



Assessing potential for employment-intensive land reform in South Africa

Key research findings from a CBPEP study

The Capacity Building Programme for Employment Promotion (CBPEP) is an EU-funded initiative aimed at assisting the Government of South Africa to attain its goal of reducing unemployment, by building state and institutional capacity. The CBPEP seeks to build state capability for employment promotion, as well as support strategic dialogue, shared problem-solving and practical collaboration between the social partners. It also aims to strengthen the knowledge and evidence base for effective policy, planning and implementation.

This policy brief focuses on the potential contribution of redistributive land reform to employment creation.

The research questions

- What are the promising commodities with the potential to create sustained livelihood and employment opportunities for small scale producers?
- What are the requirements for agricultural finance, access to value chains (informal and formal), provision of appropriate extension and advisory services, secure land rights and tenure?
- How will climate change impact on farming systems in the future and smallholder producers in different settings?
- What can we learn from the international experience of attempts to create employment and livelihood opportunities through agricultural production?
- What can local municipality case studies tell us about the employment creation potential of land reform?
- How many jobs could be created by redistributing 50% of remaining agricultural land in South Africa?

The scope of the research.

The CBPEP research study led by Prof Ben Cousins supported by a team of researchers has combined:

- Five commodity studies (livestock, wool, fresh vegetables, sub-tropical fruit and sugar cane)
- Seven thematic studies (International perspectives, climate change, socio-cultural dimensions, value chains, finance, support services, land tenure and administration)
- Four local municipality studies (Greater Tzaneen in Limpopo, Inkosi Langalibalele in KwaZulu-Natal, Sakhisizwe in the Eastern Cape and Matzikama in the Western Cape).



The context

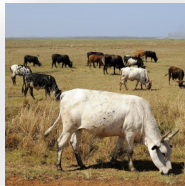
Currently the agricultural sector, together with forestry and fisheries, contributes 2% to GDP and 5% to employment, with a total of around 757 658 workers.

Around 15 000 small, medium and large scale commercial farmers contribute the bulk of produce to formal markets, employ close to 90% of all agricultural workers and earn 95% of total income.

Only a small number of these commercial farmers are black. Of the total of 40 122 farms registered for VAT, nearly 25 000 are deemed to be 'micro-farms', and contribute little in the way of income or employment. Most black farmers are small-scale, either subsistence-oriented (around 2 million) or market-

oriented (around 200 000). The latter often supply informal markets as well as formal markets.

The National Development Plan of 2012 argues that a million new jobs could be created in agriculture, two-thirds of them in primary production and one-third in secondary jobs, in linked industries such as the manufacture of inputs and agro-processing. Key to this expansion is adding 500 000 hectares to the area presently under irrigation, estimated at around 1.5 million hectares, through better use of existing water and the development of new schemes. The NDP also advocates improved access to finance, value chains, and higher levels of support for black farmers (NPC 2012).



What sort of jobs can be created?

Many of the jobs created by small-scale farmers will not be full-time jobs, including those of the farmer. For most people involved in small-scale agriculture, farming will be one component of a wider household livelihood strategy.

How can jobs be sustained and multiplied?

Jobs created in the small-scale agricultural sector can be boosted through local area planning, securing access to land and water, improving access to finance, alignment of appropriate support services, recognizing and supporting informal value chains and markets, improving market intelligence and preferential procurement.

What do we mean by small-scale agriculture?

We distinguish between the following categories of small-scale, black farmers in South Africa:

- Smallholder farmers who rely mainly (but not exclusively) on household-labour in their production systems producing for household consumption (subsistence oriented) and local informal markets (market-oriented).
- Small-scale black commercial farmers are farmers who rely mainly on hired labour in their production systems and who produce both for informal markets and sell into formal value chains.

Our research focus is on both of these kinds of small-scale farmers. The differences between them are often blurred in practice.

How can small-scale agriculture be more employment intensive ?

There are three ways to create more employment-intensive farming systems:

1. Reducing the size of farming units to increase their total number which creates opportunities and incentives to hire more labour and rely less on mechanization.
2. Changing the mix and scale of different commodities for which there are ready markets and making more labour-intensive commodity choices.
3. Changing farming systems to create more employment opportunities—weeding by hand and using herders to manage livestock rather than fences.

