources that are available to rural villagers, for diverse purposes and why they use them at specific times and in specific places. This requires an approach that views landscape as a spatial unit defined by an assemblage of cultures, practices and the workings of history. Landscapes are, as Antrop (2005, 2006) argues, in essence made up of socio-cultural and natural elements. Landscapes are thus composed of more than only biotic resources (e.g. soils, nutrients, air, and water) interacting together in a specific geographical space. Landscapes are the product of history and the materialisation of culture, power and politics (see also Fairhead and Leach, 1996; Leach and Fairhead, 2000; Unruh, 2006; Cosgrove, 1998); landscapes are transformed by natural processes as well as by the varying ways in which people use and interpret the landscape, such that some would designate them as social-ecological systems (e.g. Masterson, 2016). They also reflect the sediments of past and present institutional arrangements (e.g. laws, property or tenure rights) and how these shape social relationships (Batterbury and Bebbington, 1999; Cleaver, 2002; Odgaard, 2002; Unruh, 2006). Simultaneously because of the increasing multi-spatial and locational nature of rural livelihoods, any conceptualisation of landscape assemblages also needs to include relationships with urban environments. Landscapes, moreover, unfold as heterogeneous, dynamic, multilayered and complex entities that are treated here as assemblages. Our conceptualisation of assemblages is derived from the interpretations of Li (2007), McFarlane (2009) and Anderson and McFarlane (2011) of the original work of Deleuze and Guattari (1987) and De Landa (2006) about assemblage as continuously transforming and reproducing. Assemblages are the locally specific outcome of the interaction and mutual shaping of the socio-cultural, institutional and biotic elements that constitute the landscape; these are continually rearranged to form new connections and relationships that may not have existed previously (Pasmans and Hebinck, 2017).

The current deagrarianisation literature may benefit from acknowledgement and theorising that landscapes are generated by people and reflect patterns of land use that blur the boundaries between the historical 'officially' conceived and sanctioned land use categories and meanings. These categories find their origin notably in the globalising agricultural and rural development planning practice and scientific literature (e.g. agronomy, land use) (Scott, 1998; Leach, 2008) and which have been uncritically incorporated in support of the deagrarianisation thesis. Processes leading to a temporal and/or permanent deactivation2 of agriculture (van der Ploeg, 2008; Shackleton and Hebinck, this issue) and the reorientation of people's livelihoods in villages like Guquka and Koloni in the Eastern Cape, have deconstructed and reassembled land use categories 'cropping' or 'arable fields', 'pasture' or 'rangeland', 'forest', 'residential sites' and other surrounding areas. The little cropping that takes place has shifted largely from arable fields to homesteads; cattle grazing from herded and regulated to unrestricted in the villages and roadsides; and non-timber forest product harvesting has moved from local to multi-locational. Changes in land use during the past 25 years indicate a growing preference for active and passive extraction instead of production. New, robust and mixed property and tenure regimes have co-evolved with the blurring of the land use categories. To paraphrase Fairhead and Leach (1996), the African landscape, more broadly, needs to be read in different ways than is commonly done in the academic literature and

policy documents and initiatives.

The article proceeds as follows. We first describe the study setting and methods of data collection. We then present a short history of settlement of the two villages in the central Eastern Cape, after which we explore the spatial and temporal dimensions of the use of the landscape and its elements. In the concluding section we highlight landscape level changes emphasising the interactions between the social, institutional and biophysical elements. We end by reflecting on the reframing of the deagrarianisation debate.

#### 2. Study setting and data collection

Guquka and Koloni represent much of the contemporary realities of the rural Eastern Cape, most notably those in the former homelands Ciskei and Transkei<sup>3</sup>. To the traveller passing through the rural landscapes of the former Ciskei and Transkei, the well-defined land use categories set aside for crop farming, livestock and housing is apparent, and the general lack of current use of most of these lands for crop production is especially striking. The impression is generally of fields going unused often in the midst of rural poverty. Cattle wander around and many arable fields are infested by small shrubs and pioneer trees such as *Vachellia karroo*.

Guquka and Koloni were selected to investigate the deagrarianisation processes in part because of their contrasting rainfall patterns and thus their differing potentials for arable agriculture and livestock. They may also be contrasted in terms of natural landscapes. Guquka lies just below the escarpment of the Amathola Mountains in the central Eastern Cape (Fig. 1). The surrounding landscapes contain diverse vegetation types, including afromontane forests and the Tyume River streaming through the Tyume valley. Koloni is situated in thorn savanna on gently rolling hills. While soils in Guquka can support rain-fed farming, in Koloni that is hardly the case and it is more suitable for livestock farming, notably sheep.

Data were collected in a longitudinal research project in the two villages (1996 - present). This involved multi-methods research which included household surveys at different periods, examining land use, livelihoods and income options, aerial photographic analysis of land use patterns, oral histories, focus group discussions and informal interviews and with local residents generally or individuals regarded as knowledgeable about particular topics. All this was combined with detailed, direct observations. In 1996, 2010 and 2013 household surveys were administered covering all the households in each village. In 2004 and 2014 these were updated focusing on specific topics (e.g. cattle numbers, fallow land, migration, home gardening, and use of water). In 2005 and 2013 surveys were conducted to specifically assess the gathering of non-timber forest products. Thus, there have been repeated visits over two decades and strong interactions with people in each village. Much of the early work is summarised in Hebinck and Lent (2007) but updated and amended in this article and a range of others that are forthcoming.

Two broad sets of questions will be answered that together depict "what is happening?" with regard to the use of social and natural resources in contemporary rural settlements in the central Eastern Cape. Our point of departure is combining a set of questions about what is produced, why, where and how with questions of how these shape interactions between the social and biophysical elements of the landscape. We dissect the landscape assemblage in terms of the institutional arrangements, multiple uses and the changes over time. To analyse the

<sup>&</sup>lt;sup>2</sup>We prefer to not apply the term fallow land or fallowing of arable land which is a common term in policy documents. Fallowness is not part of the local discourse, nor is underutilisation. When asked people say "has not been planted for more than 5 years" or "has not been ploughed for twenty years" (Hebinck and Monde, 2007). The history of cultivation of arable fields in Guquka and Koloni makes the notion deactivation more appropriate than fallow or underutilisation.

<sup>&</sup>lt;sup>3</sup> The notions Ciskei and Transkei refer to homeland administrative settings during apartheid. Although after 1994 homelands were abolished and re-integrated in the Republic of South Africa, Ciskei and Transkei are still used as referring to distinct entities. The notion Ciskei is originally derived from Cape Colony's perspective as a geographical location that is inhabited by Xhosa people that migrated to the west of the Kei River. Transkei, in contrast means at the other side (east) of the Kei where the Xhosa Kingdom thrived.

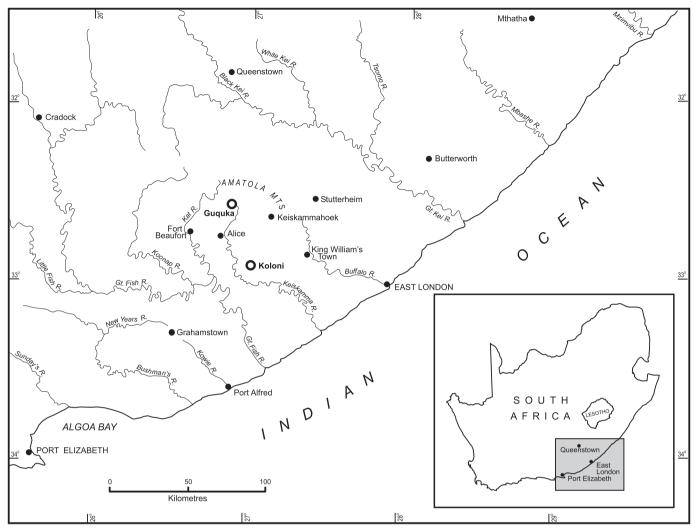


Fig. 1. Location of the villages in the Eastern Cape Province.

changes, we perceived the landscape assemblage as a locally specific configuration of diverse but rather distinct land use activities: 'growing', 'grazing' and 'gathering' (Lent and Hebinck, 2006; Hebinck and Van Averbeke, 2007b). With 'Growing' we mean the cultivation of crops and trees in arable fields and home gardens. 'Grazing', designates the rearing of small and large livestock on communally owned and managed land. 'Gathering' stands for the provisioning ecosystem services which include the harvesting of wild resources, such as leafy vegetables, medicinal plants, thatch grass, reeds for weaving, firewood, and clay and wood for building and ritual purposes. The residential site or rather homestead has always been an important land category for both consumption and production purposes. An analysis of the activities in homesteads cannot be ignored as they play a key role in the transformation of the landscape from merely productive to more extractive.

