



GTAC/CBPEP/ EU project on employment-intensive rural land reform in South Africa: policies, programmes and capacities

Municipal case study
Greater Tzaneen Local Municipality, Limpopo

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Abbreviations and Acronyms

| | |
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| BEE | Black economic empowerment |
| BFAP | Bureau for Food and Agriculture Policy |
| CASP | Comprehensive Agricultural Support Programme |
| CBO | Community based organisation |
| CBPEP | Capacity Building Programme for Employment Promotion |
| CPA | Communal Property Association |
| DAFF | Department of Agriculture Forestry and Fisheries |
| DRDLR | Department of Rural Development and Land Reform |
| DWA | Department of Water Affairs |
| DWS | Department of Water and Sanitation |
| EU | European Union |
| FABCO | Farmers Business Co-Operative |
| FROGH | Friends of Haenertsburg Grasslands |
| FPM | Fresh produce market |
| GEAR | Growth, Employment and Redistribution |
| GIS | Geographic information system |
| GTAC | Government Technical Advisory Centre |
| GTM | Greater Tzaneen Municipality |
| HSRC | Human Sciences Research Council |
| IDP | Integrated Development Plan |
| JV | Joint venture |
| LED | local economic development |
| LRAD | Land Reform for Agricultural Development |
| LDARD | Limpopo Department of Agriculture and Rural Development |
| LSU | large stock units |
| LWUA | Letaba Water Users Association |
| NFPM | National Fresh Produce Market |
| PLAS | Proactive Land Acquisition Strategy |
| PTO | Permission to Occupy |
| RECAP | Recapitalisation grant |
| SAAGA | South African Avocado Growers Association |

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Executive Summary

The report provides a way forward for implementing a labour-intensive small-scale farming approach to land redistribution in the Greater Tzaneen Local Municipality (GTM)¹. The scenario presented in Table 8 of this report, involves redistributing 50% of all farmland in GTM (71 550 hectares) to 2745 small-scale farmers. This approach has the potential to create 31 612 net on-farm jobs, inclusive of 2745 self-employment opportunities for farmers and 825 family members. As Table 7 outlines, this would entail a cost of ZAR 79 787 per net job² created. In addition, numerous jobs could be created in the value chain up and downstream of farms. The model proposes redistributing 13 145 hectares of existing subtropical fruit, citrus and nut orchards and developing 13 495 hectares of new orchards. It would involve an investment of ZAR 2.52 billion in establishment costs³. An alternative model is also presented which could keep investment costs lower by developing fewer hectares of fruit and nuts but would also create less jobs.

The region's reputation as one of the leading farming areas for fruit, nuts and fresh produce (vegetables), has proliferated the presence of wage labour opportunities, contract farming and joint ventures (Boche and Anjuere, 2015). The growing population of Tzaneen and the well-established transport system which connects the municipality to nearby towns, cities and national fresh produce markets (NFPMs), presents opportunities for small-scale farmers. There is a vibrant informal value chain, which provides numerous job multipliers 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). Rather than seeing one market as a panacea for small-scale farmers, this report suggests supporting farmers to access a range of markets, differentiated by the quality of produce.

According to DRDLR records, 40 718.2 hectares of land are under restitution claim in GTM and 8292.05 hectares are under existing redistribution projects. The total area of remaining private farmland in GTM is around 143 098 hectares. This report suggests redistributing 50% (71 550 hectares) of this land to small-scale farmers. The valuation roll⁴ indicates that the mean price per hectare of private agricultural land in GTM is ZAR 65 183. Acquiring 71 550 hectares at market-value would cost the state around ZAR 4 663 843 650. According to the valuation roll, 153 properties are 'vacant' and could presumably be acquired with relative ease and without job losses. The Presidential Panel on Land Reform also suggested investigating 'emerging interest to donate land by private owners', which has the added benefit of positively contributing to nation-building (Mahlali et al., 2019: v-vi). Alternatively, the current budget for land redistribution would need to be increased (see Aliber, 2019) or the state could pursue expropriation with below-market compensation through the 'just and equitable compensation'⁵ clause in section 25(3) of the constitution (Hall, 2018; Aliber, 2015).

¹ The author would like to thank and acknowledge the contributions of Professor Michael Aliber and Professor Ben Cousins, who assisted with fieldwork and provided valuable comments and suggestions on various drafts of this paper. Thank you also to Sivhiya Mulalo for fieldwork support.

² This is inclusive of the establishment costs for orchards for first 4 years, livestock, vegetable farming development and inputs, funding 50% of LSU, dips and fencing for kraals but doesn't include the costs of land purchase, relocation and other possible costs. A 2013 evaluation of RECAP quotes an estimate of ZAR 645 000 per job. This proposal would involve a considerable reduction in the cost per job.

³ While this appears to be a sizeable investment, data provided by DRDLR indicates that in GTM to date, a total of R86 958 459 was spent on grant funding and R6 252 336 in loan funding, for only 87 redistribution projects (ZAR 1 071 388 per farmer).

⁴ The valuation roll was last updated in 2017 and includes 2032 private agricultural properties. State land has been purposefully excluded from this calculation, although it is documented in the valuation roll. Smaller plots of 'agricultural land' that have been developed into expensive residential properties and business parks with very high values per hectare have also been omitted from this calculation since they pushed up the price of land unreasonably.

⁵ This clause in the *Constitution of the Republic of South Africa* states that, 'the amount of the compensation and the time and manner of payment (for an expropriated property) must be just and equitable, reflecting an equitable balance between the public interest and the interests of those affected, having regard to all relevant circumstances' (Republic of South Africa, 1996).

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. Small-scale farmers should be supported to participate in this lucrative industry, which has the potential to improve household incomes and job creation. However, a labour-intensive land reform programme must balance the objective of expanding the small-scale sector, with the possible job losses that redistributing commercial orchards may entail. This research, along with other studies, suggest that there are a number of white-owned farms in GTM which are not very productive and may include struggling farmers, 'life-style farmers' and/or landowners who are largely absent (StatsSA, 2017; Boche and Anjueres, 2015; Genis, 2015/9). Some white farmers may want to exit and/or could possibly be targeted for redistribution with little risk of harming existing jobs. Several farming properties in GTM are already freely transacting on the market and are suitable for subdivision and the resettlement of small-scale farmers.

Another option is to identify parts of the land owned by the numerous prominent commercial farming operations (see section 2.4 and 3.2). Many own extensive stretches of productive orchards. Since many of these operations are vertically integrated, interviews suggested that continued access to subtropical fruit, nuts and citrus products for processing and sale through their wholesale, processing and export companies was the key priority (i.e. more important than land ownership). This may make them willing sellers at a 'just and equitable price' for the state. Small-scale farmers could benefit by having access to secure markets and possibly through mentorship arrangements. Extension support for subtropical fruit and nut growers can be accessed without a substantial cost to government, as the Subtropical Grower's Association (Subtrop) Study Groups illustrate. This statement from a key informant from Westfalia Fruit also indicates willingness to assist with technical support: 'Westfalia is ready to help smallholders. We are ready to give technical support for free'.

Although there is land available for developing new orchards in GTM, this is an incredibly costly undertaking and would likely require private investment in the form of joint ventures (JVs), together with state-led expansion of blended finance models for small-scale farmers. Due to limited success to date with JVs in South Africa's land reform programme, it is suggested that careful consideration is taken in setting up these arrangements and that where possible mentorships and JVs (which don't involve shared equity) should be considered (Bunce, 2018; Manenzhe, 2015; Lahiff et al., 2012). ZZZ's Nkuri Project (see section 2.4.2), which proposes integrating smallholders into avocado value chains by financing the establishment of one to 10 trees, could provide an alternative to the current trajectory of 50/50 equity-share arrangements. This project shows potential to be scaled up to finance the establishment of larger subtropical fruit and nut orchards. Westfalia also indicated willingness to provide subtropical fruit trees to smallholders: 'We want to put our own trees free of charge as a trial to see if weather and soil on the land will work. Then they can take this forward and supply us with their fruit. We would ask for nothing in return. This would be our corporate social investment, but the government said no and it's puzzling why'. Seriously considering these options could make the proposals suggested in this report to develop new subtropical orchards under small-scale farmers more viable.

This report promotes a range of different mixed-farming systems: sub-tropical fruit and nut, blueberries, vegetables and livestock. Vegetable production provides the most promise for job creation and has the added benefit of year around income in both active local informal markets and formal value chains. It would also require relatively limited investment by the state. However, incomes tend to be low and fresh produce markets are subject to frequent market gluts (Bunce, 2019). Therefore, integrating small-scale farmers into the lucrative fruit and nut markets could greatly improve household incomes, making farming a more attractive and viable livelihood strategy for households (Genis, 2019). While livestock production provides less job opportunities than fruit, nuts and vegetables, it benefits from an active informal and ceremonial market and would involve little investment by the state to be self-sustaining (Alcock and Geraci, 2019).

A key impediment to realising these proposals is access to water. This needs to be urgently addressed as part of an integrated land and water reform programme. To succeed, the distribution of water (which currently favours the white commercial farming sector) would need to be reformed, urgent improvements made to water governance and other measures implemented to augment water supply. One serious challenge for land reform beneficiaries is that in several cases water rights have not been transferred alongside land rights. Key informants noted that better coordination between the Department of Water and Sanitation (DWS) and the Limpopo Department of Agriculture and Rural Development (LDARD) could address this. Following the urgent completion of Tzaneen Dam Wall, a provision should be in place to allocate all of the surplus water to small-scale farmers, along with water from the proposed Nwamitwa dam (due to commence construction in 2022). Alongside these measures, groundwater presents untapped potential and evidence also suggests that large numbers of small-scale farmers could be assisted through implementing measures to support 'farmer-led/ informal irrigation' (Scoones et al., 2019; Koppen et al. 2017).

Another key threat to the proposal presented in this report is the state's unwillingness to implement subdivision. This report supports the Presidential Panel on Land Reform's recommendation that the Subdivision of Agricultural Land Act No. 70 of 1970 be repealed (Mahlali et al., 2019). Research revealed that many of the most productive small-scale farmers in GTM were beneficiaries of the PLAS programme. Respondents noted that long-term land leases were providing the right incentives among beneficiaries. It is suggested that the state continue to purchase privately owned land and lease it to small-scale farmers under the PLAS programme. However, a number of measures are suggested in section 4.2 of this report which could strengthen the PLAS programme, especially allowing for subdivision and targeting a wider diversity of beneficiaries.

1. Introduction

This report has been commissioned as part of the CBPEP/GTAC Project. The Government Technical Advice Centre (GTAC) has embarked on a Capacity Building Programme for Employment Promotion (CBPEP) over four-and-a-half years. This 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. This project aims to:

- Develop policy proposals for employment-intensive options for a rural land reform programme focused on black smallholder⁶ and small-scale commercial farmers⁷, aimed at enhancing the incomes and livelihoods of large numbers of beneficiaries
- Explore the design and cost of programmes to implement these policies, including the building of appropriate institutional capacities within government, its partners and beneficiaries.