Commodity studies

The research reviewed the following commodities: livestock, wool, fresh vegetables, subtropical fruit and sugar cane.

Livestock

Livestock accounts for more than 40% of the total value of agricultural output. An estimated three million subsistence farmers own livestock. Estimates suggest that almost a million people derive part of their livelihood looking after communal livestock and receive benefits in cash and kind. Livestock are also central to the rural ceremonial and ritual economy. At least a million goats a year are slaughtered through the informal market in KwaZulu-Natal, exclusively for ceremonial purposes. Cattle are transacted as part of a bride wealth system that connects families. Lastly, cattle are necessary for all ceremonies that mark a death in the household, and which maintain a spiritual connection between the living and the dead. Future land distribution should select farmers who are wanting to commercialize as a prime activity and group these farmers onto land reform farms. State investment in appropriate local livestock value chains can support increased herd productivity and encourage mobile traders/speculators linking buyers and sellers.

Wool

Around 63 000 communal wool farmers own 1.9 million sheep and produce 2.3 million kilograms of wool per annum. This represents 4.7% of the wool production in South Africa. On average, these farmers own 30 sheep and shear an average of 1.2kg of wool per sheep. The wool is sold to traders at approximately R2/kg; this wool is not sorted.

The other 8 340 communal wool farmers sell their wool in bulk (together with neighbouring farmers as part of farming associations) directly to the market. They produce just over 2 million kilograms of wool. Shearing sheds are shared, with approximately 30 farmers per shearing shed. On average, these farmers have approximately 120 sheep. They shear approximately 2 kg of wool per sheep and sell it at five times more to the market agent than those farmers selling their wool to the traders. Overall, this group of farmers produces 4.2% of the South African wool clip. The National Wool Growers Association Programme has had positive effects in terms of vastly increased wool output by gross mass and gross value. The three most important perceived needs of emergent wool farmers are finances, infrastructure, and improved access to land. Emergent sheep and wool farmers should be a priority beneficiary group for land redistribution as they have been successful with the assistance of NPOs and government.

Fresh vegetables

There are an estimated 100 000 existing 'market-oriented small-scale farmers' already producing on irrigation schemes and in homestead gardens. There are likely to be an additional 10 000 operating outside these contexts.

Many of these households are located in the former homelands or on redistributed land.

There are a number of benefits to small-scale production of fresh vegetables, including: the large number of jobs created, lower costs of production, quick turnaround on investment, several harvests are possible year-round with irrigation. Currently there are no services in place to support small-scale farmers in informal (loose) value chains. Informal fresh produce value chains have a particularly powerful job multiplier effect, for example, hawkers, bakkie traders and local input suppliers. Small-scale farmers still face challenges in marketing their produce and several crops are subject to frequent market gluts. Sub-division and redistribution of 1 287 500 hectares of irrigable land in plots ranging between 2 - 50 ha in size—and distributing this land between:

- 100 000 market-oriented smallholders in loose value chains,
- 5000 market-oriented smallholders in tight value chains,
- 5000 small-scale black commercial farmers, could potentially create around 3 218 750 employment and self-employment opportunities on farms.

Subtropical fruit

Subtropical fruit and nuts are among the fastest growing sub-sectors in the South African agricultural economy. This growth is driven by export demand and high prices, which in turn drive innovation and productivity. Together with citrus fruit, deciduous fruit and table grapes, subtropical fruit and nuts are considered 'winners' in terms of job creation and growth potential by the National Development Plan (NDP). While most of the fruit volume and monetary value are produced by large-scale white commercial farmers, significant numbers of small-scale black farmers are growing subtropical fruit and nuts for a variety of purposes and into different value chains. Fruit contributes to household food security and is sold through local informal markets. Many small-scale black commercial farmers also sell in tight value chains. The numbers of smallholders and small-scale black commercial farmers involved in subtropical fruit and macadamia production can be considered significant. There are definite opportunities to expand subtropical fruit and macadamia production by smallholder farmers, especially in parts of Vhembe District and other parts of Limpopo where residents have been farming these crops for years. However, there are no low-cost, low-input options for this category of farmers. The kinds of jobs that may be created in this sector are unlikely to be full-time or highly paid. They will mostly be seasonal jobs picking fruit and nuts, working in packhouses or transporting fruit. Job creation will only take place with more hectares in production and bigger volumes to harvest, pack and transport. This will only be possible if more water for irrigation and adequate water infrastructure are available.