#### 3. History of settlement and land use and access categories

Both villages emerged in the aftermath of the Frontier Wars (1835–1878) between the colonising English and the indigenous Xhosa. The Tyume River valley was often cleared of Xhosa homesteads creating chaos and uncertainties for the Xhosa people while making space for the white settlers who settled around the same time. Historical sources point at 1847 and onwards. Their presence continued until the 1960s when the Tyume valley became part of the Ciskei homeland in 1981 and white farmers were removed. Concurrent with settlement, Xhosa

people cleared land to grow grains and vegetables as well as rear cattle. The early settlement period, notably in Guquka, was overseen by the tribal authorities and people were allocated land in various clusters forming villages. Each village had access to the surrounding rangelands, including mountain and valley-bottom pastures which ensured adequate grazing for livestock. Maize and sorghum were cultivated on land near the river, whilst hunting of game and gathering of wild products were also important, as confirmed by accounts of travellers (Mostert, 1992) and villagers in Guquka and Koloni (Hebinck and Smith, 2007).

Guguka and Koloni were at different times in their history, surveyed by the colonial administration. Guguka was surveyed in 1899 to demarcate the boundaries of each tribal area in the Tyume valley but also to transform the rights from communal tenure to a mixture of communal and private (e.g. quitrent). Colonial administrators made a further distinction between land allotted to crops (then termed a garden lot but subsequently and in this paper referred to as arable allotments or fields) of three to four morgen (1 morgen = 0.856 ha) and land for residential purposes (a building lot). The remaining land was designated as 'commonage' for communal grazing and gathering. Similarly, Koloni was surveyed in 1874 upon instruction of the Minister of Native Affairs. The land categorised accordingly was then allocated with the help of the Chief to the male heads of each family. Residential and arable sites were allocated under a quitrent arrangement which implied a payment of a perpetual quitrent (annual payment) of two shillings and six pence (sterling) (Mills and Wilson, 1952; Wotshela, 2014). These quitrent title deeds were only transferrable to the eldest son and

Table 1
Number of people in each village at different times (1991–2011).
Source: the 1991 data is from the Republic of Ciskei Population Census; 1996 data is from our unpublished 1996 survey; the 2001 data is extrapolated from Republic of South Africa Population Census 2001; the 2011 data is from the Republic of South Africa Population

	1991	1996	2001	2011
Guquka	650	460	300	279
Koloni	514	315	262	210

are still valid today. Rights to the communal grazing lands were granted to those who resided in the village, thus effectively only for those with quitrent title deeds. In Guquka there was no transparent commonly agreed upon plan but an ad hoc arrangement that at the end of the cropping season cattle were allowed to feed on the maize stover that was left in the arable fields. Cattle also grazed beyond the assigned grazing land. Cattle can be found in the adjacent forest lands and beyond. In the 1960s the rangelands in Koloni were divided during Betterment<sup>4</sup> into four grazing camps separated by fences. A committee of elder livestock keepers oversaw the rotational grazing of the camps and the opening up of the arable fields for grazing in winter. Rotational grazing was instituted to prevent overgrazing. The Betterment plan implied that three of the camps could be grazed in rotation for up to 10 days each, with the fourth camp rested for an entire year. Koloni residents adapted this system by resting one of the four camps and allowing the other three camps to be grazed continuously (Van Averbeke and Bennett, 2007: 155). The cattle committee was operational up until around 2005, after which it became dysfunctional, and grazing of rangeland and arable fields now resembles that in Guquka where grazing is largely continuous and where cattle graze unguarded irrespective of the land use categories and ownership. Dysfunctional committees are not restricted to cattle rearing only. The committee installed after 1994 to oversee the use of water for human consumption also dissolved (Van der Horst and Hebinck, 2017). More broadly, 'traditional' institutions like the chieftainship are increasingly being contested in the Eastern Cape (see Bennett et al., 2013; De Wet, 2011; Wotshela, 2009).

Categorising lands in this way also meant that field sizes were fixed and protected by the quitrent title deed. However, the size of the grazing land and the number, as well as the occupation of residential sites, fluctuate. The residential area in both villages has expanded considerably since the 1960s. In Koloni one of the grazing camps was converted to residential use around 1980. This also happened in Guquka when the village accommodated people who were forcibly removed from areas that were designated for white settlement in the 1960s after the formation of the Ciskei homeland (Hebinck and Smith, 2007; Smith and Hebinck, 2007). Residential plots were not only granted to next of kin but also outsiders; land was granted under the so-called Permission to Occupy arrangement.

#### 4. Using the landscape

#### 4.1. Residential

Demographically the villages are in a state of flux. There is a clear decline in population numbers. The number of people staying in the villages at the time of first survey (1996) and population census (1991,

**Table 2**Number of residential sites and occupation of houses, 1996–2014. Source: Unpublished surveys 1996, 2004 and 2014.

State of use of residential sites	Guqul	Guquka		Koloni		
	1996	2004	2014	1996	2004	2014
Permanently occupied	80	85	70	60	63	89
Once per year or less	32	6	4	30	18	1
New houses and/or under construction	1	1	6	1	2	6
Vacant/un-build site/open space	6	15	10	1	44	42
Abandoned; houses collapsed; owners not seen for a while	2	18	40	5	6	12
Spaza shop	0	0	0	1	1	1
Shed	0	0	0	1	1	1
Clinic	0	0	0	3	3	3
School	1	1	1	1	1	1
Total sites counted	122	126	131	103	139	156

2001, 2011) has decreased steadily since 1991 (see Table 1). The reduction in population, however, does not mean fewer residential sites and houses being occupied. The number of residential sites has, since our first survey in 1996, increased slightly. In Koloni, we counted 133 residential sites in 1996, 139 in 2004 and 156 in 2014 (Table 2). For Guquka it was respectively 122, 126 and 131 sites. The expansion of the residential area in both villages was primarily realised through converting grazing land. The rate of occupancy or use of the residential sites, however, has not increased. Quite a few houses are abandoned and in a dilapidated state. On the other hand, notably since the last 10 years, new houses are replacing older structures. The demographic changes are driven by natural attrition and migration to the bigger cities, a process which started before apartheid was formally abolished in 1994, but accelerated significantly after 1994. At the same time some villagers returned to their original village due to retirement or retrenchment, whilst some who migrated shortly after the fall of apartheid, never returned to the village, leaving their houses unoccupied and in a deteriorating state (Smith and Hebinck, 2007: 282 ff.; Table 2).

Tables 1 and 2 reflect the dynamics of the built-up environment of both villages. The data reveal the transformation of the villages and the rural economy to one where the rural home is central to people's lives. The residential sites or homesteads represent more than only a building; they are the sites where people grow food, stay, eat, receive members of their families and friends and is the place to where some migrants return. The homestead is usually referred to as 'home'. The homestead is also the site of rituals which are performed on specific occasions during the year, predominantly in December and June/July. In enclosures marked with material collected from the rangelands and nearby forests (a wood pile locally known as *igogo*) ancestors are honoured during *rite de passage* circumcision parties; ceremonies in which men play a central

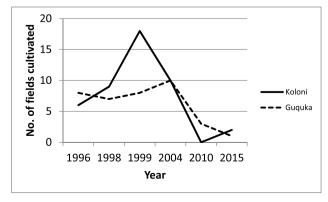


Fig. 2. Extent of deactivation of arable fields in Guquka and Koloni. Source: Hebinck and Monde (2007: 183), 2010 survey, 2015 field visit.

<sup>&</sup>lt;sup>4</sup> Betterment is largely known for its social and physical reorganisation of villages (De Wet, 1987, 1989). However, there is less reference to Betterment as bringing and expanding education facilities (schools) and water infrastructure. During Betterment, two small dams and a slightly bigger dam were constructed in Guquka to retain water for cattle and crops and, as a secondary objective, for human consumption. Koloni became a pilot village for Betterment planners in the 1930's, receiving substantial agricultural support from Government and neighbouring white farmers.

role. Performing rituals invariably involves the slaughtering of either an ox or a goat. The host family invites extended members of the family, neighbours and friends to attend and large quantities of food and traditional beer are prepared (McAllister, 2005). The homestead becomes a public space during rituals because these events are usually open to other residents. Some come from afar. To prepare the food and beer lots of firewood is required, which may be collected or bought and brought by the family and kin, or labour is hired within the village from people who harvest and sell firewood. During these rituals and other festivities one observes many people visiting their families for a few days, and the village is extremely busy. The Christmas return of urban migrants or family, carrying with them their annual bonus, signifies a time to relax and socialise and developed into a period of festivities (Ngwane, 2003). The literature on the (religious) meaning of home and place also reveals the role and importance of enjoying the natural environment and rekindling one's childhood (Basso, 1996; Cocks et al., 2017).

#### 4.2. Growing crops

Crops are grown in arable fields and in home gardens in the residential sites. Maize used to be the staple crop. Maize is intercropped with potatoes, beans, pumpkins and sunflowers. Leftover maize in arable fields is fed to livestock. We have detailed yield data only for 1997 and 1998 (Hebinck and Monde, 2007). Maize yields in the arable fields in Guquka at the time averaged about 1 ton/ha. In Koloni, where the rainfall is lower and less reliable, the average maize yield was about 0.6 tons/ha. Maize is also picked as green mealies and is mostly consumed in the home. From 1998 onwards not many fields were ploughed and planted. The trend of arable field deactivation depicted in Fig. 2 is well supported by interpretations of aerial photographs taken between 1938 and 1996 and analysed by Lent and Mupakati (2007). The aerial photographs of 2002, 2009 and 2016 and the yearly field observations also underline the trend. A similar picture emerges in other areas of the Eastern Cape, such as the former Transkei (Andrew and Fox, 2004; De Klerk, 2007; De Wet, 2011; Shackleton et al., 2013; De la Hey and Beinart, 2016; Connor and Mtwana, 2017).