The Greater Tzaneen Local Municipality Study involved a scoping assessment of what it might take to implement guidelines for employment-intensive land reform. This process sought to identify a range of context specific challenges and to identify necessary adaptations to a national guideline document. The study involved desktop research, combined with a number of interviews, focus groups and consultations with a diverse range of role players. A rapid assessment of the status quo was conducted, including analysis of: information on existing land uses, capability classes, land ownership and patterns/values (through GIS mapping); available irrigation and groundwater resources and their utilisation; the outcomes of existing land reform initiatives (redistribution and restitution) and farmer support services; market access for small-scale farmers; current institutional arrangements to support land and agrarian reform; the functioning of land holding entities (CPAs and Trusts); and the nature of land demand/needs. This analysis has informed the development of various options for embarking on a labour-intensive land redistribution programme in GTM, which are presented in the final sections of this report.

1.1 Descriptive overview of Greater Tzaneen Local Municipality (GTM)

The Greater Tzaneen Local Municipality (GTM) is located in Limpopo Province in the Mopani District Municipality and covers an area of 2 897km². It is host to Tzaneen town, which is the second largest town in Limpopo, after Polokwane. The area includes the main towns of Tzaneen, Nkowankowa, Letsitele, Lenyenye and Haenertsburg. There are 125 rural villages located within GTM, in which almost 80% of households reside. The municipality is well connected to major cities and towns, including the major N1 highway, which connects the area to Gauteng and the Kruger National Park. The local economy is characterized by both intensive and extensive farming activities but is renowned for its suitability for subtropical fruit and citrus (StatsSA, 2011).

The municipality's IDP for 2018/9 notes the following regarding the status of agriculture in GTM: "Agriculture constitutes the main source of employment of the majority of our poor people in our municipality. The area has a dual agricultural economy, with both well-developed commercial farming and more subsistence-based production in the deep rural areas. It has fertile land, access to labour, local farming expertise and a subtropical climate, which favours the primary production of various agricultural products".

1.1.1 Overview of Socio-economic conditions in the municipality

In 2016 the population of GTM was 416 146 (an increase from 390 095 in 2011). There is a population density of 120 people per km². 11.4% of the total population of the GTM live in urban areas, 82% in tribal/traditional areas

⁶ *Smallholders* are farmers who rely mainly (but not exclusively) on household labour in their production systems.

⁷ *Small-scale black commercial farmers* are farmers who rely mainly on hired labour in their production systems. The degree to which they are capitalised falls within the bottom third of all commercial farming enterprises producing similar products in South Africa.

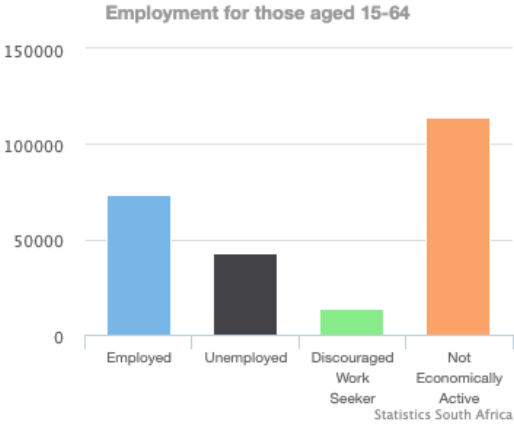
and 6.6% reside on farms. 53% of the population is female and 62.4% of the population is of working age (15-64). 52 052 households (48%) are categorised as 'female-headed' and 208 households (4%) are 'child-headed'. 12.8% of households have flush toilets connected to a sewage system and 11.9% have piped water in their dwellings. Therefore, basic infrastructure and service delivery are still major challenges (StatsSA, 2011).

Table 1. Number of agricultural households by access to water in Greater Tzaneen Municipality

| Piped water inside the dwelling/yard | Piped water outside the yard | No access to piped water |
|--------------------------------------|------------------------------|--------------------------|
| 14 610 | 12 104 | 10 079 |

96% of the population are black Africans, with the minority consisting of whites (3%), Indians / Asians (0.4%) and Coloureds (0.2%). Sepedi (46%) is the most widely spoken first language, followed by Xitsonga (40.7%), Afrikaans (3%) and English (2%) (Statistics South Africa, 2011; DWS, 2015). The unemployment rate for individuals stood at 36.7% in 2011⁸ and youth unemployment was even higher at 48.5% (StatsSA, 2011). 41% of the *population* doesn't have any source of income. 13.4% of *all households* in GTM don't earn any income and 47% earn between ZAR 9601 and ZAR 38 200 per year (StatsSA, 2011).

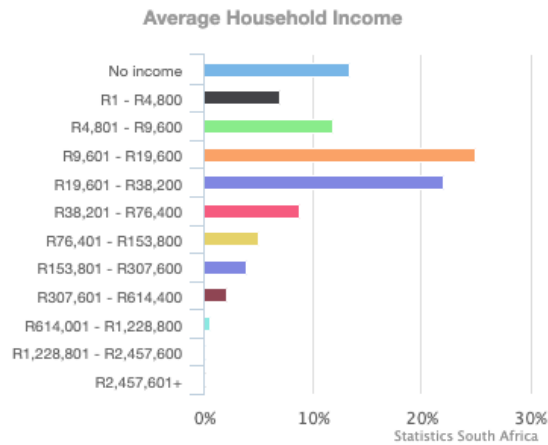
Figure 1. Employment figures for working age population (15-64 years) in Greater Tzaneen Municipality



Source: StatsSA, 2011

⁸ This includes those who are economically active (employed or unemployed but looking for work) i.e. not including discouraged job seekers who amounted to 14 321 people (StatsSA, 2011).

Figure 2. Average Household Incomes in Greater Tzaneen Municipality



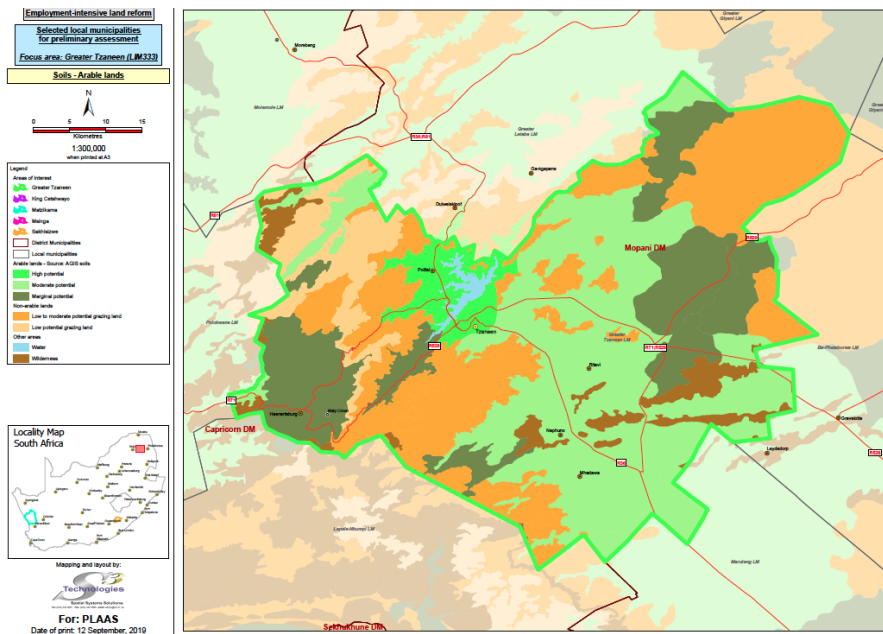
Source: StatsSA (2011)

1.1.2 Agro-ecological conditions: mapping of existing land uses and capability classes

The region has relatively favourable agro-ecological conditions. It has a tropical, semi-arid climate, falling into the summer rainfall region with an average annual rainfall of 902.49 mm, between October and March (DWS, 2015). Temperatures generally range between 10 and 31 °c. There is a dry season, however, with irrigation, crop production is possible year-round. Agriculture is the most important economic activity in the Greater Tzaneen Municipality and the area is often referred to as a 'tropical paradise' due to the high-quality production of subtropical fruits. 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 (LARD, 2012 in Boche and Anjuere, 2015).

The arable potential of soils in the area is indicated in Map 1 below. It indicates that there are large areas of arable soils and that the land with the highest potential (bright green on the map) is found around Tzaneen town and along the Tzaneen Dam, located along the Groot Letaba River. There are also large areas of moderate potential soil (light green), some of which extends into the former homeland areas to the south. These categories need to be read alongside the availability of water and other climatic factors. For example, the area mapped as 'marginal potential' around Letsitele includes some of the most productive citrus growing areas in the municipality due to the fact that these farms benefit from direct access to the Groot Letaba River. The Agatha area is also located South West of Tzaneen, which is at a higher altitude and is a very productive avocado growing region. The dark orange on Map 1 indicates that there are large areas of 'low to moderate potential grazing land' suitable for smallholder livestock production. However, this grazing land also includes 4902.2 hectares of existing orchards, indicating its suitability for limited crop production as part of mixed-farming systems for smallholders.

Map 1. Land Capability (Soils- Arable Lands), in Greater Tzaneen Municipality



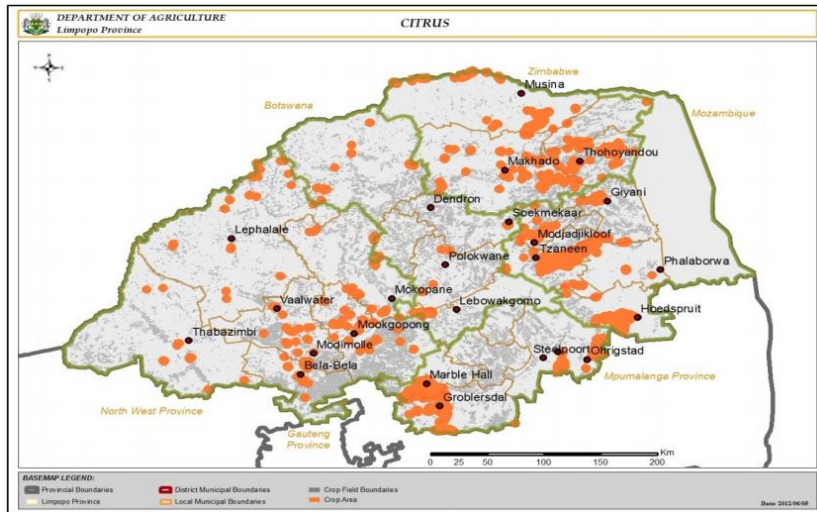
The ability to extend agricultural production is restricted by the large areas that have already been cleared for commercial forestry plantations (see orange areas in Map 2 below). There are, however, parts of commercial forestry plantations which are currently being cleared for agriculture (see discussion below in section 2.4). GTM also includes areas of protected indigenous forests⁹. Map 2 below designates the urban/ industrial built up areas, croplands and forestry plantations. Unfortunately, some of the built up urban and industrial areas (indicated in blue) are already located on high and moderate potential soils, which limits future expansion of small-scale agriculture. The continued expansion of these sprawling settlements is mentioned as a threat in the GTM's Integrated Development Plan 2018/19, rural development strategy 2017 and by several key informants.

Map 3 below indicates that permanent orchards dominate the commercial farming systems (indicated in yellow), while much smaller areas are also cultivated with commercial annual rainfed crops (indicated in brown) and irrigation pivot cultivation (indicated in orange). The location of specific dominant crops is mapped below in Maps 4-6: citrus, avocado and mango. Some productive orchards are bordering settlements and could possibly be acquired for land redistribution (see discussion in Section 3). 'Subsistence cultivation'¹⁰ refers to the small-scale farming systems, which are indicated in blue in Map 3 and are located in the 'former homeland' areas. When one looks at the location of 'subsistence cultivation', alongside the urban and industrial/ built-up areas in Map 2, it becomes clear that expanding production by small-scale farmers located in these areas is limited by the sprawling nature of these settlement.