Sugar cane

The South African sugar industry has long been one of South Africa's most substantial agro-industries. The South African Sugar Association (SASA) estimates that around R16bn in value is created annually by 85 000 directly employed and 350 000 indirectly employed persons, and ultimately with approximately one million rural lives dependent on these jobs. Every 1 000 hectares (ha) in sugarcane land, the industry estimates, provide an average of 133 permanent and 210 seasonal jobs.

In addition to its sheer magnitude, the sugar industry is distinct from other agro-industries by the inclusion in the 1970s of substantial numbers of black small-scale sugarcane growers (SSGs), farming predominately under communal or customary tenure, as distinct from large-scale commercial growers (LSGs). However, SSG numbers peaked in the late 1990s/ early 2000s, and thereafter have steadily declined to nearly half their numbers by 2013/14 – a trend significantly tied to regulatory reforms in the late 1990s/early 2000s. The sugar industry is currently in a state of general crisis rooted in its diminishing share of a shrinking, tariff-protected domestic market, with approximately half of domestic production currently being exported to a chronically low-priced international market.

Detailed recommendations are made in the commodity study for the reinvigoration of the sugar sector including a range of intra-industry price supports to incentivise millers to maintain and/or expand their share of SSG supply.



Climate change

Agriculture is widely considered as being among the most vulnerable sectors to the potential effects of climate change. Both crops and livestock production will be affected by temperature rises forecast to increase between 2 and 3 °C in the mid future period of 2040 – 2060 with the greatest warming expected to occur over the western interior regions.

Both hotter and drier and hotter and wetter scenarios are possible depending on geography. Small scale producers growing food for household consumption as well as market-oriented smallholders remain highly vulnerable to the impacts of climate change.

Managing this risk requires a range of proactive adaptive measures with regard to farm management and technology, financial instruments and insurance, policies and programmes to manage drought risk and future

proof food systems. Knowledge management and effective sharing networks will be key to managing an uncertain future.

Area level planning for land reform will need to actively address risk, resilience and adaptation.



Climate change drives up agricultural risk

International perspectives

Worldwide, smallholder support models have largely been located within a modernisation paradigm seeking to ensure the productivity and profitability of agricultural production. This promoted a standardised technical package based on improved seeds, chemical inputs (fertilizers, herbicides, insecticides) and mechanization. Modernization processes have accelerated structural inequalities within global agriculture creating a dual sector with large farms and numerous marginalized smallholders. Vertical integration and concentration has seen large food processing companies and retail chains merge to take control of the global agri-food system. There is increasing recognition of the fundamental unsustainability of this model which has also contributed significantly to the acceleration of climate change. The limitations of siloed sectoral policies to deal with the challenges of an increasingly complex and interconnected global environment are increasingly acknowledged. This has resulted in a growing interest in place-based policies for farmer support and more sustainable food systems. Customised smallholder support systems at local municipality level supported by help desks, knowledge hubs and data management systems at the district scale are shaping new approaches.

Social and cultural dimensions

Marriage, household formation and composition have changed in response to urban migration and structural unemployment. Households are spatially "stretched" with fluid membership, as members straddle urban and rural spaces and multiple livelihood sources.

Rural households, especially in the former homelands/communal areas, are often characterised by a 'skipped generation' demographic profile populated by grandparents (typically grandmothers) and minor grandchildren. Many rural households are effectively formed around a social grant recipient. These rural households do not always have sufficient labour capacity to meaningfully engage in agriculture. Even if there is sufficient surplus labour capacity within a rural household, it cannot be assumed that this labour can be readily mobilized for agricultural purposes. Intense gender and generational conflicts often shadow small farmers' efforts to mobilize unpaid family labour.