Analysing and comparing the oral history accounts and the series of aerial photographs, and combining these with yearly observations shows that the deactivation of arable fields is not a linear process in neither time nor place. The history of the use of arable fields articulates that some fields that have never or hardly been ploughed since the start of our research in 1996 are suddenly ploughed and planted (see Fig. 2). Having the option to farm at any time, even if not actually practiced at any specific or longer periods (thus deactivated), remains important to local identity and sense of place and belonging (see also Cocks et al., 2012; Masterson, 2016) as well as a safety net for people retrenched or retiring from urban employment. The timing of the trend towards deactivation is rather similar for both villages. The decline of arable field production was clearly set in motion from the 1960s onwards. The data for Koloni is more detailed which is in part due to the quality of the images (Lent and Mupakati, 2007: 179 ff.). Here, the decline went from about 90% of fields cultivated in 1939 to under 10% in 1985, levelling off, at about 5-9% of the fields ploughed between 1996 and 2004 (Hebinck and Monde, 2007: 183-190) and only a few in the last few years. In Guguka deactivation after 1949 was roughly comparable to that in Koloni, although the percentage of field cultivated was about 20-25%. The trend accelerated somewhat with the formation of the Ciskei homeland from 1968 onwards when, as a consequence, white traders and farmers with whom those that cultivated interacted with left the region.

It is tempting to relate the deactivation of the use of arable fields and the associated trend in the reorientation of livelihoods away from agriculture to changing and adverse climatic conditions, such a severe droughts (e.g. 1960–1970 and 2016). In addition, soil erosion, an important factor for maintaining and increasing productivity of the land, was – and probably still is - quite significant in the Ciskei (Lent and

Mupakati, 2007: 166). Much of the soil erosion can be associated with cultivation (Van Averbeke and Bennett, 2007: 55; Beinart, 2003). Moreover, soil erosion becomes problematic for productivity when the labour that is necessary for caring and monitoring of land and fertility is neither available nor applied. The explanation is thus more complex and other processes are more prominent than a focus on climate or agronomy per se. One clearly needs to take into account the labour migration history and political-economic changes in the country that spurred more broadly the transformation from an agrarian based economy to a rural place. The need for a more permanent labour force rather than yearly renewable contracts of about 4-6 months dramatically changed the nature of migrant labour relations. Previously the return of migrants to home for Christmas at the end of 4-6 month contract went together with cultivating fields which was financed from migrant wages. When labour contracts shifted to fulltime contracts the time spent at home for Christmas was for social and cultural activities thereby competing for time with agrarian activities, particularly cultivation (Hebinck and Smith, 2007). Lack of labour and over time the aging of landholders not only mirrors the transformation of the rural economy and livelihoods but also adds to explaining the gradual decline in field cultivation. When one gets older, "one loses the power to work" a landowner in Koloni once remarked when discussing the past and present of cropping in the village. The local expression for agriculture is 'ploughing'. When locals say that they are 'not able to plough' they are indicating that labour and land but also the ability to access the means to 'plough' are not available. When alternative sources of labour (family or hired) and capital are not abundant or affordable, cultivating fields by hiring tractors or oxen to plough and buying seed, insecticides, fertiliser or manure and fencing becomes virtually impossible. Often only a few strips of land in a field are actually cultivated (Hebinck and Monde, 2007: 183-190). Some households hire(d) labour to help. The monetary and social resources to organise draught power or hire labour are increasingly not readily available or accessible. This must also be read against the background of the changes in the nature of remittances<sup>5</sup> to the villages and youth migration.

Past state interventions also play their part in explaining the decline of field cultivation. Part of the reason for implementing Betterment planning was supposedly to halt the assumed ecological deterioration of communal grazing lands. Reducing cattle herds through culling cattle was widely applied, also in both villages. Yet, according to local informants, the programme's main effect was to trigger the permanent decline of animal husbandry. This, in turn, negatively affected crop production which depended on animal draught power at crucial phases during the growing season (Hebinck and Smith, 2007: 100; Hebinck and Monde, 2007: 210 ff). In addition, during the early years of the 20th century the Transkei and Ciskei received a multitude of economic refugees who had left white farms when their existing tenancy arrangements ended. This influx increased the population of these territories, raising pressure on the landscapes and available natural resources. Marginal land was taken into cultivation and pressure on the available rangelands increased. This overcrowding reduced the capacity of the natural resources to buffer the effects of adverse conditions. As a result, the vulnerability of farmers to droughts and other disasters increased, forcing them into debt, and limiting their ability to cope and continue their rural existence (as summarised in Hebinck and Van Averbeke, 2007a: 48). The Ciskei became known as the dumping ground of apartheid.

Moreover, the growing of crops is intimately connected to land ownership and land-people arrangements. Not everybody has rights to an arable field. The ability to produce is associated with secure property rights both historically and now. Producing crops is historically embedded and protected by the quitrent title deed that is issued to the

<sup>&</sup>lt;sup>5</sup> Whereas in the past remittances were in the form of cash, these increasingly appear now in the form of materials (e.g. a new couch or a new fridge).

Table 3

The degree of purchasing of food in Guquka and Koloni during 2010.

Source: Unpublished 2010 survey

	Guquka n = 58	Koloni n = 51
Average	87.4%	84.7%
Max	100.0%	100.0%
Min	30.0%	22.5%
Std. Dev.	20.0%	20.6%

owner. At the same time, local institutions ensured that producers' rights to the crops were guaranteed and that no other person or livestock could lay claim to them or the space. While the property rights to the land are secured for those with title deeds, not all residents have rights to land; and landlessness is thus a reality. Besides not all landlords reside in the villages. Local accounts suggest that absenteeism is not a recent phenomenon and some families are known to have never ploughed their fields (Bennett, 2002:130). Absentee landlordism might go as far back as the early post-settlement period (Hebinck and Smith, 2007). Accounts indeed suggest that some people may have been allotted an arable (and residential) lot at the time of the land surveys in 1876 and 1899 in Koloni and Guquka, respectively, but never occupied the land that was allotted to them by the then chief. Indeed, of the 33 fields in Koloni 'belonging' to people not resident in the village, 26 belong to individuals whose whereabouts are unknown and most probably have never resided in the village. Renting out land to others and other arrangements that mediate land transactions between land owners and non-land owners are absent and have never been popular in either village (Hebinck and Monde, 2007). This certainly limits the opportunity for those with no rights to arable land or the youth to access and use arable land. Van der Horst (2013) found this a major reason why land that potentially is irrigable will not emerge as an opportunity to expand arable field production. Mistrust of sharecroppers is said to be the chief reason why sharecropping or renting is virtually absent (see also Van Averbeke and Bennett, 2007).

In contrast to field production, home gardening is popular and carries fewer risks and warrants allocating labour and investment of limited financial resources. Home gardens are fenced to reduce the risk of damage to crops by free roaming livestock. Home gardens are more secure and closer to the home; water from communal water taps is widely available and actively used (Van der Horst and Hebinck, 2017); rainwater that is harvested from roofs and stored in tanks is also available. Gardens can be attended more regularly and provide quick access to fresh produce. This may explain why cropping has shifted from distant arable fields to home gardens as is the case in many other villages in the former Ciskei and Transkei (Andrew and Fox, 2004; De Klerk, 2007; De Wet, 2011; Shackleton et al., 2013; De la Hey and Beinart, 2016; Connor and Mtwana, 2017).

Home gardening is important for village food supply and forms an important part of the food security picture in villages like Guquka and

Table 4
Number of homesteads<sup>a</sup> and use of home gardens in 1996 and 2010.
Source: Hebinck and Monde (2007: 200) and unpublished survey data 2010

	Guquka		Koloni	Koloni		
	1996	2010	1996	2010		
Homesteads	n = 68	n = 59	n = 60	n = 51		
Had gardens	61	49	52	44		
Cultivated	-49	-29	-41	-32		
Uncultivated	-12	-20	-11	-12		
No gardens	7	10	8	7		

<sup>&</sup>lt;sup>a</sup> The table excludes those homesteads that were vacant or abandoned. Homesteads inhabited once or less per year were also included. However, the home gardens of some of these were in use by neighbours (see Table 2).

Koloni and elsewhere in the Eastern Cape and beyond (Connor and Mtwana, 2017). Home gardens are primarily aimed at feeding the family, significantly but varyingly, supplementing food purchases. Some commercialised their home garden production (Van der Horst and Hebinck, 2017). Local informants used to say when discussing gardening, 'gardening saves money'. Purchasing food, however, is among the everyday realities and over time has increasingly become the predominant means of food procurement (D'Haese and Van Huylenbroeck, 2005; Hebinck and Monde, 2007). Table 3 shows the extent to which people purchase food outside the village in supermarkets in Alice, King William's Town or Middledrift. Despite being important for the daily supply of food, home gardens are not always fully cultivated nor continuously over the years (Table 4).