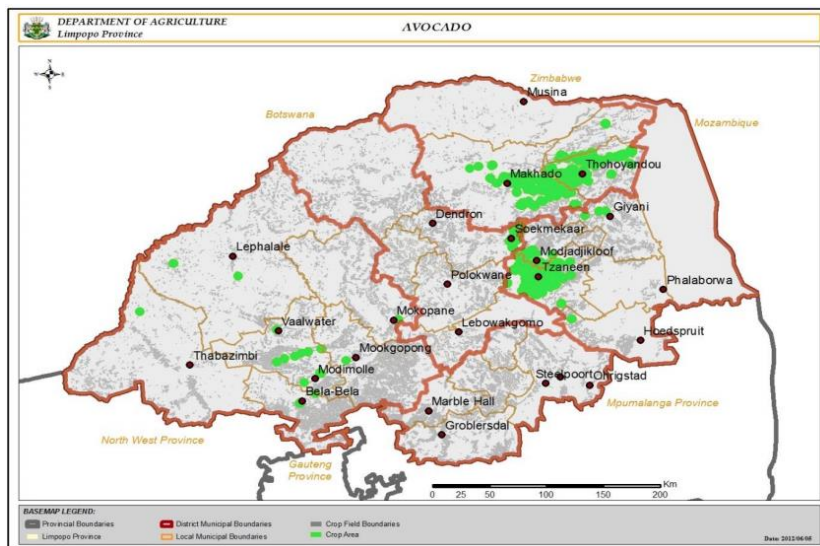
⁹ Afromontane forest area with botanically diverse grassland/ Woodbush Granite Grassland, which after the Cape Fynbos area is the most bio-diverse in the country.

¹⁰ This is an official category used frequently by StatsSA. However, in reality many of these small-scale farmers are 'market-oriented' and not only 'subsistence-oriented' as the category suggests.

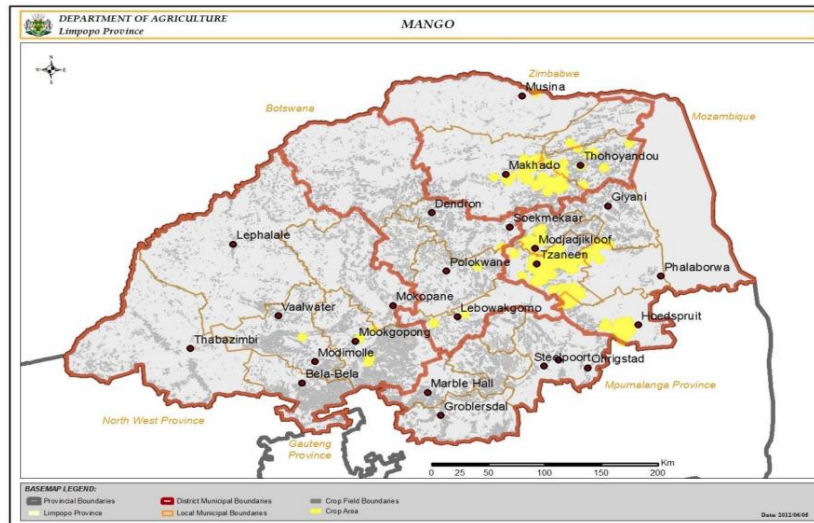
Map 4. Citrus Production in Limpopo (Source: LDARD, 2018)



Map 5. Avocado Production in Limpopo (Source: LDARD, 2018)



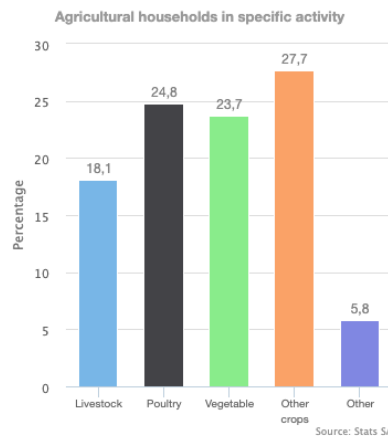
Map 6. Mango Production in Limpopo (Source: LDARD, 2018)



1.2 Over-view of the agricultural sector as a whole

Figure 3 below indicates the specific agricultural activities that all 'agricultural households' engage in. There are 36 793 agricultural households in GTM¹¹, of which 24 524 are black households. Noting that many agricultural households engage in multiple activities, production of 'other crops' (including subtropical fruit and nuts) is the most popular agricultural activity (27.7%), followed by poultry production (24.8%) and then vegetables (23.7%). 48% of agricultural households only grow crops, 35% only keep livestock, while 14% engage in mixed farming and 3% are categorised as 'other' (StatsSA, 2011). Therefore, overall crops are the dominant agricultural activity in the municipality. Those households engaging in mixed farming (livestock and crops) are largely small-scale farmers. Research indicates that many of the larger farming entities, are mostly diversifying within the crop sector for example. Undercapitalised small-scale farmers, unable to extend crop production over the entirety of their land commonly engage in mixed farming e.g. mango, fresh produce and cattle farmers. While others (many who have not yet benefitted from land reform) make use of communal grazing lands.

Figure 3. Agricultural households in Greater Tzaneen Municipality and specific agricultural activities



**An agricultural household may engage in more than one agricultural activity

¹¹ There are slightly more female-headed agricultural households at 18,504, compared to 18, 289 male-headed households.

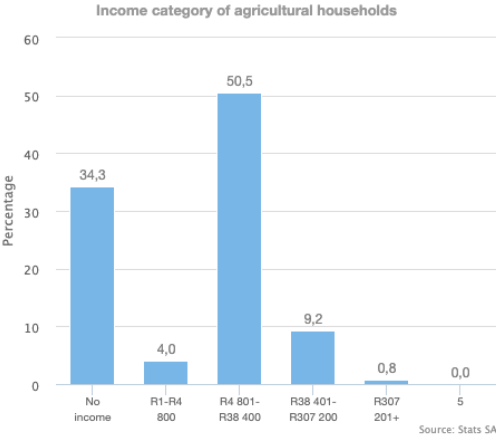
The table below indicates that most livestock farmers keep small herds of between 1-10 animals for all categories of livestock. Goats are the most common livestock, closely followed by cattle and then much smaller numbers for pigs and marginal rearing of sheep. For households keeping 11-100 livestock (where most market-oriented small-scale livestock producers are likely to be located), cattle are the most common livestock and 19% of cattle producers or 675 households keep herds within this range.

Table 1. Number of agricultural households owning livestock in Greater Tzaneen Municipality

| Livestock Types | 1-10 | 11-100 | +100 | Total |
|-------------------|-------|--------|------|-------|
| Cattle | 2,921 | 675 | 25 | 3,621 |
| Sheep | 246 | 52 | 16 | 314 |
| Goats | 3,693 | 186 | 12 | 3,892 |
| Pigs | 1,285 | 79 | 13 | 1,377 |
| 'Other' Livestock | 951 | 266 | 25 | 1,242 |

As figure 4 below indicates, 34.3 % of all 'agricultural households' earn no income and 50.5% only earn between ZAR 4801 and ZAR38 400 per year (StatsSA, 2011). This data indicates that a large proportion (34.3 % or more) are probably 'subsistence-oriented' smallholders who are not selling an agricultural surplus. 54.5% of households make marginal incomes (ZAR 1- 38 400) from farming and other income sources. This group could include some market-oriented small-scale farmers targeting predominantly fresh produce markets, processors (particularly for mango atchar) and informal markets. The category of income directly above these households is not very useful as it includes a wide range of incomes between ZAR 38 401- 307 200, within which 3386 households (9.2%) are located. However, it can be deduced that within this category there may be a number of 'market-oriented' smallholders and small-scale black commercial farmers that could benefit from access to more land, water and other support programmes to enable them to expand production and hopefully employ more labour (depending on the commodity being produced). Only a minority of agricultural households (0.8%) are managing to make annual incomes above ZAR 307 201 and these would be commercial farmers.

Figure 4. Average Household Incomes in Greater Tzaneen Municipality for agricultural households (StatsSA, 2011).



Unfortunately, this agricultural data isn't disaggregated by racial groups, therefore some informed guesses have to be made. The historical trajectory of agrarian relations in the municipality are such that incomes have been and continue to be much higher among white households (Boche and Anjuere, 2015). Therefore, we can perhaps assume that all of the agricultural households (309 households/farming entities) in figure 4 above, making annual incomes above ZAR 307 201 are likely to be white commercial farmers. This would amount to

only 2.5% of all white households. We can also assume that the 12 806 agricultural households¹² who earn ‘no income’ are likely to be black households. This amounts to 52.2% of all black agricultural households, who could be defined as ‘subsistence-oriented’. This, however, leaves us with 11 960 white agricultural households still to place among the other categories. The next highest income earning bracket earns a wide-range of incomes between ZAR 38 401 - 307 200. However, they account for only 3386 households. Based on data gathered for this research, and Boche and Anjuere’s (2015) study, some black households will be located in this category. However, even if we hazard an overly optimistic guess, and say that 90% of this group is comprised of white households, that would still leave 8913 white households to place elsewhere. Interestingly, this means that quite a large proportion of white households must be located among those who make relatively low annual incomes of ZAR 4801 - 38 400 and possibly even among those making ZAR 1 - 4800 (e.g. life-style farmers?). These relatively unproductive farms could potentially be the source of further research to evaluate their suitability for redistribution to small-scale farmers. They are unlikely to hire much labour or to be important to overall national food security and thus redistributing them could potentially be done at low risk and with a net increase to jobs.

1.2.1 Settlement patterns and local food demand

Unlike many rural areas in South Africa which have experienced depopulation as a result of urban and peri-urban migration, GTM has experienced remarkable population growth. Since 1996, the number of people in GTM has increased by about 20% and the number of households by 68%. Possible explanations for this include, the ‘semi-rural’ nature of much of the settlements and increasing access to farm employment, particularly from the growing citrus and subtropical fruit and nut industries. The table below demonstrates settlement patterns across GTM and illustrates that poverty is concentrated in the ‘traditional areas’.