Value chains

Agricultural primary production contributes an estimated 2.7% to GDP, but this rises to 12% with the inclusion of agro-processing. Agro-processing is the largest activity in South Africa's manufacturing sector, accounting for 29% of total manufacturing value from 2006–2010.

Agro-food production is dominated by a small number of large firms. Up to 70% of food sales are dominated by the big four corporate supermarket retailers. The notion of linking small-scale farmers to markets and facilitating their participation or inclusion into agricultural value chains has long been influential. However, the overwhelming majority of small-scale farmers participate in informal agricultural value chains and markets.

It is estimated that just 184 000 black households (approximately 7.3% of the 2.5 million black households engaged in any agricultural production) sold agricultural products to consumers. Of small-scale non-subsistence producers, around 80% sold to local buyers from within the same district, 6% to those from neighbour towns and cities, and only 3% to formal markets.

The challenges facing input supply for small-scale farmers are also fundamental. In South Africa prevailing systems for the provision of inputs and input supply chains are designed to service large-scale production systems.



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Finance, support services and land tenure

Finance

In recent years provision of grant finance has been reduced in favour of loans. Attempts to introduce blended finance models have faced many problems.

The Integrated Agriculture Development Finance Policy Framework (IADFP) for Smallholder Farmers of 2015 proposed a land reform start-up grant for newly settled small-scale beneficiaries to address their most urgent input, infrastructure and equipment needs in order to commence production. This grant could take the form of a flat R80 000 per farm. At current budget levels, this would accommodate almost 12 500 beneficiaries per year.

Blended financing models combining grants and loans might require return to something like the agency agreement that existed between the Land Bank and the Department of Land Affairs in the early days of LRAD. Other options include exploration of potential for partnerships with micro-finance institutions and a reconsideration of the advantages of targeted smart input subsidies.

Support services

Specific problems experienced by government extension services include continued adherence to outmoded models of extension, inadequate linkages between research, extension and producers on the ground, and capacity constraints and costs. The nine provincial departments spend R4 billion a year on extension which reaches just 11% of smallholder and subsistence households combined.

Extension services are widely regarded as poorly structured and ineffective. Of the 4 billion extension budget one billion was spent on the failed Fetsa Tlala programme.

There is a need for policy clarity and the appropriate choice of extension paradigms. Strategic foresighting involves thinking about sustainable farming systems which integrate a focus on natural resource management and anticipate the impacts of climate change. For such an approach to work a deeply entrenched culture of mandate protection must be overcome. This presents enormous challenges and requires government-wide attention if change is to take place at scale. Overall targeted investment is required to develop appropriate locality-based support services with the active involvement of existing and aspirant small-scale producers, the private sector, relevant NGOs and organs of state.

Land tenure

The land rights of at least 60% of the South African population remain off-register, unrecorded and potentially insecure. The Presidential Advisory Panel has argued that a key outcome of the land reform programme should be to enable recorded ownership and access rights which provide legal security. It proposes state support for a process of testing to develop a new integrated land rights administration system which recognises a continuum of rights. Secure and enforceable land rights make an important contribution to advancing small-scale agriculture.

Municipal case studies

The CBPEP study set out to model the impacts of redistributing 50% of available agricultural land in four local municipalities. This exercise aimed to highlight the varying potentials of employment-intensive land reform across different ecological and socio-economic contexts and the widely varying costs per net job created in different settings.

By way of a baseline, in the 2019/20 financial year the land reform programme seeks to promote equitable land redistribution and agricultural development by acquiring 103 012 ha of strategically located land by March 2020 nationwide. Over the medium term the programme seeks to acquire 269 539 ha at an estimated cost of R1.9 billion.

The four municipalities studied were:

- Sakhisizwe Local Municipality – Eastern Cape
- Inkosi Langalibalele Local Municipality – KwaZulu-Natal
- Greater Tzaneen Local Municipality – Limpopo
- Matzikama Local Municipality – Western Cape.

Circumstances vary widely between the four municipalities which accounts for the markedly different job creation potentials and the relative costs per net job created in different agro-ecological and spatial settings.