The mean size of gardens in Guquka is  $957\,\mathrm{m}^2$  per household compared to  $615\,\mathrm{m}^2$  in Koloni. Table 5 gives an impression of the kind of produce people get from their home gardens. In contrast to arable fields, most households have a home garden on their residential site. Home gardens are typically more diverse than arable fields. The range of crops planted in home gardens includes maize, beans, pumpkins, onions, spinach, cabbages and tomatoes (Table 5). Some contain fruit trees. Small livestock species, including pigs, chickens and ducks, are an integral part of home gardens. They are fed on leftovers from the garden and supply some nutrients to the soil.

The variation between the years of observation may be due to the differences in surveying, or differences in seasonal weather conditions. Targeted interventions by the Eastern Cape government also need to be taken into account. Projects like Siyazondla aimed at increasing participation in home garden production often generate some initial enthusiasm and impact on production, but are rarely enduring (Fay, 2013; De Klerk, 2013; Van der Horst and Hebinck, 2017). A good example is a Water Harvesting Project that was implemented in Guquka between 2004 and 2009. It initially generated a lot of enthusiasm in home gardening. When the funding cycle ended, the practice of water harvesting in gardens faltered out. In 2014 we found only one gardener that was part of the project still using the techniques transferred (Van der Horst and Hebinck, 2017).

The data on home gardening clearly shows the dynamic nature of change in time, up and down and then up again, confounding narratives of a linear and unidirectional deagrarianisation process. However, the trend in Guquka is towards a decreasing number of people engaged in home garden production, while in Koloni the trend is less clear. The trend also varies per crop gown.

#### 4.3. Grazing and livestock husbandry

Cattle, sheep and goats graze in the two villages on both the communal rangelands and in arable allotments as well as the open spaces in the residential sites. In the past, grazing in the fields usually took place during winter after the crops had been harvested. Feed and fodder are rarely purchased. With the demise of field cropping and the gradual collapse of institutions that maintained the rotational grazing schemes (introduced during the period of the Betterment), livestock may now graze any unprotected fields all year round. The so-called 'Cattle committee' is now defunct. Cattle roam freely about the villages, without regard to the once sharply maintained and imposed land use categories.

The cattle are usually of mixed breed – generally a cross of the 'non-descript' mixed breed of the region with Swiss Brown, Afrikaner and Brahman (Faku and Hebinck, 2013). The exchange of stock for breeding purposes largely occurs at the local level. For most, cattle are sold infrequently, although a few households do engage in such. Small stock are mainly kept for purposes of exchange. Cattle have both material (potentially measurable in terms of cash but not always) and cultural meaning (status, rituals, bride wealth (lobola)). Cattle and goats are kept for milk (Bennett and Lent, 2007). Sheep potentially supply meat and wool. Goats are sometimes called the poor man's cattle because

Table 5
Production in home gardens: degree of cultivation and mean production, 2005 and 2013.
Source: Unpublished survey 2005 and 2013 (Mtati (2013: 52))

Crop	Units	Guquka					Koloni			
	HH cultiv-ating (%)		ating (%)	Mean number produced; stand dev.		HH cultiv	ating (%)	Mean number prod	Mean number produced; stand dev.	
		2005	2013	2005	2013	2005	2013	2005	2013	
Cabbage	Count	54 <sup>a</sup>	44 <sup>a</sup>	16.7 ± 12.6	18.3 ± 10.1	36 <sup>a</sup>	54 <sup>b</sup>	15.9 ± 5.6	21.8 ± 14.3	
Spinach	Bunches	52 <sup>a</sup>	42 <sup>a</sup>	$13.1 \pm 7.3$	$13.9 \pm 5.6$	49 <sup>a</sup>	54 <sup>a</sup>	$10.8 \pm 5.5$	$18.9 \pm 11.1$	
Carrots	Bunches	46 <sup>a</sup>	$27^{\rm b}$	$8.6 \pm 5.4$	$13.3 \pm 13.4$	15 <sup>a</sup>	35 <sup>b</sup>	$6.3 \pm 4.4$	$7.6 \pm 4.0$	
Beetroot	Bunches	35 <sup>a</sup>	36 <sup>a</sup>	$8.8 \pm 5.1$	$7.9 \pm 4.4$	21 <sup>a</sup>	35 <sup>b</sup>	$5.0 \pm 2.7$	$10.1 \pm 6.7$	
Tomatoes	Bunches	39 <sup>a</sup>	$19^{\rm b}$	$50.0 \pm 35.4$	$15 \pm 22.5$	33 <sup>a</sup>	16 <sup>b</sup>	$31 \pm 30.3$	$4.5 \pm 1.5$	
Onion	Bunches	43 <sup>a</sup>	$29^{\mathrm{b}}$	$15.4 \pm 18.5$	$18.9 \pm 9.9$	44 <sup>a</sup>	46 <sup>a</sup>	$5.9 \pm 2.8$	$22.8 \pm 32.9$	
Potatoes	Bags	61 <sup>a</sup>	47 <sup>b</sup>	$10.0 \pm 12.2$	$9.8 \pm 14.9$	49 <sup>a</sup>	60 <sup>a</sup>	$4.1 \pm 4.3$	$7.8 \pm 7.4$	
Pumpkin	Count	26 <sup>a</sup>	17 <sup>a</sup>	$12.1 \pm 12.5$	$26.7 \pm 29.7$	28 <sup>a</sup>	16 <sup>b</sup>	$10.0 \pm 5.8$	$19.4 \pm 14.6$	
Maize	Kgs	56 <sup>a</sup>	42 <sup>b</sup>	$153.8 \pm 142.6$	$1.85 \pm 1.2$	21 <sup>a</sup>	21 <sup>a</sup>	$146.9 \pm 80.7$	$0.45 ~\pm~ 0.1$	

N.B.: unlike superscripts indicate significant differences between the two time periods within a village.

Table 6
Changes in livestock numbers and ownership, 1996 and 2010.
Source: Unpublished Surveys 1996 and 2010

	Guquka			Koloni					
	1996		2010 1996		1996	1996		2010	
	cattle	% hh	cattle	% hh	cattle	% hh	cattle	% hh	
Cattle	154	30.3	131	22.4	286	55.6	248	51.0	
Sheep	212	15.8	24	5.2	381	33.3	95	11.8	
Goats	51	14.5	115	15.5	172	40.7	92	19.6	
Horses/donkeys	6	3.9	2	3.4	14	11.1	0	0	
Chickens	349	60.5	263	36.2	265	48.1	204	35.3	
Pigs	82	43.4	8	5.28	11	22.2	124	7.8	

they play a similar role to cattle. They are favoured for ritual slaughter because, like cattle, they make a lot of noise, which is interpreted as a call to the ancestors. More than cattle, goats are sold when there is an urgent need for cash. They are more easily fungible than cattle because they cost less.

They also represent a store of wealth which can mitigate financial uncertainties and sudden shocks. It is customary to slaughter a beast when a household member dies. Cattle are also slaughtered periodically in remembrance of ancestors. This not only underlines the continued strength of traditional rituals in the villages but also demonstrates the burden rituals place on some households, which either have to slaughter valuable cattle or purchase them if they don't have any. HIV/AIDS related deaths have also increased the need to buy cattle for funerals. Young men in the villages, especially those who have some experience of urban lifestyles, claim that they are no longer interested in accumulating cattle. They prefer to put energy and resources into educational opportunities, for example.

With the deactivation of field crop production, the importance of cattle as a source of draught power has diminished (although the order of cause and effect is hard to discern, for example Shackleton et al. (2013) ascribe declines in cropping to loss of cattle). This also coincides with diminished state support since the mid-1990s in maintaining animal health (see also Aliber and Hall, 2012; Shackleton et al., 2013).

Table 6 summarises the changes in livestock numbers and ownership between 1996 and 2010. Clearly numbers of livestock are declining and there is a tendency of livestock ownership being concentrated in fewer hands. Chickens are still widely raised although their numbers are declining slightly.

The sharp decrease in sheep numbers and ownership is due to the loss of access to the wool market, which has virtually collapsed in the former homelands in the Eastern Cape. Wool production was important till recently, especially in Koloni. People sought to derive income from

Table 7
Percentage of women household heads owning of livestock in Guquka and Koloni, 1996–2010.
Source unpublished survey 1996 and 2010.

	Guquka		Koloni	Koloni		
	1996	2010	1996	2010		
Cattle Sheep Goats	9.7 2.8 17.6	48.9 58.3 71.3	38.5 59.3 48.3	48.8 56.8 41.3		

wool from about 1850, when African smallholders in the Eastern Cape first began to rear sheep (Bundy, 1988; Bennett and Lent, 2007). Villagers also commented that sheep are easy to steal and they therefore prefer to invest in goats. Residents in both Guquka and Koloni have experienced livestock theft on a significant scale over a long period of time. Villagers also explain the decline in numbers also with cattle disease, drought, and economic hardships caused by retrenchments.