Table 2. Settlement patterns in Greater Tzaneen Municipality

| | Area (km) | % of population, 2011 | Population density (people/km ²) 2011 | Share of black HHs running out of ‘money to buy food’ |
|-------------------------------------|-------------|-----------------------|---|---|
| Farms | 2219 | 18% | 31 | 9% |
| Tzaneen town | 22 | 4% | 662 | 7% |
| ‘Rural north’/ Traditional areas | 509 | 34% | 258 | 22% |
| ‘Rural south’/ Traditional areas | 493 | 45% | 354 | |
| Total | 3243 | 100% | | |

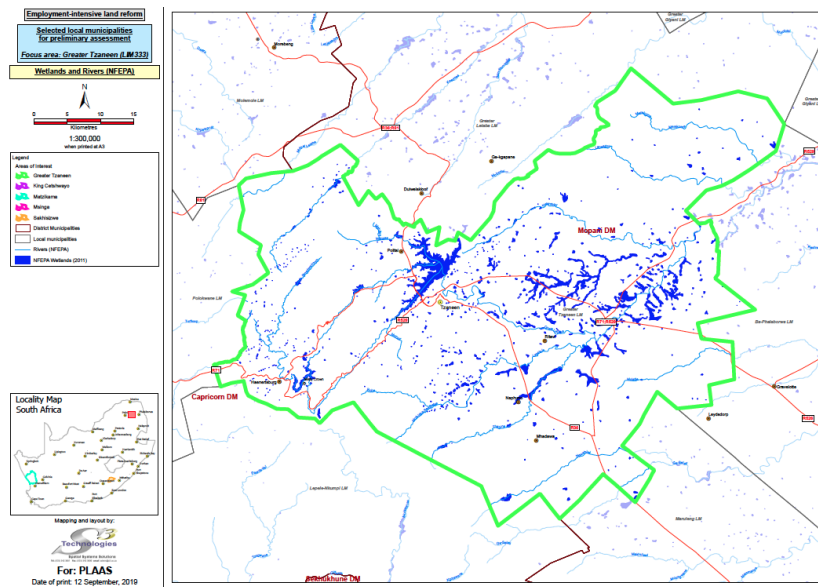
One advantage of this large and growing population is the pronounced local demand for food. There is approximately ZAR 1.6 billion annual expenditure on food, of which ZAR 190 million is spent on fresh fruit and vegetables. Several key informants noted the sprawling settlements around the R36 main road. These growing settlements reflect the types of mixed-livelihood systems which are predominant in this area. Households want to be closer to Tzaneen town for job opportunities and access to amenities, while still having the opportunity to engage in household farming. However, the densification policy of the municipality limits the extent to which farming can become a meaningful contributor to household livelihoods since plots tend to be small (see discussion in section 2.3.2). Access to water is also a key limiting factor for these newly settled households.

¹² There are 36 793 agricultural households in GTM¹², of which 24 524 are black households and 12 269 are white households.

1.2.2 Available irrigation and groundwater resources and their current utilisation

GTM benefits from access to a number of rivers and wetlands, which are indicated together with the Tzaneen and Ebenezer Dams on Map 7 below. The Tzaneen Dam and Ebenezer are both earth-fill type dams, the former is located at the beginning of the catchment area of Groot Letaba River (an important tributary of the Olifants River), while the latter is located both on the Groot Letaba and Broederstroom Rivers. Another important catchment area for GTM is the Nwanedzi River (Boche and Anjuere, 2015).

Map 7. Location of Wetlands, Dams and Rivers in Greater Tzaneen Municipality



Tzaneen Dam is owned and managed by the Department of Water and Sanitation (DWS). It was first constructed in 1976 and its principle purpose is to provide water for agricultural and domestic use, although it is also used for recreational activities. The water is noted to be of 'excellent quality' (DWS, 2015). A DWA (2010) report on the Groot Letaba catchment area notes challenges with water resources and provides some suggestions to address this, which have clearly long been in planning (since 1998) but are yet to be realised:

The water resources available in the catchment are limited, and considerable pressure has been put on these resources in the past.... The Feasibility Study (DWA, 1998) proposed several options for augmenting water supply from the Groot Letaba River. These included some management interventions, as well as the construction of a dam at Nwamitwa and the possible raising of Tzaneen Dam. These options would enable additional water to be allocated to the primary water users, would allow the ecological Reserve to be implemented and could also improve the assurance of supply to the agricultural sector (DWA, 2010).

The project to raise the Tzaneen dam wall was never completed and several key informants noted gross corruption as the key reason for this. The project to raise the dam wall would have increased water supply by 20%. Contractors got as far as decreasing the wall's height by four meters to stabilize the base. After this, they were meant to raise the wall again, but since then no contract has been issued to raise it. Allegedly, according to key informants at LDARD, GTM municipality and various commodity associations, there is no plan in place to

finalise the construction of the dam wall. If and when the project to raise the dam wall is implemented it is suggested that a provision should be in place to allocate all of the surplus water to small-scale farmers.¹³

The Tzaneen dam is under the jurisdiction of the Letaba Water User Association (LWUA). The LWUA is responsible for 'strategically managing the consumption of water for agriculture in the two large dams (Tzaneen and Ebenezer Dams) with DWS' (DWS, 2015: 11). The LWUA is comprised exclusively of farmers, the municipality is not part of the association, nor are various other water users along the Great Letaba River. LWUA can no longer allocate water to new users and the DWS has allegedly not taken measures to reallocate water in GTM. A LRAD beneficiary notes: 'There's nothing the Letaba waters association can do- if it's full, it's full!' However, other key informants noted that there should be a review of current water rights and redistribution of water rights should be undertaken. A DWS (2015) resource management plan for the Tzaneen dam, notes:

The catchment as a whole is in water deficit due to the growing demand of water in the area, while users upstream of the dam enjoy a relatively high level of water assurance, the users downstream experience water shortages. Tzaneen Dam has been fully allocated due to the growing demand of agriculture and afforestation practices... There is a growing demand of water for agricultural use in the Tzaneen area, for example, irrigation of various vegetables such as tomatoes and variety of sub-tropical fruits including nuts, bananas, avocados, mangoes and citrus fruits like oranges and lemons. (DWS, 2015: 1/12).

Water challenges in the area reflect the current drought and dynamics of climate change. Some key informants also noted that the low levels of the dam are a recurrent and 'natural occurrence'; this being the third time since 1995 that it has been at this level. However, periodic drought periods have also been exacerbated by poor water management. A key informant from LDARD notes: 'There is close to zero collaboration between DWS and DARD. DWS and the municipality are not playing their role in water governance'.

Figure 5. Source of water in GTM (StatsSA, 2011).

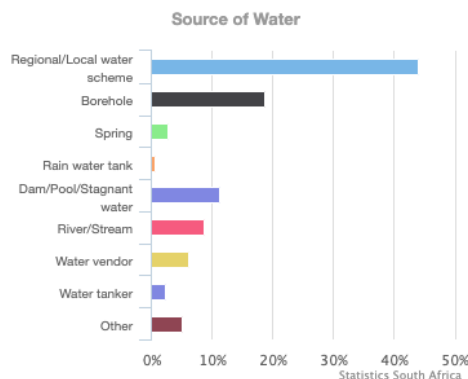


Figure 5 above indicates the source of water for households, indicating that most households access water from a 'local water scheme' (i.e. from the dam), followed by borehole water. Some key informants raised concerns that borehole construction was not being monitored affectively and that this could have a negative effect on the availability and quality of groundwater resources (WRC, 2018). However, a DWS (2010: V) report emphasised that there was room for expansion of groundwater utilization in GTM and that in 2010 only 44% of total available ground water was being used.

¹³ Reallocation of water to subsistence producers in surrounding villages should also be a key focus. According to key informants from Mopani Farmer's Association, insufficient access to water is having a profound impact on household food security in rural villages.

Based on a desktop evaluation, it is estimated that the groundwater potential in the Study Area is 91 Mm³/a. It is estimated that the current groundwater use is approximately 40 Mm³/a. This would leave approximately 51 Mm³/a (without accounting for groundwater losses) available for development. Groundwater is therefore a significant potential water resource for the area. Development on a regional scale is envisaged as an important option for the area.

There are now plans to augment access to water by constructing the Nwamitwa dam. Construction is to commence from March 2022 and will be completed in 2026 at a cost of ZAR 4.6 billion. The dam is expected to have a storage capacity of 187-million cubic meters (Arnoldi, 2018). However, given that the improvements to the Tzaneen Dam have not yet been finalized, DWS's approach to resolving the water challenges in the area appear peculiar. Given reports of corruption in the appointment and management of contractors for the Tzaneen Dam development, this raises concern over the management of the Nwamitwa project. The DWS (2010: V) report had suggested that, 'The potential yields, costs and environmental implications associated with a regional groundwater supply scheme should be determined and compared with the yields, costs and environmental implications of the proposed Nwamitwa Dam development'.

2 Status quo: land reform to date and the farming sector in GTM

2.1 Land reform to date

2.1.1 Redistribution

According to data received from DRDLR (2019) there are a recorded 87 redistribution projects that have been transferred in GTM between 1998 and 2013, through the SLAG¹⁴, LRAD¹⁵ and PLAS¹⁶ programmes. There is either no available data or no land that has been transferred in the area since 2013. Total land redistributed, according to this data, amounts to a total of 8292.05 hectares, with properties ranging from eight hectares in size to 888 hectares. Most received only grant funding, while a few received both grant and loan funding. While there is data missing for a number of projects, a total of ZAR 86 958 459 is accounted for in grant funding and ZAR 6 252 336 in loan funding.

Many of the redistribution farms included in this study were located in the area broadly situated along the R528 and R71 roads in the direction of Phalaborwa and included a number of what could be categorized as 'small-scale black commercial farmers' operating quite productive enterprises. The Nwanedzi river runs through this area, however, drought conditions have negatively impacted access to water. As Map 1 above indicates, this area includes arable land with 'moderate potential', although there are some dry areas, which are only appropriate for grazing with 'low to moderate potential'. A number of LRAD and PLAS farms were visited and beneficiaries interviewed.

Many LRAD farms had been sold, some to white commercial farmers. The reasons for this were many and complex but included: beneficiaries being unable to sustain production due to lack of post-settlement support; failure to secure water rights; alleged lack of commitment to farming among some beneficiaries; and natural

¹⁴ The Settlement/Land Acquisition Grant (SLAG) was the first version of the redistribution programme implemented from 1995. The then Department of Land Affairs (DLA) provided grants of R15 000 (then R16 000) to assist poor households to purchase land from willing sellers (DLA 1997; Wegerif, 2004).

¹⁵ The Land Redistribution for Agricultural Development programme (LRAD) replaced SLAG in 2000. In line with the market-led Growth Employment and Redistribution (GEAR) economic policy it removed poverty as a key criterion for selecting land reform beneficiaries and instead aimed to create a class of black commercial farmers (Wegerif, 2004).

¹⁶ The Proactive Land Acquisition Strategy (PLAS) 'involves the state purchasing privately owned land and leasing it to emerging black commercial farmers. According to government, about 2.8 million hectares were redistributed between 1994 and 2013 and this benefitted 225 895 people' (Manenzhe, 2015: 73-4).

disasters (fires) and other household crisis including illness. A PLAS beneficiary and member of FABCO notes 'Some LRAD farmers with private title are selling their land back to the white farmers because they can't make it.... That land is killing people! The worse part with LRAD is the debt people get into'. Another PLAS beneficiary and member of Agri Letaba noted how some people are benefitting from the failure of redistribution farms. A local white farmer has allegedly taken to purchasing failed LRAD farms and after doing some improvements such as drilling boreholes, sells them for a profit (sometimes doubling the value).

Many of the most productive small-scale farmers were PLAS beneficiaries. Despite widespread criticism of the PLAS programme in the media and literature, many beneficiaries and other key informants noted that although challenges remain in terms of support programmes, the incentive structures inherent to the PLAS programme seemed to be facilitating productivity among beneficiaries that were committed to making a success of farming. Many black small-scale farmers agreed that providing private property outright would be a disaster, as this PLAS beneficiary notes: 'Ownership will be a disaster! Across this valley there are many properties being sold and they are all private LRAD properties. These PLAS properties are expensive, this farm is worth ZAR 10 million but it's not worth owning it. If I could sell it, I would and then go to Joburg'.