The case studies highlight the need for coherent methodologies for land reform planning, risk and benefit assessment to guide state investment in land reform.

Sakhisizwe—Eastern Cape

This local municipality amalgamates two former magisterial districts – Cala in the former Transkei and Elliot, a commercial farming area. In 2011 the Municipality had a total population of about 62 000, of whom almost half resided in one or the other of the two main towns. Overall, there are about 6 300 black households involved in agriculture at some scale, excluding land reform beneficiaries. Sixty eight percent of black households in the municipality are agriculturally active, of which an estimated 500 households (8%) are commercially oriented. Black households in the Cala part of the municipality own approximately 26 000 cattle, 85 000 sheep and 22 000 goats. Wool is the most important commodity for small scale producers in this area. About 40% of these farmers employ herders, most of whom are from Lesotho.

There are stark differences between the agricultural landscapes of the commercial farming areas around Elliot and the densely settled former homeland areas around Cala where stocking rates are high. Crop farming in the Cala area declined sharply in 1994, when government stopped providing tractor services. Farmers used to crop maize, wheat and sorghum.

There has been intense concentration in farm ownership in the Elliot area. In 1971, there were 214 commercial farms. By 2002 there were 61 and now local farmers estimate there are around 40 farms. Commercial agriculture accounts for about 10% of employment in Sakhisizwe.

There has been a significant amount of land redistribution in the local municipality - 106 redistribution projects in all amounting to 42 500 hectares – 24% of commercial farmland. Despite the significant transfers of land, most agree that only a few land reform projects have performed well. This highlights a range of constraints discussed in previous pages. Based on the assumption that 50% of the remaining commercial farmland of Elliot is redistributed in proportion to these three main types of land (i.e. grazing, dryland and irrigated), it is estimated that about 1 069 full-time equivalent employment opportunities could be created either within Sakhisizwe Local Municipality. In the context of the area, these 1 069 FTEs would be significant: they would reduce the number of unemployed people in Sakhisizwe by about a quarter.

Sakhisizwe (Eastern Cape)	Farm units	Total hectares	Net jobs	Land cost/net job (R)	Setup cost/net job (R)	Total cost/net job (R)
Vegetables	26	260	294	35374	55284	90658
Grain	114	5685	660	148685	88640	235325
Extensive livestock	258	51585	115	2242826	158539	2401365
All products	398	57530	1069	341412	84941	426353

Inkosi Langalibalele—KwaZulu-Natal

The municipality had a total population of 215 183 persons in 2016. It comprises 3403.3 square kilometres, with a population density of 63.2 people per square kilometre. There are 46 952 households in ILM with 4.6 people per household. A large proportion of the population (48%) are 19 years or younger. Some 36% of the land is designated as 'communal areas', with traditional authority structures playing a key role in their governance.

Over half of all households (53%) are female headed. Fifty two percent of the population is 'not economically active', but many of these are engaged in subsistence-oriented agriculture, mainly in order to produce some additional food for home consumption. Some better-off households own livestock, mainly cattle and goats, while many own small flocks of indigenous chickens. The only form of cash cropping by small-scale producers on a significant scale is the production of fresh vegetables (including green maize), in areas where irrigation water is available. The farms of small-scale, black commercial irrigation producers in Weenen generate around 300 person days of employment per ha, as compared to 100 person days per ha for large-scale producers.

Projections in the table below indicate that a significant increase in livestock-linked jobs could be derived from redistributing 50% of available grazing land together with employment increases on irrigation land.

Local municipality/ farming systems	Farm units	Total hectares	Net jobs	Land cost/net job (R)	Setup cost/net job (R)	Total cost/net job (R)
Inkosi Langalibalele (KZN)						
Vegetables	91	714	830	129036	53777	182813
Extensive livestock	246	125710	1392	349980	60496	410476
All products	337	125884	2222	267449	57986	325435

Greater Tzaneen—Limpopo

The Greater Tzaneen Local Municipality (GTM) in Limpopo Province covers an area of 2 897km². The GTM includes parts of the former homelands of Gazankulu and Lebowa. There are 125 rural villages located within GTM, in which almost 80% of households reside. Many of the small-scale farmers who could be potential beneficiaries of land redistribution are located in these areas. Agriculture is the most important economic activity in the Greater Tzaneen Municipality.