Livestock ownership has increasingly become skewed. This is partly explained by the majority of livestock owners not replenishing their stock due to lack of finances. The outcome of this is clearly manifested in Koloni, where over time, 4-5 people control 80-90% of the cattle which they hold for the purposes of accumulation. They actively breed and sell cattle. This marks a significant shift in why some cattle owners keep cattle; however this shift is far less pronounced in Guquka then in Koloni. During field visits in 2014 and 2015, we met at least four cattle owners that were regularly selling, slaughtering and buying cattle in nearby markets. These four cattle owners also happen to be the four that keep most cattle. One cattle owner, who also runs a taxi company, regularly keeps between 60 and 90 cattle. A recent female immigrant combines a catering service company with setting up a herd for commercial purposes. During our 2014 visit she claimed to have purchased about 8–10 cattle and she was planning to buy more in the future. The interesting element in this pattern of accumulation is that it takes place on communal land. The taxi owner cum livestock keeper complained that the 'communal areas were not well maintained, and that government should take care of that!' Thus, the value of communal grazing resources is increasingly concentrated in the hands of fewer households. This is not insignificant for the future of common property resources like the rangelands. Struggles to use and manage these for alternative purposes (e.g. residential, harvesting) may intensify (see Bennett et al., 2010; Bennett and Barrett, 2007).

Cattle used to be almost exclusively held by elderly men, while both men and women owned and managed small stock. However, a comparison between the 1996 and 2010 shows that ownership of livestock has shifted to female-headed households, especially in Guquka

Table 8
Households gathering NTFPs, 2005 and 2013.
Source: Unpublished survey 2005 and 2013 (Mtati, 2013)

NTFP	Guquka (%	)	Koloni (%)	Koloni (%)	
	2005	2013	2005	2013	
Firewood	95ª	88 <sup>a</sup>	83ª	81 <sup>a</sup>	
Hand brushes	85 <sup>a</sup>	59 <sup>b</sup>	73 <sup>a</sup>	77 <sup>a</sup>	
Thatch grass	65 <sup>a</sup>	49 <sup>b</sup>	25 <sup>a</sup>	16 <sup>a</sup>	
Kraal poles	65 <sup>a</sup>	34 <sup>a</sup>	40 <sup>a</sup>	75 <sup>b</sup>	
Kraal branches	68 <sup>a</sup>	$39^{\mathrm{b}}$	78 <sup>a</sup>	75 <sup>a</sup>	
Fencing poles	$60^{a}$	$90^{\mathrm{b}}$	35 <sup>a</sup>	$93^{\mathrm{b}}$	
Rituals	95 <sup>a</sup>	73 <sup>b</sup>	80 <sup>a</sup>	84 <sup>a</sup>	
Medicinal plants	83 <sup>a</sup>	41 <sup>b</sup>	83 <sup>a</sup>	53 <sup>b</sup>	
Wild vegetables	75 <sup>a</sup>	$0_{\rm p}$	56 <sup>a</sup>	$2^{\mathrm{b}}$	
Wild fruits	80 <sup>a</sup>	$3^{\mathrm{b}}$	66 <sup>a</sup>	$0_{\rm p}$	
Sticks	48 <sup>s</sup>	72 <sup>a</sup>	43 <sup>a</sup>	81 <sup>b</sup>	
Wooden utensils	40 <sup>a</sup>	59 <sup>b</sup>	50 <sup>a</sup>	58 <sup>a</sup>	

N.B.: unlike superscripts denote significant differences between the two time periods within a village.

(Table 7). Most of the women involved are widows who inherited livestock from their deceased husbands and hold the cattle with other next of kin, which emphasises the savings and safety-net value of livestock to families when the main income earner passes on. The shift to women owning cattle can also be interpreted as a declining interest of the younger males to engage in cattle production.

#### 4.4. Gathering

Historically gathering was a central component of rural livelihoods as described in diaries of early European travellers and settlers in the region and during the 20th century by anthropologists (Mostert, 1992; Schapera, 1937). Wild plants and animals were extensively used for food, construction of dwellings, firewood, traditional medicines, utilitarian and cultural artefacts and decorations. This is embodied in rich knowledge of local species and their integration into symbols, idioms, stories and songs (Alexander et al., 2015). The use of many species and the practices associated with such use has deep cultural meaning and they are important for rituals and communication with the ancestors (Cocks et al., 2012). For many, access to and use of relatively natural landscapes such as forests, grasslands and wetlands is part of their local identity and culture embedded alongside constructs of agrarian or productive landscapes, which together constitute "Xhosa landscapes" (Cocks et al., 2012; Fox, 2013; Masterson, 2016).

There is a tension between the cultural importance of gathered products and the processes of westernisation and development eroding both cultural and utilitarian uses. Thus, the use of many gathered resources is presumed to be in decline. However, there has been little systematic or quantitative study of the importance of gathered products until recently. Hence, longer term trajectories of use and decline can only be assumed. Hebinck and Lent collected data in 2005 on gathering (unpublished), which provided a basis for the systematic survey in 2013 by Mtati (2013), i.e. a period of slightly less than one decade. Potential measures of use include the prevalence, i.e. proportion of households making use of wild products, the frequency of such use and the amounts used. In terms of the proportion of households there is a mixed picture, with the use of several gathered resources declining during the decade, but others increasing (Table 8), as well as differences between Guquka and Koloni. At Guquka the prevalence of use of nine of the 12 gathered resources listed decreased significantly. In comparison, at Koloni, use of only four decreased, four increased and four hardly changed. Considering the two villages together, the proportion of households using specific resources declined for nine of the 12 resources listed. The exceptions were fencing poles, traditional sticks and wooden utensils. Even though there was a net decline for most of the resources, there was still widespread use of most of them, other than wild fruits and vegetables (which we consider to partly be a reflection of the drought which constrained supply of wild fruits and vegetables in 2013). We interpret the marked increase in prevalence of use of some gathered resources to be a consequence of the general weaknesses of the macro-economy during the 2013 period, which constrained household cash resources and hence some substituted bought items with locally gathered ones, such as fencing poles and handcrafted wooden utensils.

Whilst the use of gathered resources is widespread, many villagers felt that the reliance on and quantities used were declining. For example, one or two decades ago most households used locally gathered firewood almost on a daily basis. However, with access to electricity since 1994 and increased cash incomes (from a variety of sources: pensions, remittances, wages, social grants: Hebinck and Van Averbeke, 2013), most households now increasingly use a mix of energies, such as electricity, gas, kerosene and firewood. Thus, the quantities of firewood used per household are declining. Similar shifts occur with other resources. Of particular cultural importance is wood collected for ritual purposes and medicinal plants for healing (see also Cocks and Wiersum, 2003; Cocks et al., 2012; Cocks and Dold, 2011).

What was noted is that there was no record of villagers selling any gathered products during either of the two surveys. This is contrary to findings from the same region (Shackleton and Shackleton, 2006; Fox, 2013; Falayi, 2017) and elsewhere in the country showing increasing commodification of gathered resources as an economic activity with low barriers to entry and thus is readily available to economically marginalised households (e.g. Shackleton et al., 2008).

#### 5. Re-assembling the landscape

The use of these various land use categories has clearly changed over time. Planners and policymakers (and the land surveyors) considered the livelihood of the Xhosa people as ordered around residential sites, arable allotments and communal grazing land. Their conceptualisation of what constitutes an agrarian landscape was derived from the ideal that a spatial separation would spur development. Allocating them according to a mixture of tenure was part of the administrative mission of the colonial state during the mid-1800s onwards to remodel African ways of life and performance of agriculture (Beinart and Bundy, 1987). The style and technology of interventions surely did not resonate with the Xhosa pattern of land use. With the changes in the political economy of South Africa which translated also in the changing need for a more permanent labour force rather than short-term labour contracts, labour time spent away from the homestead began to compete with agrarian related activities. The use of the arable fields shifted on a sliding scale from relatively intensive to a stage of deactivation. Occasionally a field is ploughed that during previous years was unused for cropping purposes but not for other uses such as grazing and gathering. The sudden ploughing and planting of old fields is the product of changing migration patterns. Some migrants return to their home village and some start cultivating their fields again (Masterson, 2016; Shackleton and Hebinck, this issue).

The boundaries between the land categories are also blurred and have lost most of their externally imposed meaning. Many fields overgrown by trees and shrubs now provide firewood, wood for ritual purposes as well as medicinal plants, fodder for goats, as also observed elsewhere in the Eastern Cape (Fox, 2013; Shackleton et al., 2013; Falayi, 2017). The deactivation of the fields potentially contributes to restoring their fertility and growth of useful plants and thus an increase in biodiversity. However, it must be said that bush encroachment, notably of pioneer trees such as the *Vachellia*, at the same time restricts options for cattle and field production. Cattle, once restricted in grazing and movement, now graze the deactivated fields, the residential sites as well as the rangelands. Food is collected from the rangelands, nearby forests and is also to varying degrees and intensities produced in home gardens and increasingly purchased in nearby towns. The land use

categories interact in ways that were not foreseen by the land surveyors in the previous century and current rural development policies. Driven by socio-cultural and political transformations, the land use categories do not exist as separate but as integrated entities. Together, they contribute to and shape the landscape which is culturally significant and provides some resources for local livelihoods, particularly for those whose livelihoods are only weakly connected to the urban domain. For most, the village provides a home. The once historical land use categorisations have become superfluous for such a home. The landscape that emerges is, however, not unproductive and continuous to provide goods and services.