2.1.2 Restitution

Data received from DRDLR (2019) for restitution projects indicates that 20 restitution claims were settled in the municipality between 2001 and 2015. Much of the data is missing for the number of hectares transferred, number of beneficiaries and the size of the grants issued. It is also not clear whether all of these claims have been finalised, as only an 'approval date' is provided. Many claims include very large claimant groups over extensive farms. For example, the Mmamathola claim for a 1597-hectare farm includes a very large claimant groups of 1500 households (7500 beneficiaries) for forestry and crop farming. The Maitjene Community claim was for a 7732-hectare farm for 167 households (591 individuals) for crop and cattle farming. It is not clear whether any of these have been subdivided, but it seems unlikely given the current trajectory of the restitution programme. However, the large number of beneficiaries indicates that subdivision would be more successful than attempting to coordinate a single farming entity for a large beneficiary group under a single trust, CPA or cooperative; a model which has a poor track record in South Africa's land reform programme (Manenzhe, 2018; Clark and Luwaya, 2017; Davis, 2015; Cousins, 2015; Lahiff et al., 2012).

Data was not made available on outstanding claims. Field research, however, illustrated that there are a number of unsettled claims. According to the Mopani District Rural Development Plan of 2016, there are 25 claims that are yet to be validated and 12.8% of the total area of the municipality is under claim. Surprisingly some of the land under claim in GTM is still transacting on the land market. Commercial farmers are allegedly willing to take the risks involved in purchasing land with the hope that an agreement could be reached with claimants to enter into JV arrangements in the future. GTM's IDP notes the need to 'fast-track the protracted land restitution process for claims that have been outstanding for a long time'.

Several challenges were reported for restitution projects, which reflect the general trend of challenges associated with the restitution programme in other parts of the country, particularly: the internal politics of large claimant groups, governance and financial management challenges within CPAs and trusts, government failure to adequately support claimant groups and challenges and disputes between claimants and strategic partners. However, the LED officer believed that CPAs were doing 'very well and just a few experience challenges'. In some cases of restitution projects, where existing farming operations were not maintained there were reports of net job losses. This should be avoided as part of a wider employment-intensive land reform programme moving forward. An example of this is the Mokororwane CPA's land, which was previously being

used as a game lodge and reportedly all of these jobs were lost¹⁷. The tourism venture was not maintained and was replaced with cattle farming by CPA households, however, so far, no dividends have been distributed to members.

Another, more well-known case is the Makgoba Tea Estates (previously known as Sapekoe Tea Estate). A 2017 report¹⁸ noted that 'over 2000 jobs were lost', while an informant from Westfalia contended that 'around 5000 jobs were lost'. The Makgobas are now in a JV with ZZ2, after a failed attempt at establish a JV with Westfalia and other strategic partners. Due to the numerous failures and troubling dynamics of coordinating large beneficiary groups in JV arrangements with strategic partners, this report suggests applying the same model proposed of subdivision of farms for redistribution, to restitution cases as well (see section four).

2.1.3 Assessment of current institutional arrangements for land reform initiatives

The following SWOT Analysis draws on the GTM's IDP for 2018/9 and the 'Rural Development Strategy' for 2017. The documents note a number of challenges posed to land and agrarian reform. There is clearly a very long list of weaknesses, in comparison to the strengths.

Table 3. SWOT Analysis of land and agrarian reform in Greater Tzaneen Municipality

| STRENGTHS | WEAKNESSES |
|--|---|
| <ul style="list-style-type: none"> • Transport is accessible • Plenty of retail outlets (fresh produce) • There is plenty of agricultural water • Availability of farm inputs within reasonable distance • Abundance of unskilled labour • Availability of farm service e.g. ploughing, harvesting, pruning • There is fertile land and favourable climate • Vibrant hawkers market serves as good local distributor | <ul style="list-style-type: none"> • High costs of commercial transport • Inconsistent markets make farmers switch to other enterprises that may seem convenient • Poor irrigation infrastructure • Insufficient CASP funding, few people benefiting • Lack of technical or management skills • LRAD – long processes of acquiring land • Expensive unskilled labour • Poor access to information to allow farmers to benefit from government support programmes • High costs of farm support services • Tenure – PTOs only conducive for cash crops or other short-term production • High competition with commercial farmers • Agents at the FPMs don't represent emerging farmers' interests • No access to export market (Global Gap & HACCP aren't easy to meet) • Insurance is unaffordable • Poor technical advice and extension officers • Finance –lack of collateral and blacklisting • Lack of capital for irrigation pipes • Poor access to water rights • Packhouse standards are very difficult for black farmers • Processors only buy from contracted producers when supply is high • Unresolved feud between municipal and traditional leadership over who allocates land • Unwillingness of landowners to sell their land and high prices • Unprocessed and slow pace of land claims |

¹⁷ The respondent was not certain on the number of jobs lost.

¹⁸ *Capricorn Voice*, August 2, 2017

| | |
|---|---|
| | <ul style="list-style-type: none"> • Beneficiaries of land reform use productive land for non-productive uses • Communities not organized into cooperatives • Limited collaboration with Institutions of Higher Learning |
| OPPORTUNITIES | THREATS |
| <ul style="list-style-type: none"> • There's still room for processors • Establishment of a Fresh Produce Market • Black empowerment agents • Export market is growing but needs government intervention • Establishment of specialized transport service: specific for emerging farmer needs • Agri-BEE focused farm service companies • Investment opportunities for retailers and wholesalers • Export BEE company | <ul style="list-style-type: none"> • Production likely to decline due to land claims • Barriers to entry into export market e.g. certification (Global GAP) • Organic Certification requires a national policy and governing body • Crime- theft of electric cables, transformers, crops and livestock and vandalization of farmhouses • Natural disasters • Encroachment of settlements onto agricultural land |

2.2 Small-scale black farming sector

2.2.1 Small-scale farmers in GTM: Location and access to land and water

There are 119 106 established 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. The location of all *black households* in the municipality and the percentage of whom are *agriculturally active*¹⁹ is captured in table 4 below (StatsSA, 2017). Among the agriculturally active black households, 94% are found in the former homeland areas, while the rest are more or less equally split between urban and farming areas (StatsSA, 2017). Many of the small-scale farmers in GTM are well organised into different farmer's associations, which represent various class interests. The organisations included in this research were members of FABCO (Farmers Business Co-operative)²⁰, Mopani Farmer's Association²¹, Groter Tzaneen and AgriLetaba²².

Table 4. Location of agriculturally active black households in Greater Tzaneen Municipality

| Geo-type | Estimated number of black households | ...of whom agriculturally active | ...of whom agriculturally active % | Percentage of total black agriculturally active households |
|-------------|--------------------------------------|----------------------------------|------------------------------------|--|
| Urban | 10 359 | 717 | 7% | 3% |
| Traditional | 99 915 | 23 087 | 23% | 94% |

¹⁹ This is a StatsSA category defined as 'A household involved in agriculture'. Agriculture is defined as 'The growing of crops, the raising of livestock, and the utilisation of forestry and fishery resources' (StatsSA, 2011: 22).

²⁰ FABCO is an agricultural cooperative formed in 2014 with 348 members. It includes a number of beneficiaries of land reform (including small-scale black commercial farmers) as well as market-oriented smallholders in the former homelands.

²¹ A farmer's association representing around 1500 smallholders (including many subsistence-oriented) in the Mopani District and is composed mostly of farmers operating in the former homelands on no more than two hectares (only one farmer has 17 hectares, two farmers have ten hectares and six farmers have between two and six hectares).

²² Both AgriLetaba (+130 members) and Groter Tzaneen (+60 members) are farmer's associations which are affiliated to AgriLimpopo and AgriSA. Although GTM is not located in Letaba District some farmers are still affiliated to it. Some LRAD and PLAS beneficiaries focused on subtropical fruit are affiliated to them and to The South African Subtropical Growers' Association (Subtrop).

| | | | | |
|----------------------|----------------|---------------|------------|-------------|
| Farming areas | 8832 | 719 | 8% | 3% |
| Total | 119 106 | 24 524 | 21% | 100% |

There is a total of 39 existing smallholder irrigation schemes in the Mopani district, most of which are located in the former homeland areas (Koppen et al., 2017). According to a Manager at LDARD, ten of these irrigation schemes are located in GTM but ‘only around four or five are 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. ‘The majority of smallholders have four or five hectares, but some have two hectares or only ½ hectare ... land sizes range from ½ hectare to 15 hectares.

Boche and Anjuere (2015: 87-88) note that a few black small-scale farmers in this study area have managed to accumulate through land reform (SLAG, LRAD and PLAS) as well as through political connections to the former homeland governments. These ‘black farmers formed a new class of what is called ‘emerging farmers’. Some specialised in vegetable production, others in industrial broiler production’ and research conducted for this report indicates that many also grow various subtropical fruit, especially mango. However, overall these developments have not radically transformed the distribution of land rights or agrarian relations. The majority of households still have limited access to land and water and thus farming is limited to food security, with livelihoods depending mostly on social grants and wage employment.

A handful of small-scale black farmers were found to have purchased their farms through private land transactions. These are however a minority, for example only around 2% of FABCO’s members purchased their farms. Many of these are middle class households coming from cities. Of the two households interviewed, one had not received any support from government, while the other had received a CASP grant to set up a broiler project²³. She was selling 100% of her product through a contract with Bushvalley Chickens and relied on hired labour, although admittedly the venture was very capital-intensive and doesn’t require much labour.

Communal Areas of the Former Homelands

The GTM includes parts of the former homelands of Gazankulu and Lebowa. Many of the small-scale farmers who could be potential beneficiaries of land redistribution are located in these areas. The sprawling settlements of the former homelands are nestled alongside some of the most valuable and highly productive private farmland in the country, predominantly owned by white landowners. Large areas of this region are the subject of unsettled land claims. Map 8 below indicates the areas in which tribal authorities are present and play a role in land management (olive green to the North East and South of the municipality). In the municipality's IDP (2018/9: 144) it is noted that there is a 'good relationship with the Traditional Authorities'²⁴, which participate in various programmes including being represented in the council and ward committees. However, in the municipality's 'Rural Development Strategy' (2017) it is noted that there is ‘tension between Traditional Leaders and the Municipality on control of land’. The municipality has a mandate to implement land allocation and settlement according to the Spatial Planning and Land Use Management Act (SPLUMA). However, there are allegedly challenges in doing so because the Chiefs are not involved in the process. The LED officer noted that: ‘We have a tribunal to assess claims and the Chiefs are not involved and this is a problem’.

²³ Boche and Anjuere (2015) also noted that ‘a broiler-chicken project has been supported for five emerging farmers, initiated by the Limpopo Department of Agriculture through its Comprehensive Agricultural Support Programme grants and loans from the Land Bank’.

²⁴ The following Traditional Authorities lie within the jurisdiction of GTM: Modjadji Traditional Authority, Bahlabine Traditional Authority, Bakgakga Traditional Authority, Valoyi Traditional Authority, Nkuna Traditional Authority, Nyavana Traditional Authority, and Mmamabolo Traditional Authority

produced. Members of Mopani Farmer's Association, for example, noted that they were producing crops like groundnuts because they require less water for cultivation, while others restrict production to the rainy season or opt to rear livestock. Some small-scale farmers, with access to borehole water have installed drip irrigation systems at their own cost, instead of waiting for government support. This can be done at a cost of around ZAR 25 000 per hectare.