The region produces around 223 000 tons of nuts and subtropical fruit annually. GTM accounts for more than 60% of all mango and avocado produced and 20% of citrus in South Africa. Orchards of citrus and subtropical fruits and nuts (mango, avocado, litchi, banana and macadamia) dominate the commercial farming sector in GTM, covering 30 824.9 hectares of farmland.

There are 119 106 black households in GTM, of which 24 524 (21%) are categorised as agriculturally active. About 2000 are involved in agriculture for the main purpose of earning an income. Among the agriculturally active black households, 94% are found in the former homeland areas. Ten smallholder irrigation schemes are located in GTM but less than half are reported to be functioning. Some of the farmers only use the land seasonally to grow maize for green mielies and grain and there is clearly potential to improve the productivity of this land through improved farmer support. Many small-scale farmers do not have enough water to either sustain or extend production. Water shortages affect the choice of production systems and crops produced. There is a vibrant informal value chain, which provides numerous jobs for bakkie traders and hawkers. Opportunities also exist to access formal value chains (e.g. supermarkets and processors) and export markets (especially for subtropical fruit). There are some very large farming operations located in GTM including include ZZ2 and Hans Merensky Holdings PTY LTD. There are a number of vertically integrated agribusiness firms operating in the municipality, which control the entire or substantial parts of value chains. According to DRDLR records, 40 718.2 hectares of land are under restitution claim in GTM. There are a recorded 87 redistribution projects that have been transferred in GTM between 1998 and 2013, through the SLAG, LRAD and PLAS programmes. The projected results of redistributing 50% (71 550 hectares) of remaining commercial farmland to small-scale farmers include creation of 17 202 net on-farm jobs, inclusive of 2 745 self-employment opportunities for farmers and 825 family members. This entails a cost of ZAR 418 776 per job created.

Greater Tzaneen (Limpopo)	Farm units	Total hectares	Net jobs	Land cost/net job (R)	Setup cost/net job (R)	Total cost/net job (R)
Fruit and vegetables	2677	46050	14719	-	-	-
Fruit, vegetables and extensive livestock	68	25500	2483	-	-	-
All products	2745	71550	17202	271132	147644	418776

Matzikama—Western Cape

The Matzikama municipal area is semi arid receiving 100-300mm of precipitation per year. This means most of municipal area cannot be used for arable agriculture. There are however 237 km of canals which form part of the Olifants river irrigation system in the south. The planned increase in the height of the Clanwilliam Dam wall should add a further 6 000 hectares of land under irrigation. This will provide significant opportunities for land reform and employment. Currently this provides a rich production zone of at least 16 000 ha of irrigated land which is primarily under wine grapes but also supports table grapes, vegetables and dried grapes (raisins and currants). Most of the municipal area, about 1.1m hectares, is used for extensive grazing lands together with small and declining areas of wheat and oats under dryland cultivation.

There are about 72 000 people in the municipal area with 6 000 – 7 000 permanent workers and 20 000 casual workers involved in agriculture. The municipality includes two former Coloured Reserves at Ebenhaeser and Rietpoort. The small-scale farming sector in Matzikama includes a relatively small number of producers involved in livestock and vegetable production on municipal land, other state land, land reform and privately owned land. There are 21 loosely associated groups of small-scale farmers totalling 418 farmers. Of these more than half (223) farm on the two TRANCRAA areas at Ebenhaeser and Rietpoort. Most small-scale farmers have very few livestock and are very poor. 153 Ebenhaeser farmers have formal rights on the irrigated, arable land. Currently only 32 of the 153 plots are cultivated (22%). Many other rights holders are unable to use their land and water due to erratic water supply, lack of capital, infrastructure, expertise and secure access to markets. As a result, 78% of potentially productive land lies fallow. Land reform has been very limited in Matzikama. Only 1% of land in the municipality has been transferred through the redistribution programme. If restitution claims and TRANCRAA transfers are added then just 3% of agricultural land in the municipality will have been transferred after 25 years. Some of the land acquired through land reform has been sold back into the land market following the failure of the projects. Most farming on the large-scale commercial farms has been undertaken employing high-tech, and increasingly mechanized production systems. The table below highlights that close to 3 000 jobs could be created on irrigation land, while extensive livestock in this area will create very few job opportunities at a very high cost per job.