The interconnections between the land use categories vary through time and between land users. In some cases interaction is limited and in others there is no connection at all. The ecosystem services from grazing cattle (in the form of manure and draught power) are now increasingly disconnected from growing which differs substantially from the past when land, labour and manure were intimately connected. Moreover, poles collected for fences and kraals are increasingly purchased. Yet, some connections still endure, for example, grazing of maize stover during the winter, cutting of grass from the rangelands to bring home to sick or injured animals that cannot free range, feeding waste foods to goats.

The role of gathering as a safety net, which features so prominently in the literature, is becoming less significant as connections with urban opportunities and benefit flows increase, although it remains important for the poor households. The degree of commoditisation is low, but the meanings for cultural purposes, rituals and healing remain strong (Cocks et al., 2012). The same goes for cattle sold and slaughtered for purposes of *lobola* and *rites de passage*; however, there are a few exceptions, mainly in Koloni, where cattle are the subject of accumulation for a minority. Food is predominantly purchased which is an indication of the transformation of the landscape from production to consumption. The urban and state resources have become an essential component of the social landscape. People in the village maintain links with the urban (they visit for many reasons, shop in nearby towns); villagers that have moved and now live elsewhere come back for rituals like circumcision, a marriage, a funeral, and send remittances (although less than before).

The blurring of the boundaries is clearly a gradual process. The shifting of boundaries was set in motion by the interplay between outcomes of interventions, responses to these interventions, abandonment of arable cropping in favour of home gardening, the shift from regulated herding of livestock to unregulated, livelihood re-orientations and a gradual disfunctionalisation of institutions that were created to protect the property rights to the land and to manage the use of the land categories in particular ways. Each of these processes have their own timing and complexities. The available evidence (e.g. oral accounts, aerial photograph interpretation; surveys) indicate that the boundary blurring probably started by the early 1950's, the time when arable farming started to decline. It became a gradual routine since then, with subsequent acceleration in the post-apartheid era.

The analytical importance of boundary blurring is that it questions the interpretations by many regarding what comes from the arable field (as a unit of analysis) as a measure of production and productivity. This may to a degree be correct for large-scale farming in the region but these calculations and data discriminate against the reality of so-called former homeland agricultural practices and land-based livelihoods (Shackleton et al., 2001). It is a common official oversight to not include what people get through 'gathering', and thus ignoring the role of wild products in the total set of rural livelihood activities and incomes. What is considered productive is often rigidly assessed. McAllister (2001) elaborates a more adequate way of calculating maize production and productivity for the Transkei by including the early harvesting of green mealies and the feeding of left overs and rotten maize to cattle. Jerven (2010) and Jerven and Johnston (2015) broaden the argument and question the nature and use of statistics for policy purposes. Moreover, the transformation of the villages to largely being a rural

place, is not taken into account in current development narratives and planning by the state. There is still a pre-occupation with rural livelihoods as largely hinging on agriculture. This not only ignores the gathering aspects but also that the rural has been attributed a different meaning.

Institutionally, despite the blurring of the boundaries of the land use categories, an interesting, overlapping governance structure has emerged. Each of the three land use categories are governed by different rights and claims. The 'growing' sites of the landscape originally were and still are designated as private tenure governed by quitrent arrangements in terms of access and use as well as inheritance. Peoples' rights to the arable fields and home gardens are exclusive. These rights are still more or less maintained and there is little evidence that nonplot holders cultivate 'illegally' without consent of the owner, being absentee or a neighbour. The gradual erosion of the local institutions that historically secured the rights to fields and crops, contributed to a transformation of a (once) productive arable landscape to spaces of consumption. The current property system (i.e. quitrent) is both problematic as well as offering new opportunities. Problematic in that after many years of movement out of the village or death of some owners, fields have become disconnected from the original owners. The institutional capacity at village level to re-arrange land-people relations in the village is absent. Owners residing in the village continue to lay claim to their field even if they have not ploughed and planted it for many years. At the same time, the institutional erosion also allows people to use the fields for purposes other than cropping (i.e. gathering, grazing). The sites for grazing cattle were originally designated to be managed as communal rangelands, implying for use of those in the village with ownership of residential sites. The sites for 'gathering' were demarcated as open access areas for village residents. However, while rules and rights are designed and implemented to include and exclude people from using and accessing specific parts of the landscape, they have transformed through time. Gathering as an open access activity now also occurs on the communal rangelands and unused fields; grazing takes place in old fields and on abandoned residential sites, seemingly without open conflicts with regards to access. However, the shifts in the management of cattle, from merely subsistence to commoditisation, could increase tensions in the long run regarding how to manage the diverse suite of benefits from the rangelands. Conflicts may become more open. This requires a disaggregated analysis of property and usufruct rights of the various landscapes and natural resources, and interpretations thereof. Such an analysis is at the core of the debates about the reassembling of landscapes.

#### 6. Conclusion

This paper posits that the deagrarianisation literature has not recognised the importance of landscapes and what they tell us about the past and present processes of (re)assembling livelihoods, the landscapes themselves, and the agency required to do so. The narrowly defined agrarian has certainly diminished and been largely replaced by a resource use pattern that hinges on the rural being a home, but has not totally disappeared from Guguka and Koloni. This is despite the reorientation of rural livelihoods towards increasing reliance on 'outside' sources (e.g. pensions, remittances, wages, bought foodstuffs) and away from planting field crops as a major source of livelihood. The degree to which this transformation occurs cannot simply be explained by class or socio-economic differentiation. Both the 'rich' and 'poor' continue to spend time and energy in combining growing, grazing and gathering in different configurations to best suit their needs at particular times. The 'rich' spend money on cattle (notably in Koloni) and the 'poor' spend more of their own 'capital' in gardening and collecting and securing in this way their food, albeit with varying success. Despite class differences, the common denominator between the various ways they reassemble landscape and make use of it is in function of their cultural and religious needs and people's feeling of being at or returning home.

The observable outcome is that land use planning and the associated ordering of the landscape have been reworked over time to fit and resonate with local livelihoods and the institutional setting structuring these.

The landscape that has emerged over time continues to produce productive pockets providing goods and services that are relevant to those in the village and beyond. Such reassembling, we argue, is fuelled by the drive to return to, to be and feel at their rural home, enjoy family gatherings, participate in rituals, worship their ancestors, grow some food to save money, rear livestock for a variety of reasons and or to decide to leave the village for good. The rural homesteads have not diminished in importance. The analysis and evaluation of these productive pockets of land that serve the homestead, however, need to take into account the interaction between the landscape components and whether, when and how these interactions invigorate contestations and conflicts about the management of communal resources. Hence, we need to treat landscapes conceptually as emergent, as a continuous process of reassembling, the forging of new connections between town and countryside and between the constituting components of the undivided landscape.

What does this mean for the landscape assemblage and the deagrarianisation debate? The landscape is clearly composed of many facets and elements which vary in time and as meanings evolve. The institutions that maintained the segmentation and separation of the land use categories have collapsed over time. What used to be a field is now a grazing land, but years later has been turned into a field again or a place for a new homestead. Cattle used to be herded and confined through that process to particular parts of the landscape at particular times of day or season, now they roam everywhere, thereby blurring any segmentation of the physical landscape. Gathering is declining, but for some people, and for some key resources it takes place further afield so linking more distant forests and spaces to the daily hub of the village. The reassembling or reconfiguring of the landscape also manifests institutionally, with the landscape assemblage now being shaped by an overlay of governance regimes. A multi-governance regime has evolved which combines private (quitrent) tenure, with commons management and aspects of open access. The reconfigured landscape is in turn shaped by the differentiated meanings that are associated with the many multi-locational livelihoods, ranging from accumulation to satisfying cultural and daily food needs. The 'agrarianess' of the assemblage is still vividly active albeit in ways different as claimed - and assumed - in the deagrarianisation literature.

#### Acknowledgements

Wim van Averbeke, James Mbuti, Nomakhaya Monde, Lothar Smith, Peter Lent, James Bennett and Joyce Mafu were also part of the original team that took part in the research project. Their contribution and insights are highly valued. We are grateful to the people of Koloni and Guquka for openly sharing their insights and time with us, as well as to two anonymous reviewers and Deepa Pullanikattil and Sheona Shackleton for their comments on an earlier draft of this paper. The field and bursary costs of NM were provided by the South African Research Chairs Initiative of the Department of Science and Technology and the National Research Foundation of South Africa (84379). Any opinion, finding, conclusion or recommendation expressed in this material is that of the authors and the NRF does not accept any liability in this regard.

#### Appendix A. Supplementary data

Supplementary data related to this article can be found at http://dx. doi.org/10.1016/j.jrurstud.2018.01.004.