Many small-scale farmers have sunk boreholes since they cannot be allocated surface water by the LWUA. This is, however, quite costly, ranging from ZAR 35 000 to ZAR 120 000. Theft and vandalism of boreholes is cited as a challenge. Several farmers also noted that the electricity costs involved in pumping water were extremely costly: ZAR 750 – 1000 per hectare of vegetables. One member of Mopani Farmer's Association notes, 'Our problem is the pumping fees for the borehole... we pay ZAR 3000 a month to irrigate four hectares'. Another farmer, operating with a PTO for three hectares near Letsitele similarly notes, 'I spend about ZAR 3000 on electricity to pump water from the borehole. The problem is that Eskom doesn't give any discounts for the transformer, even though its smaller'. Despite the high cost of electricity and unreliable access to groundwater in certain parts of the municipality, overall boreholes are an important means by which to access water: 'We will continue with this drought until 2022 so the water strategy is boreholes' (PLAS beneficiary).

One serious challenge for land reform beneficiaries has been that water rights have often not been transferred along with land rights in several cases. Allegedly, due to the lucrative nature of the water rights, water rights are being sold separately to land rights, leaving the new owners without access to water to maintain the farms productively. In certain cases, infrastructure like boreholes and irrigation systems have also been stripped by the previous owners before the land reform beneficiaries were resettled. A small-scale farmer from Letsitele notes, 'All the claimed land on the way to Letsitele- it's chaos! The farmers who are leaving vandalise their equipment so you have to start from scratch when you get the land and you don't have water'. A LDARD official notes: 'DRDLR needs to acquire the land with the water rights! The provincial department [LDARD] says we can't assist the farmer without water rights. Of late they also say we can't give surface water rights anymore'. A PLAS beneficiary explains the challenges he faced to receive his water rights:

It took me six years to get my water rights... I was advised by a civil engineer at Westfalia to cut through the red tape of water rights by paying for my own dam yield analysis. So, I brought an engineer to do it and I paid ZAR 25 000 and submitted my application for the water license. When they sold this farm to the government, they sold the water rights separately... It's countless how many land reform beneficiaries don't receive their water rights ... Many beneficiaries don't know about the process and extension officers also don't know.

In the context of the former homeland areas there were alarming reports by the Mopani Farmer's Association of sand-mining around riverbanks which has destroyed access to water for these small-scale farmers and is also affecting domestic water use:

The big companies are drilling sand around dams and rivers.... Traditional leaders are very skewed in their position, they are against us because they allow these companies to mine sand here and disrupt the water flow. Just today, more than five trucks have come in and out of this village [Ndhambi Village]. Even if God will answer our prayers and the rain comes, we won't be able to access it because those rivers are destroyed ...The mining company is from Tzaneen. The chief told us that 'Premium' will come and mine sand here and that we must tell our people to not bother them. They only employed two people from here.

There is a growing acknowledgement regarding the injustice of water distribution between large white commercial farmers and small-scale black farmers in the municipality: ‘Those citrus farmers along the Letaba river, they have enough water why don't we? We deserve to be nearby water resources’ (Member of Mopani Farmer's Association). Access to water clearly needs to be addressed urgently as part of an integrated land and water reform programme.

2.2.2 Production systems and typology of small-scale farmers

The table below provides figures on agricultural activities for black farming households, which is taken from the Community Survey of 2016 (StatsSA, 2017). Poultry production is the most widely practiced agricultural activity, followed by fruit production, livestock production and then vegetable production.

Table 5. Agricultural activities for black households in Greater Tzaneen Municipality

| Agricultural Activity | Established number of Black Households | Number of observations in data set |
|------------------------------|---|---|
| Livestock production | 7812 | 588 |
| Poultry production | 10 665 | 779 |
| Grains and food crops | 4239 | 301 |
| Industrial crops | 69 | 5 |
| Fruit production | 7872 | 562 |
| Vegetable production | 6635 | 465 |
| Other | 151 | 12 |

Source: StatsSA (2017)

Analysing existing dynamics of social differentiation among small-scale farmers in GTM is important as a means to inform a land redistribution programme that meets the differentiated needs of households. Within a capitalist mode of production, small enterprises that predominantly make use of family labour can be thought of as differentiated classes of 'petty commodity producers'²⁵ (Bernstein, 2010). These enterprises/ households combine the contradictory class places of labour and capital because they own the means of production but also exploit their own labour power. In reality, many hire labour for certain tasks, but the majority of labour is sourced from the family (Cousins, 2010; Bernstein, 2010). The ability of petty commodity producers to deal with competition and shocks is uneven and this results in a tendency towards social differentiation (Bunce, 2018; Gibbon and Neocosmos, 1985; Lenin, 1967). With these general tendencies in mind, the following categories were broadly identified in GTM, based on fieldwork and a review of existing literature (Boche and Anjuere, 2015; Cousins, 2010/3).

- **Small/medium-scale black commercial farmers, for whom farming is their main income source** (mostly mixed farming systems emphasising fruit and/or vegetables and complemented by livestock, also some industrial broiler producers, predominantly for formal markets)
- **Smallholders targeting formal and informal value chains, supplementing with off-farm activities and social grants** (vegetables and fruit (mostly limited to mango for processing and FPMs) and livestock for ceremonial and informal market)
- **Smallholders targeting informal value chains, relying on off-farm activities and social grants** (mostly staples for self-consumption, vegetables for informal markets, green mango for informal atchar trade and occasional livestock sales)

²⁵ In the context of this project, households who rely predominantly on household labour are referred to as 'smallholders'.

- ***Subsistence-oriented smallholders, relying on off-farm activities and social grants*** (mostly food in homestead gardens and small numbers of livestock)

Small/medium-scale commercial farmers are the minority among black agricultural households in GTM. Many (but not all) of these households have benefitted from land reform. They comprise 15-20% of FABCO's members (52 - 69 farmers). Two land redistribution beneficiaries (and members of AgriLetaba) interviewed could also be included in this category. Many of the farmers interviewed occupied relatively large farms (mostly over 100 hectares for land reform beneficiaries), although smaller but highly capitalised farms were also found e.g. 5 - 33 hectares²⁶. Most of these farmers noted that farming was their main income and some that it was their only income. Others supplement farming with other businesses and wage labour. All households rely predominantly on hired labour, with family labour utilised mainly for managerial functions. These farmers sell all or the vast majority of their produce. Many of them target formal value chains but some choose to sell in informal markets where deemed profitable. Some of these farmers create a large number of permanent (8-15) and seasonal jobs (20-30), especially those engaging in a mix of fruit and vegetables, which require year-round labour. Those producing only fruit hire smaller numbers of permanent workers but larger numbers of seasonal workers. However, the labour-intensity in relation to the size of the land was sometimes low in the case of land reform beneficiaries with farms over 100 hectares. This is in part because farmers struggle to cultivate large parts of the land under crops, due to a lack of capital and access to water, and thus much of the remaining land is used for grazing livestock.

Livelihood Profile: PLAS beneficiary and FABCO Chairperson

This small-scale farmer is the beneficiary of a 265-hectare PLAS farm on a 30-year lease. The long lease has not helped him to get funding from banks. However, he doesn't view private property as the problem, but rather difficulties in accessing secure formal markets. The farm is fenced and includes storerooms, a tractor, plough and other farm implements. 35 hectares is used for crops and the rest is used to graze cattle and goats on. There are 25 000 mango trees on 30 hectares and five hectares with 10 very productive tunnels of cucumbers and green peppers, which are irrigated with a sophisticated drip irrigation system. There are also plans to plant an avocado orchard and the land was being prepared. However, he was concerned about having sufficient access to water since avocados need more water than mangoes. The cost of establishing tree crops over large parts of the land, along with access to water, restricts how much land can be cultivated. Goats and cows are therefore grazed on the remaining part of the farm. They employ 12 permanent workers year around and during the mango harvesting season they employ more than 30 people. He noted that the 10 vegetable tunnels (each one 10 by 30 meters) create 10 permanent jobs. 'In season fruit employs the most people, while out of season vegetables create the most jobs'.

Livelihood Profile: LRAD beneficiary and AgriLetaba member

He has had his LRAD farm for ten years. It is 33 hectares and he grows mangoes (21 hectares), litchi (one hectare) and avocado (five hectares) and also keeps cattle (on six hectares). The tree crops were already there when he received the farm, but they were old, so they have since been 'rejuvenated'. He has two permanent workers and around 30 temporary workers he calls on for harvesting, cleaning up vegetation and other tasks. He is a member of Agri Letaba and Subtrop and attends the latter's study group on growing subtropical fruit. They have water rights to a nearby stream and plan to irrigate once they extend their avocado orchards. They plan to get a loan from the Medira Foundation in Midrand to extend the avocado orchard because their application for RECAP funding was unsuccessful. They want to slowly take out all of the mango and replace it with avocados. He supplies avocado to the FPMs, through agents and sometimes to bakkie traders. 'Prices are much better at the

²⁶ Land size is not considered a good indicator of class place and would differ considerably based on commodities produced and agro-ecological zones.

fresh produce markets. Export is the best, but we are not there yet'. The second-grade avocados are taken to Westfalia for processing into guacamole and avocado oil. They started buying cattle to bring in extra income and would like to process biltong in the future. He is considering purchasing another farm nearby for grazing. 'There are a lot of farms around here for sale!'

Smallholder farmers targeting informal markets and a mix of formal and informal markets rely on both household and hired labour. Cousins and Chikazunga (2013) have also distinguished between smallholders based on those which supply 'loose value chains' (bakkie traders, hawkers, neighbours & other farm gate sales) and those supplying 'tight value chains' (e.g. contracts for supermarkets). In their typology there are many more smallholders supplying loose value-chains. While, this is still true of smallholders in the context of GTM, the presence of subtropical fruit means that many farmers are also targeting formal value chains (including processing e.g. mango for atchar and drying²⁷ and avocado for guacamole and oil). GTM is also well connected to NFPMs and both vegetables and fruit (especially mangos favoured by smallholders, for which there is no export market) are sold. Smallholders able to target formal value chains tend to sell larger proportions of their produce in markets, make significant use of hired labour and have a medium to high capital intensity (Cousins and Chikazunga, 2013).

Many smallholders across these two groups operate smaller plots of around one to five hectares with PTOs (some on irrigation schemes) and have access to communal grazing. However, a few have access to larger land reform farms. The chairperson of FABCO noted that the most common farmer among their members would have around five hectares of land and would employ around five permanent workers, supplemented by seasonal labour depending on the specific crops. It was common also outside of FABCO to hear the estimate of around one job per hectare for those producing a mix of vegetables, fruit and livestock. However, respondents noted that for those producing vegetables intensely it could be as many as five permanent workers per hectare. Farmer's falling into this type of category were also found among the members of Mopani Farmer's Association (although more often targeting informal markets and sometimes NFPMs). Small-scale farmers in the communal areas who are not aligned to a farmer's association are also included in this category.