Matzikama (Western Cape)	Farm units	Total hectares	Net jobs	Land cost/net job (R)	Setup cost/net job (R)	Total cost/net job (R)
Grapes, vegetables, lucerne	549	7841	2976	362979	107857	470835
Extensive livestock	169	508070	222	3432905	127131	3560036
All products	718	51551	3198	576117	109195	685311

Assumptions and projections

The tables in the previous spread summarise findings on the number of jobs and the costs per net job in each of the four case study local municipalities. They suggest that significant increases in the employment intensity of agriculture can be achieved if land is redistributed to small-scale farmers. Both jobs and costs vary considerably across local municipalities, as expected, given major variations in agro-ecological conditions and in the types of commodities and farming systems that can be sustained. Key assumptions are that:

- 50% of the land currently under large-scale farming is redistributed;
- net jobs show gains in employment taking into account the displacement of workers employed prior to redistribution;
- the two main costs to the state of land redistribution are (a) land acquisition; and (b) establishment (i.e. setup or capitalisation) costs;
- land costs reflect current average market prices;
- livestock setup costs: the state carries the cost of acquiring 50% of the maximum number of Large Stock Units (LSUs) that a farming unit can carry, at recommended stocking rates.

The findings are projections based on these assumptions, in order to gauge the potential orders of magnitude of employment-intensive land redistribution.

The potential for employment creation

In *Inkosi Langalibalele* in KwaZulu-Natal, the main farming system is extensive livestock production; if established on 125 712 ha, these would generate 1 392 net new jobs. Many of these jobs are in goat production, which is more labour intensive than other forms of livestock production. A small area under irrigated vegetables allows 830 net jobs to be generated. The overall cost per net job in this local municipality is R325 425.

In *Greater Tzaneen* in Limpopo, where conditions are suitable for the production of labour-intensive and high-value subtropical fruit and nuts, as well as vegetables, a much large number of net jobs can be created. On 46 050 ha, high value crops units would generate a total of 16 813 net jobs, and on the 25 500 ha where grazing predominates, small-scale livestock systems would result in 389 net jobs. The overall cost per net job in this municipality is R418 776.

In *Matzikama* in the Western Cape, high value crops such as grapes, vegetables and lucerne, a fodder crop, can be produced on irrigated land along the Olifants River. The Ebenhaeser area is particularly suited to grapes given its proximity to the ocean and thus cooler air. A total of 549 small-scale farm units, on a total of 7 841 ha, would generate 2 976 net jobs. A total of 508 070 ha under extensive livestock yields only 222 net jobs. The total cost per net job in Matzikama is R685 311, higher than in other local municipalities due to the price of land relative to job creation potential.

In *Sakhisizwe* in the Eastern Cape, only a small area under vegetables can be sustained, comprising 26 farms on 260 ha with 294 net jobs. In relation to maize, 114 farm units on a total of 65 685 ha would allow for 660 net jobs to be created. Wool production on 51 585 ha can generate 115 net jobs. Overall, the cost per net job in Sakhisizwe is R426 653.

These findings are far from being detailed and precise assessments of the actual costs and benefits involved. This would require much more in-depth local study which would need to factor in the enabling conditions required to scaffold such an initiative. Meeting some of the underlying assumptions in practice will pose real challenges. These challenges must be addressed in policy. They include farmers enjoying secure land rights, securing access to markets (whether formal or informal), having the requisite knowledge and skills, being provided with effective extension and advisory services, and gaining access to adequate financial resources. Access to adequate water for irrigation is critically important for the high value crops grown in certain localities, and climate change makes water availability somewhat uncertain.

We provide a **policy brief on employment intensive land reform** in a companion document which builds from the research and key findings of this research study.