#### References

- Alexander, J., Cocks, M., Shackleton, C.M., 2015. The landscape of childhood: play and place as tools to understand children's environmental use and perceptions. Hum. Fcol. 43, 467–480.
- Aliber, M., Hall, R., 2012. Support for smallholder farmers in South Africa: challenges of scale and strategy. Dev. South Afr. 29, 548–562.
- Anderson, B., McFarlane, C., 2011. Assemblage and geography. Area 43, 124-127.
- Andrew, M., Fox, R., 2004. Undercultivation and intensification in the Transkei: a case study of historical changes in the use of arable land in Nompa, Shixini. Dev. South Afr. 21, 687–706.
- Antrop, M., 2005. Why landscapes of the past are important for the future. Landsc. Urban Plann. 70, 21–34.
- Antrop, M., 2006. Sustainable landscapes: contradiction, fiction or utopia? Landsc. Urban Plann. 75, 187–197.
- Bank, L., Minkley, G., 2005. Going nowhere Slowly? Land, livelihoods and rural development in the eastern Cape. Soc. Dynam. J. Afr. Stud. 31, 1–38.
- opinent in the eastern Cape. Soc. Dynam. J. Alf. Stud. 31, 1–38.

  Basso, K., 1996. Wisdom Sits in Places. Landscape and Language Among the Western Apache. University of New Mexico Press, Albuquerque.
- Batterbury, S., Bebbington, A., 1999. Environmental histories, access to resources and landscape change: an introduction. Land Degrad. Dev. 10, 279–289.
- Beinart, W., Bundy, C., 1987. Hidden Struggles in Rural South Africa: Politics and Popular Movements in the Transkei and Eastern Cape, 1890–1930. James Currey, London.
- Beinart, W., 2003. The Rise of Conservation in South Africa. Settlers, Livestock, and the
- Environment 1770-1950. Oxford University Press, Oxford.

  Bennett, J., 2002. The Role of Arable Land Allocations in Cattle Production Systems in Communal Areas of Central Eastern Cape Province, South Africa. Unpublished PhD
- thesis. Coventry University. School of Science and the Environment Coventry.

  Bennett, J., Ainslie, A., Davis, J., 2010. Fenced in: common property struggles in the management of communal rangelands in central Eastern Cape Province, South Africa.
- Land Use Pol. 27, 340–350.
  Bennett, J., Ainslie, A., Davis, J., 2013. Contested institutions? Traditional leaders and land access and control in communal areas of Eastern Cape Province, South Africa.
- Land Use Pol. 32, 27–38.

  Bennett, J., Barrett, H., 2007. Rangeland as a common property resource: contrasting insights from communal areas of central Eastern Cape Province, South Africa. Hum.
- Ecol. 35, 97–112.
  Bennett, J., Lent, P., 2007. Livestock production and forage resources. In: Hebinck, P.,
  Lent, P. (Eds.), Livelihoods and Landscape. The People of Guquka and Koloni and
  Their Resources. Brill, Boston/Leiden, pp. 221–257.
- Bundy, C., 1988. The Rise and Fall of the South African Peasantry, second ed. James Curry, London.
- Bryceson, D.F., 1996. Deagrarianization and rural employment in sub-Saharan Africa: a sectoral perspective. World Dev. 24, 97–111.
- Chagumaira, C., Rurinda, J., Nezomba, H., Mtambanengwe, F., Mapfumo, P., 2016. Use patterns of natural resources supporting livelihoods of smallholder communities and implications for climate change adaptation in Zimbabwe. Environ. Dev. Sustain. 18, 237–255.
- Cleaver, F., 2002. Reinventing institutions: bricolage and the social embeddedness of natural resource management, Eur. J. Dev. Res. 14, 11–30.
- Cocks, M., Dold, T., 2011. Born-frees and worn trees: home grown medicinal plants and poverty. In: Hebinck, P., Shackleton, C. (Eds.), Reforming Land and Resource Use in South Africa: Impact on Livelihoods. Routledge, London, pp. 235–254.
- Cocks, M., Njwambe, A., Vetter, S., 2017. Misread Landscape: the contribution of rural landscapes to people's sense of identity and belonging. Landownership, Governance and Sustainability Colloqium. University of Fort Hare, Hunterstoun Centre, Hogsback 25-27 October, 2017.
- Cocks, M., Dold, T., Vetter, S., 2012. God is my forest: Xhosa cultural values provide untapped opportunities for conservation. South Afr. J. Sci. 108, 1–8.
- Cocks, M., Wiersum, F., 2003. The significance of plant diversity to rural households in the Eastern Cape province, South Africa. For. Trees Livelihoods 13, 39–58.
- Connor, T., Mtwana, N., 2017. Vestige garden production and deagrarianization in three villages in the Eastern Cape, South Africa. S. Afr. Geogr. J. 1–22.
- Cosgrove, D., 1998. Social Formation and Symbolic Landscape. University of Wisconsin Press, Madison/London.
- D'Haese, M., Van Huylenbroeck, G., 2005. The rise of supermarkets and changing expenditure patterns of poor rural households case study in the Transkei area, South Africa. Food Pol. 30, 97–113.
- Dahlberg, A.C., 2015. The importance of environmental history in evaluating the sustainability of non-timber forest product harvesting systems. In: Shackleton, C.M., Pandey, A.K., Ticktin, T. (Eds.), Ecological Sustainability for Non-timber Forest Products: Dynamics and Case Studies of Harvesting, Earthscan, London, pp. 53–70.
- De Klerk, H., 2007. The Embodiment of Landscape and Livelihoods: an Environmental History of Nqabara. Unpublished M.Sc. Thesis. Rhodes University, Grahamstown.
- De Klerk, H., 2013. 'Still feeding ourselves': everyday practices of the Siyazondla homestead food production programme. In the Shadow of Policy: Everyday Practices in Land and Agrarian Reform in South Africa. Wits University Press, Johannesburg, pp. 231–247.
- De Landa, M., 2006. A New Philosophy of Society: Assemblage Theory and Social Complexity. Continuum, London.
- De la Hey, M., Beinart, W., 2016. Why have South African smallholders largely abandoned arable production in Fields? A case study. J. South Afr. Stud. 1–18.
- De Wet, C., 1987. Betterment planning in South Africa: some thoughts on its history, feasibility and wider policy implications. J. Contemp. Afr. Stud. 6, 85–122.
- De Wet, C., 1989. Betterment planning in a rural village in Keiskammahoek district,