Livelihood Profile: Small-Scale Farmer in Letsitele with a Communal Plot under PTO

This is a young small-scale farmer in his 30s who recently got into agriculture, 'Farming is not easy but sitting in an office is not for me so that's why I do it'. He has a three-hectare plot in Letsitele, which he accessed through the traditional leader with a PTO. He lives on the property in order to protect his fields from thieves, which is a problem in the area. He neither received a grant from government, nor a bank loan. He has two permanent employees and he also works on the farm himself. 'I pay my ladies ZAR 130 per day, the other farms only pay ZAR 125 but I want to attract good workers'. During harvest he hires as many as 20 people from the village. He produces green beans and butternut. Some of the butternuts are sold to a local company producing pest controls for citrus. The rest, along with the green beans, are sold to NFPMs through a marketing agent. 'I prefer to use my agent rather than selling to the local [informal] market. Green beans we sell at ZAR 60-120 per box through the agent, at the fresh produce markets, but I might only get ZAR 30 if I sell it to a bakkie trader... I pay about 20% on transport but the whites get better deals with those transport companies... I tried to go to the supermarkets directly, but they try to rip us off!'. He makes about ZAR 20 000 per annum per hectare planted, which fluctuates with market prices. He watches the market vigilantly to time his harvest accordingly: 'I do the research myself on the internet to know when it's good to harvest'. In the future he wants to extend production and produce vegetables and livestock together. He needs to sink boreholes to extend production. He is concerned about planting tomatoes and cabbages because he perceives them as risky crops. 'I would need

²⁷ Due to the sugar tax, respondents noted that market for juicing has been drastically reduced in the municipality.

netting if I want to do tomatoes... but for that I would need funding. I have looked into government support but nothing came of it’.

Subsistence-Oriented Smallholders account for the majority of small-scale farmers in this municipality. They are predominantly located in the former homeland areas with the majority having PTO certificates to residential plots with homestead gardens and access to communal grazing. Some may also have access to small plots of between ¼ to two hectares, relying mostly or solely on household labour (Boche and Anjuere, 2015). Production is critical to food security but relatively little or insignificant amounts are sold. However, land remains important to overall livelihood strategies for large numbers of people, in conjunction with social grants and off-farm incomes.

2.2.3 *Markets/Marketing*

It is well documented in the literature that small-scale farmers often struggle to access formal value chains. However, in relation to subtropical fruit growers Genis (2019:1) found that ‘many small-scale black farmers also sell in formal markets’. Aphane’s (2011:146) study of 234 small-scale mango growers in Vhembe and Mopani Districts found that only 54 (23%) of these farmers sold their produce in formal markets, e.g. export, supermarkets or to processing companies. Due to high transaction costs, the remainder of the farmers mostly targeted loose value chains, selling to bakkie traders, hawkers and to the local community. In GTM there is room to improve access to formal value chains for small-scale farmers, as GTM’s IDP for 2018/9 notes: ‘Currently a lot of fresh produce from our area is still being sent to Johannesburg only to be sold back in processed form back to large chain stores in and around Tzaneen’. However, formal value chains shouldn’t be seen as a panacea for small-scale farmers. There are often high transaction costs involved in meeting the contract terms, quality standards and procurement practices of formal value chains (Cousins, 2018; Greenberg, 2013). Small-scale farmers need to be supported to meet the conditions of accessing a full range of markets based on the quality of produce e.g. sending first grade produce for export, second grade to NFPMs, supermarkets and informal markets and third grade for processing.

Informal Markets

The majority of small-scale farmers sell their produce in informal markets: spot sales to bakkie traders, hawkers and directly to consumers. However, many bakkie traders and hawkers go directly to national and municipal fresh produce markets or to the RSA/ Z22 Mooketsi market to get the bulk of produce they require. Where large numbers of small-scale farmers are organised on irrigation schemes, traders may more easily be able to get the volume they need. However, sourcing from various scattered farmers presents high transaction costs. Some small-scale farmers also preferred to sell to marketing agent for NFPMs because they allegedly receive better prices. A young male hawker interviewed near Tzaneen notes: ‘We buy our fruit from bakkie traders mostly. Sometimes we go to the farmers as well but most of the time they don't want to sell to us because they send it to the fresh markets. The white commercial farmers don't sell to us²⁸.... we buy these bananas from black farmers.’

In spite of the well-developed formal value chain, including an active export market from GTM, it is clear that the informal sector for fresh produce and subtropical fruit in GTM provides many benefits to farmers. Hawkers and Bakkie traders can be seen around Tzaneen, rural towns and settlements and along main transport routes. Unfortunately, the municipality has adopted quite a harsh approach to regulating street traders, which limits the livelihood benefits for traders and the number of potential informal jobs that could emanate from the fresh produce value chain. There are ‘no hawking’ signs along most main roads including the busy R528 and R71 and for the most part hawkers are not allowed to trade on main streets where they might compete with other

²⁸ We however did come across bakkie traders who had purchased fresh produce from surrounding white commercial farmers.

businesses. However, some hawkers could be seen selling in these areas in spite of the restrictions. The LED officer demonstrates his position on hawkers in the following statement:

We built structures for hawkers but it didn't work because they know where they can make money. They want to be in town on pavements and on the roads ... We take their stuff and destroy it but then they just come back anyway. They want to be on a national road because they make money there, but they can't be because it's dangerous and it's a Sanral road. When we demarcate, we have to control. You can't have someone selling takkies outside Jet. We are protecting the big guys because they provide more jobs ... There are some foreign-national hawkers who also don't know the regulations, and they sell nuts just outside the banks but that is dangerous.

There is a very active informal market for mangoes which is so lucrative that even established commercial farmers choose to target it. A mango farmer near Tzaneen documented by Genis (2015:188-189), noted that he sells 40% of his harvest to 'hawkers with so many different preferences ... you can do a thesis on that'. Van Rooyen (2013) also noted in the *Farmers Weekly*:

Some 40% of Radley Estate's mangos are marketed directly from the farm to hawkers and vegetable shops. Another 40% is sent to municipal markets and the remaining 20% is sent to a nearby dried mango and juice factory. 'The hawkers are getting increasingly fussy over quality, but the advantage of this market is that they want a variety of sizes to fit into crates or to sell loose so it makes it easier to sell fruit that does not conform to formal market standards' (in Genis, 2019: 8).

Wholesale markets

The Polokwane FPM is the closest wholesale market, however, produce is also sold further afield in the Tshwane, Joburg, Springs and Cape Town FPMs. GTM is well connected to nearby towns and cities and there are several established transport companies based in the region which small-scale farmers are making use of e.g. Kobus Minnaar Transport and Premium Trucking. One small-scale farmer explains the process:

You harvest and pack it the way you want it to be sold, according to advice from agents at the fresh produce markets. Then you take it into town to the transport point and dump it there.... They give you a receipt and when the agent sells it for you, they pay the transporter first, then the agent as the seller and then whatever is left is yours as a farmer.

While most farmers noted that it is a good system, several noted the need for market information to drive decisions on what to produce and when to send produce to market to avoid slumps. There were some small-scale farmers who were actively monitoring on-line data on NFPMs or relied on commodity associations like Subtrop. Others noted that provision of market information should be a service that government should organise. Apart from the FPMs, the ZZ2/RSA Moketsi market is the closest fresh produce market. According to ZZ2 there are over 200 registered small-scale farmers which supply the market. However, a small-scale farmer noted that, 'Anyone can access it but it doesn't benefit black farmer because you have to compete with ZZ2'. This is not the view of all farmers though, and it clearly has also created a very vibrant economy for local hawkers and bakkie traders. The benefits of this also extend beyond the province and some traders were interviewed who were purchasing produce to send to Pretoria and Johannesburg.

Processing

The processing sector in GTM is well established. It is particularly important to small-scale mango growers who take green mangos for processing mostly into achar but also dried mango and juice. Of the annual production of

mangoes 20-25% is sold to achar processors and 25% to juice processors and driers. The remainder is sold to bakkie traders, hawkers, fresh produce markets and supermarkets and less than 5% is exported (Respondent, Subtrop). However, in the last few years due to fruit fly infestation GTM hasn't been exporting (Genis, 2019). Approximately 10% of avocados are processed to oil and purée and Westfalia is the most dominant processor in this regard. Although many smallholders noted that it was good to have a developed processing industry for mangoes, avocados and tomatoes in the region, some also cautioned that government's focus on pushing agro-processing for small-scale farmers can be to the detriment of their profitability:

It is only worth it to send your lowest quality crops for processing. But if we are stuck with just processing, we will not succeed. You should have your system in place, if your crop fails to meet export quality, it will go to wholesale and then last resort is agro-processing but government wants to send it first to processing! But if you take your best grades there you are killing yourself. The agro-processor is making money from you. There are only a few people that are able to access export markets in this area but the money is in export, especially for fruit... On the export market I'm guaranteed at least ZAR 10 000 per ton for Mangos, ZAR 5 – 8000 per ton for the local wholesale markets but for agro-processing I will get only ZAR 4000 per ton (FABCO Chairperson).

The sense was that more should be done to facilitate access to wholesale and retail markets (formal value chain), in which small-scale farmers struggle to compete with large commercial farmers.

Domestic Retail Markets

There are a few small-scale farmers that are able to access formal value chains like supermarkets. However, a small-scale farmer, from Mopani Farmer's Association noted that 'Some people sell vegetables locally or at Spar but it's not easy because Spar doesn't take anyone there, they just take people by personal connection'. FABCO had recently pilot tested a model with 'cash and carry' for the Massmart group²⁹, which was considered to be very promising according to two key informants within the farmer's association. The Massmart group covers both wholesale and retail market networks. The farmers were provided with a small space to display fresh produce in the 'cash and carry' store in Tzaneen.

We want farmers to produce for themselves and Massmart must just create a space to display our products, we bring it in at our own risk and define the volumes of what to put on the floor. There is a cash and carry store in Tzaneen and they gave us an option to sell within other branches in the country, but we are not yet ready to do that yet (FABCO Chairperson).

The model includes two options: firstly, FABCO buys directly from the farmer and then the farmer doesn't take on the risk or the farmers can take on the risk and negotiate their own price. FABCO members were allegedly mostly happy with the payment system and how prices were set.

We were able to negotiate prices on the floor... Cabbage as an example: The farmer says they want ZAR 7 for a cabbage and then cash and carry asks for ZAR 2, which takes us to ZAR 9, and then FABCO takes ZAR 1.50 for transport, so on the floor the cabbage is sold for ZAR 10.50. We look at the interest of the farmers as the starting point ... Massmart doesn't take much risk and the ZAR 1.50 covers FABCO's transport and we have some savings to keep us going. The model benefited the farmer, FABCO and the consumer (FABCO member).

²⁹ "Massmart is the second-largest distributor of consumer goods in Africa ...The Group comprises nine wholesale and retail chains, and one buying group – 441 stores and 517 buying group members all focused on high-volume and low-cost distribution" (Massmart, 2019).

There are some challenges involved in working within the Massmart system, for example meeting the complex requirements of their 'excel system to generate orders and statements' (*ibid*). The plan for future rollout is to propose a simpler system that could be easily managed by FABCO. Massmart has shown interest in continuing the project, however, FABCO has asked government to support them with some infrastructure to make sure they can meet quality standards before they begin trading again e.g. improved packhouse facilities, cooling facilities and a weighing scale. At the moment FABCO's members are selling directly to FPMs.