- Ciskei. J. South Afr. Stud. 15, 326-345.
- De Wet, C., 2011. Where are they now? Welfare, development and marginalization in a former Bantustan settlement in the Eastern Cape, post 1994. In: Hebinck, P., Shackleton, C. (Eds.), Reforming Land and Resource Use in South Africa: Impact on Livelihoods. Routledge, London, pp. 294–315.
- Deleuze, G., Guattari, F., 1987. A Thousand Plateaus. University of Minnesota Press, Minneapolis, MN.
- Ellis, F., 2000. Rural Livelihoods and Diversity in Developing Countries. Oxford University Press, Oxford.
- Fairhead, J., Leach, M., 1996. Misreading the African Landscape: Society and Ecology in a Forest Savannah Mosaic. Cambridge University Press, Cambridge.
- Faku, N., Hebinck, P., 2013. Cattle and rural development in the Eastern Cape, South Africa: the Nguni project revisited. In the Shadow of Policy: Everyday Practices in South Africa. Wits University Press, Johannesburg, pp. 281–295.
- Falayi, M., 2017. Understanding Social-ecological Changes in Fairbairn Village, Eastern Cape. Unpublished Master Thesis. Department of Environmental Sciences, Rhodes University.
- Fay, D., 2009. Land tenure, land use, and land reform at Dwesa–Cwebe, South Africa: local transformations and the limits of the state. World Dev. 37, 1424–1433.
- Fay, D., 2013. Cultivators in action, Siyazondla inaction? Trends and potentials in homestead cultivation. In: Hebinck, P., Cousins, B. (Eds.), In the Shadow of Policy: Everyday Practices in Land and Agrarian Reform in South Africa. Wits University Press, Johannesburg, pp. 247–263.
- Fox, H.E., 2013. The Role of Anthropogenic Disturbance in the Creation of a Socio-ecological Landscape. Unpublished Master thesis. Rhodes University, Grahamstown, pp. 209.
- Francis, E., 2000. Making a Living: Changing Livelihoods in Rural Africa. Routledge, London.
- Greenough, P., Tsing, A., 2003. Nature in the Global South. Environmental Projects in South and South East Asia. Duke University Press, Durham.
- Hajdu, F., 2006. Local Worlds Rural Livelihood Strategies in Eastern Cape, South Africa. Linköping University. Linköping.
- Hebinck, P., 2007. Examining Rural Livelihoods and Landscape: an Introduction, Livelihoods and Landscape: the People of Guquka and Koloni and Their Resources. Brill Academic Publishers, Leiden/Boston, pp. 1–33.
- Hebinck, P., Lent, P.C., 2007. Livelihoods and Landscape. The People of Guquka and Koloni and Their Resources. Brill Academic Publishers, Leiden/Boston.
- Hebinck, P., Monde, N., 2007. Production of crops in arable fields and home gardens. In: Hebinck, P., Lent, P.C. (Eds.), Livelihoods and Landscape: the People of Guquka and Koloni and Their Resources. Brill Academic Publishers, Leiden/Boston, pp. 181–221.
- Hebinck, P., Smith, L., 2007. A social history of Guquka and Koloni: settlement and resources. In: Hebinck, P., Lent, P.C. (Eds.), Livelihoods and Landscape: the People of Guquka and Koloni and Their Resources. Brill Academic Publishers, Leiden/Boston, pp. 91–121.
- Hebinck, P., Van Averbeke, W., 2007a. Rural transformation in the eastern Cape. In: Hebinck, P., Lent, P.C. (Eds.), Livelihoods and Landscape: the People of Guquka and Koloni and Their Resources. Brill Academic Publishers, Leiden/Boston, pp. 33–67.
- Hebinck, P., Van Averbeke, W., 2007b. Livelihoods and landscape: people, resources and land use. In: Hebinck, P., Lent, P.C. (Eds.), Livelihoods and Landscape: the People of Guquka and Koloni and Their Resources. Brill Academic Publishers, Leiden/Boston, pp. 335–361.
- Hebinck, P., Van Averbeke, W., 2013. What constitutes the agrarian in contemporary rural African settlements of the central Eastern Cape. In: Hebinck, P., Cousins, B. (Eds.), In the Shadow of Policy: Everyday Practices in South Africa Land and Agrarian Reform. Wits University Press, Johannesburg, pp. 189–205.
- Jerven, M., 2010. The relativity of poverty and income: how reliable are African economic statistics? Afr. Aff. 109, 77–96.
- Jerven, M., Johnston, D., 2015. Statistical tragedy in Africa? Evaluating the data base for African economic development. J. Dev. Stud. 51, 111–115.
- Leach, M., Fairhead, J., 2000. Fashioned forest pasts, occluded Histories? International environmental analysis in west African locales. Dev. Change 31, 35–59.
- Leach, M., 2008. Pathways to Sustainability in the forest? Misunderstood dynamics and the negotiation of knowledge, power, and policy. Environ. Plann. A 40, 1783–1795.
- Lent, P., Hebinck, P., 2006. Growing, Grazing and Gathering: the uses of arable allotments in two Eastern Cape villages. In: Shackleton, S.E. (Ed.), SANPAD Seminar Links between Natural Resources, Livelihoods and Poverty Alleviation, pp. 12 Grahamstown.
- Lent, P.C., Mupakati, G., 2007. The view from above: a history of land use in Guquka and Koloni, 1938-1996. In: Hebinck, P., Lent, P.C. (Eds.), Livelihoods and Landscape: the People of Guquka and Koloni and Their Resources. Brill Academic Publishers, Leiden/Boston, pp. 165–180.
- Lefebvre, H., 2001. The Production of Space. Blackwell Publishing, Oxford.
- Li, T., 2007. Practices of assemblage and community forest management. Econ. Soc. 36, 263–293.
- Masterson, V.A., 2016. Sense of Place and Culture in the Landscape of Home:
  Understanding Social-ecological Dynamics on the Wild Coast, South Africa. PhD
  thesis. Stockholm University, Stockholm.
- McAllister, P., 2001. Building the Homestead: Agriculture, Labour and Beer in South

- Africa's Transkei. Ashgate, London.
- McAllister, P., 2005. Xhosa Beer Drinking Rituals. Power, Practice and Performance in the South African Rural Periphery. Carolina Academic Press, Durham NC.
- McFarlane, C., 2009. Translocal assemblages: space, power and social movements. Geoforum 40, 561–567.
- Mills, M., Wilson, W., 1952. Land Tenure. Keiskammahoek Rural Survey, vol. 4 Shuter & Shooter, Pietermaritzburg.
- Mostert, N., 1992. Frontiers. The Epic of South Africa's Creation and the Tragedy of the Xhosa People. Pimlico, London.
- Mtati, N., 2013. The Relative Contribution of Non-timber Forest Products, Agriculture and Off-farm Sources of Income to Rural Households in Koloni and Guquka, Eastern Cape. Unpublished Masters Thesis. Rhodes University, Grahamstown.
- Murray, C., 2002. Livelihoods research: transcending boundaries of time and space. J. South Afr. Stud. 28, 489–509.
- Ngwane, Z., 2003. 'Christmas time' and the struggles for the household in the countryside: rethinking the cultural geography of migrant labour in South Africa. J. South Afr. Stud. 29, 681–699.
- Odgaard, R., 2002. Scrambling for land in Tanzania: process of formalisation and legitimisation of land rights. Eur. J. Dev. Res. 14, 71–88.
- Pasmans, T., Hebinck, P., 2017. Rural development and the role of game farming in the Eastern Cape, South Africa. Land Use Pol. 64, 440–450.
- Ramisch, J., 2014. 'We will not farm like our fathers did'. Multilocational livelihoods, cellphones, and the continuing challenge of rural development in western Kenya. In: Sick, D. (Ed.), Rural Livelihoods, Regional Economies, and Processes of Change. Routledge, London, pp. 1–25.
- Sallu, S., Twyman, C., Stringer, L., 2010. Resilient or vulnerable livelihoods? Assessing livelihood dynamics and trajectories in rural Botswana. Ecol. Soc. 15, 3. [online]. http://www.ecologyandsociety.org/vol15/iss14/art13/.
- Schapera, I., 1937. The Bantu-speaking Tribes of South Africa. An Ethnographical Survey. Routledge & Kegan Paul, London
- Scott, J.C., 1998. Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed. Yale University Press, New Haven [etc.].
- Shackleton, C., Shackleton, S., Ntshudu, M., Ntzebeza, J., 2002. The role and value of savanna non-timber forest products to rural households in the Kat River Valley, South Africa. J. Trop. For. Prod. 8, 45–65.
- Shackleton, C.M., Shackleton, S.E., 2006. Household wealth status and natural resource use in Kat River valley, South Africa. Ecol. Econ. 57, 306–317.
- Shackleton, C.M., Shackleton, S.E., Cousins, B., 2001. The role of land-based strategies in rural livelihoods: the contribution of arable production, animal husbandry and natural resource harvesting in communal areas of South Africa. Dev. South Afr. 18, 583-604.
- Shackleton, R., Shackleton, C., Shackleton, S., Gambiza, J., 2013. Deagrarianisation and forest revegetation in a biodiversity hotspot on the wild coast, South Africa. PLoS One 8, 1–13.
- Shackleton, S., Luckert, M., 2015. Changing livelihoods and landscapes in the rural Eastern Cape, South Africa: past influences and future trajectories. Land 4, 1060–1089.
- Shackleton, S., Hebinck, P. (in this issue). Through the 'Thick and Thin' of Farming on the Wild Coast, South Africa.
- Shackleton, S.E., Campbell, B., Lotz-Sisitka, H., Shackleton, C.M., 2008. Links between the local trade in natural products, livelihoods and poverty alleviation in a semi-arid region of South Africa. World Dev. 36, 505–526.
- Smith, L., Hebinck, P., 2007. Livelihood and mobility. In: Hebinck, P., Lent, P.C. (Eds.), Livelihoods and Landscape: the People of Guquka and Koloni and Their Resources. Brill Academic Publishers, Leiden/Boston, pp. 267–285.
- Trefry, A., Parkins, J.R., Cundill, G., 2014. Culture and food security: a case study of homestead food production in South Africa. Food Secur. 6, 555–565.
- Twyman, C., Sporton, D., Thomas, D., 2004. 'Where is the life in framing?': the viability of smallholder farming on the margins of the Kalahari, Southern Africa. Geoforum 35, 69–85
- Unruh, J., 2006. Land tenure and the "evidence landscape" in developing countries. Ann. Assoc. Am. Geogr. 96, 754–772.
- Van Averbeke, W., Bennett, J., 2007. Local governance and institutions. In: Hebinck, P., Lent, P.C. (Eds.), Livelihoods and Landscapes. The People of Guquka and Koloni and Their Resources. Brill Academic Publishers, Leiden/Boston, pp. 139–165.
- Van der Horst, B., 2013. People, Land and Water. Irrigation? a Sociotechnical Feasibility Study for an Irrigation System in Guquka, South Africa. Unpublished MSc thesis. Wageningen University, The Netherlands, Wageningen.
- Van der Horst, B., Hebinck, P., 2017. 'Irrigation by night' in the eastern Cape, South Africa. Water SA 43, 28–35.
- van der Ploeg, J.D., 2008. The New Peasantries. Struggles for Autonomy and Sustainability in an Era of Empire and Globalization. Earthscan, London.
- Wotshela, L., 2009. Land redistribution politics in the eastern Cape midlands. Kronos South. Afr. Humanit. 35, 142–160.
- Wotshela, L., 2014. Quitrent tenure and the village system in the former Ciskei region of the eastern Cape: implications for contemporary land reform of a century of social change. J. South Afr. Stud. 40, 727–744.