Export Markets

Very few small-scale farmers producing fruit are able to access the export market. In the course of our research we did not come across any small-scale farmers currently exporting (apart from those engaged in JV arrangements e.g. the Maraveni scheme and the Makgoba Trust). This is in part due to the costs involved in meeting Global GAP requirements, which is particularly prohibitive for producers operating on a very small-scale (Genis, 2019; Chawiche, 2015). It is also due to the fact that of all of the tree crops grown in the municipality (mango, avocado, citrus, litchi, macadamia, banana) mango is the most common among small-scale producers and only 5% is exported nationally (Respondent, Subtrop). 'There are no mango exports from here. It's a wetter area so the quality is not good. Fruit flies are also a big problem here' (Respondent, AgriSA). Other lucrative export crops, like blueberries, are not currently being grown by small-scale farmers in GTM, according to our research. The most common commodity grown by small-scale farmers are vegetables, however, only 2% of vegetable are exported nationally in South Africa (DAFF, 2016) and no examples were found in the municipality, apart from large commercial producers like ZZ2.

2.2.4 Farmer support

Government support services and policy framework

There is an office of the Provincial Department of Agriculture and Rural Development (LDARD) located in Tzaneen. The Manager of this office (since 2004) described her office's role as: 'assisting farmers that have received land through redistribution and restitution and supporting land tenure reform. We provide technical advice, animal and plant production support, animal health services and engineering services'. LDARD is organised into four service centres located around the municipality. Unfortunately, the extension services in the municipality, like elsewhere in the country, are very poor with many small-scale farmers noting they had 'never seen an extension officer'. The department is emphasizing the expansion of subtropical fruit, citrus and macadamia and wants to extend the number of hectares under these commodities. Interviews with key informants indicated that the key focus was on strategic partnerships to involve land reform beneficiaries and small-scale farmers in these value-chains:

We want these people [small-scale farmers] to export but then you need to link up with ZZ2 and Westfalia. With citrus there is Du Roi, they have a nursery and they work on some of the restitution farms. If you are waiting for a government grant to get into subtropical fruits and citrus, you will never make it. The costs are so high, so we need help from the private sector (LDARD Manager).

The Vumelana Advisory Fund³⁰ has been recruited by the local economic development department at GTM to help identify investors and strategic partners. There are some cases in which production is happening on restitution land without a JV arrangement. In one case, the Mokororwane CPA is engaging in livestock

³⁰ 'The Vumelana Advisory Fund has been established as a non-profit company to pre-finance the acquisition of skills required on behalf of the community by supporting the development of commercially viable partnerships between investors and local landowners' (The Vumelana Advisory Fund, 2019).

production without a strategic partnership, however, several challenges were reported related to the effective management and strategic vision of the CPA. No dividends had been distributed to households and therefore they are considering entering into a JV. Outside of GTM there is also the case of the Levubu Valley which provides a precedent for hiring a manager on community-owned commercial farms rather than a strategic partner in an equity arrangement (Manenzhe, 2015).

The Municipality's Approved IDP for 2018 - 2019 includes a short section on agriculture. It notes that the following key Agricultural Programmes constitute the basis of agricultural development in the municipality: livestock improvement; processing and support; forestry development and processing; and agriculture diversification. The LED manager described the division of labour between the local municipality and LDARD as follows: 'We deal with the social issues and the technical issues are left to the department'. In reality there seems to be considerable overlap. There is a sub-committee on land and agriculture and the LED manager views its role as 'convening all of the stakeholders together, including assisting land reform beneficiaries to link with local businesses and strategic partners. The subcommittee also assists beneficiaries of land reform through infrastructural support on their farms, particularly electricity and water rights and supporting the management and functioning of CPAs'. While the numerous support programmes and initiatives listed by the GTM LED manager appeared impressive, unfortunately some of these are not functioning properly or reaching few beneficiaries. An example was a CPA forum, which was initially driven by a particular official and since she resigned it is allegedly not functioning as effectively: 'There was a CPA forum, but I no longer attend because the lady who used to be passionate about that programme resigned and she was coordinating everything' (Member of Mokororwane CPA).

A particularly concerning failed project initiated by the former DRDLR is the 'Agri-Hub', which appears to exist only in the form of a sign board. A key informant, whose development consultancy³¹ was involved in compiling a business plan for the Agri-Hub implied that the project may have fallen apart due to politics within the department, 'There was two million allocated there and all there is to show is that sign'. According to the Master Agri-Park Business Plan, an Agri-Hub should include 'processing, packaging, logistics, equipment hire, innovation and training unit'. Although the district municipality had allocated the land on the outskirts of Tzaneen town for this purpose, the consulting company had suggested that it should rather be used 'to establish training facilities and a research centre focused on animal and plant health, for conferences and workshops, and possibly establishing some demonstration plots and other activities'. This was linked to the Agri-Park concept of a 'Farmer Production Support Unit' (Mopani District Municipality, 2016).

The business plan had suggested that the industrial element of the Agri Hub should make use of the industrial park in Nkowankowa, which has existing infrastructure and vacant factories (near the Eskom power station) and was thus suitable for processing and packaging facilities. In this way it was hoped that the nearby community could also be drawn on for wage employment opportunities, ensure easy access to markets and avoid unnecessary expenditure since the zone was allegedly 'in a state of almost ready to move in'. The Industrial park remains unused today.³²

³¹ Riboni Consulting and Business Management.

³² Further research would be required to get a more comprehensive idea as to why the Agri Hub failed to materialise. Since the idea of AgriParks was spearheaded under Minsiter Gugile Nkwinti's leadership of the DRDLR, a change of leadership may play a part in explaining why the project came to a standstill as the key informant suggests. A progress report on Agri-Parks suggests that 'The concept of Agri-Parks has not been abandoned', see: <https://pmg.org.za/committee-meeting/29122/?via=cte-menu>

Smallholder irrigation schemes

A recent survey of 17 of the smallholder irrigation schemes located in Mopani district noted that five were not being utilized at all, five had 'low utilisation' (10-49% of area irrigated), one had 'moderate utilisation' (50-89 % of area irrigated) and six had 'full utilisation' (90-100% of area irrigated) (Koppen et al., 2017). Although this evaluation only provides a 'once-off snapshot' of irrigation scheme utilisation, it gives a sense of the current performance of schemes. The key reasons cited for non- or low utilisation are related to the poor status of irrigation infrastructure, lack of fencing and inadequate access to tractors. Challenges are also noted in ensuring adequate water supply; along with a host of other factors which impact irrigation scheme performance including a complex mix of economic, financial, social and institutional factors (Koppen et al., 2017; Bunce, 2019; Denison and Manona, 2007).

Post-Settlement Support for Land Reform Beneficiaries

RECAP and CASP Grants

A number of land reform beneficiaries noted that they had applied for RECAP or CASP grants, however, their application had been unsuccessful. Others who were awarded grants noted challenges with the grant amount, payment schedule and prohibitive restrictions regarding what it could be spent on. A farmer who received his land through the PLAS programme notes an unfortunate story of how the original agreed grant was drastically reduced so that his plans to expand into avocado had to be abandoned. The original RECAP grant was meant to be ZAR 12.8 million, however, in an unclear sequence of events the final amount received was three million and the landowner's mentors advised him to abandon the plans. 'They told me that there is nothing you can do with three million, so it is better to focus on your mangoes'. His two mentors (White commercial farmers and members of Groter Tzaneen) agreed to guide him to improve and extend his mango orchard instead. The mango orchard is now 50 hectares.

Public-Private Initiatives

The Limpopo Department of Agriculture and Rural Development has initiated a project involving the establishment of subtropical fruit study groups. Since their own extension support staff members cannot provide adequate technical advice, they have partnered with the Subtropical Fruit Growers Association (Subtrop). There are various study groups e.g. for avocado, mango, macadamia, citrus, etc. All the members are black small-scale farmers who grow these fruits. The project is considered to provide 'a foot in the commercial door'. Subtrop and its members give training to both public extension officers and the farmers, as this statement from a key informant explains:

We have the knowledge but we don't have people on the ground, so instead of us hiring extension officers, we thought - lets train their people. We have a memorandum of understanding and we train their extension officers on cultivation of mangos, litchi and avocados... Every second month we have study groups and talk about seasonal issues. It's functioning best up there in Vhembe ... The study group is for the farmers and the extension officers run these things. In Venda we have a very switched on lady who is doing it there ... You get up to 70 people at those study groups. It's very encouraging! It's generally small farmers on communal land and their biggest constraint is access to finance ... We have a similar thing running in Tzaneen but we have combined the study groups on mangoes, litchis and avo - it's not ideal. But there are only a few farmers, maybe 10 - 15³³ people attend here versus 70 people just for the Venda mango group. The department of agriculture people are

³³ Of this group, only two farmers are black small-scale fruit growers, both of whom are affiliated to AgriLetaba.

not as good down here as well, but it's also because it's a peri-urban area whereas in Venda it's deeply rural.

2.2.5 *Land needs among small-scale farmers*

FABCO's chairperson estimated that almost 70% of their 348 members (244 households) would want to be resettled through land redistribution, many of whom are located in the former homeland areas. The chairperson also noted that many households outside of their membership would want land for resettlement and farming in the municipality. All the members of Mopani Farmer's Association also expressed an interest in land redistribution, with most noting that they would want relatively smaller plots (between three - 50 hectares) which would allow for larger numbers of small-scale farmers to be resettled. Many emphasised that access to water was almost more important than the size of the land. '50 hectares would be enough. On my one-hectare farm I can make ZAR 20, 000. So, times that by 50 hectares and that's how much I could make. But water is the key issue.... I would say, give me the water, that's the most important!' (Small-scale farmer from Letsitele).

Views differed among respondents as to whether they would be willing to relocate in order to become beneficiaries. FABCO members said that they believed everyone would move if the right land, with sufficient water and infrastructure were provided. Whereas in a focus group of 10 smaller producers, some members of Mopani Farmer's Association seemed hesitant about relocating their residence to a redistributed farm if it was far away from their village. Some noted that they may prefer to travel between their current homesteads and the new land that was allocated for farming, citing concerns over leaving their families behind and the proximity of clinics and schools. The differentiated domestic needs and social dynamics of households should be considered when targeting land for redistribution (Cousins et al., 2018; Vogel 2000; Chung, 2017).

Boche and Anjuere (2015) caution that in the Nwanedzi catchment area generational and gender dynamics are important variables to consider for land reform. Many of the 'subsistence-oriented' smallholders are households led by elders and single women, who are dependent on pensions and child support grants for grandchildren. These factors along with trajectories of de-agrarianisation (in a peri-urban landscape like GTM) limit the number of willing/able local residents who could be candidates of a redistributive programme aimed at extending small-scale production. Many younger people are also seeking jobs in nearby towns and cities. In these cases, well-located land for settlement (0.1-1 hectare) and food security should also be among the options which may better fit their livelihood needs (Aliber, 2019). This would be in line with national trends which indicate that the majority of households want land of less than one hectare, as an HSRC land demand survey indicated (Aliber et al., 2006). Despite the widely held perception that young people are not interested in agriculture (see Swart and Aliber, 2013; Mathivha, 2012), it was encouraging to come across many young people in GTM who are passionate about agriculture and keen to access land for farming.

2.3 *Large-scale commercial farming sector*

2.3.1 *Production systems and character of the large-scale farming sector*

There are some very large farming operations located in GTM. Notable players include ZZ2, Hans Merensky Holdings PTY LTD (subsidiaries Westfalia Fruit and Merensky Timber), Paardedrift Boerdery, Lombard Avocado, Rein Noffke PTY LTD, African Realty Trust, Du Roi, Letaba River Orchards, the Mahela Group, Bosveld Sitrus and Laeveld Sitrus³⁴. The tendency within South Africa's commercial farming sector towards concentration of farms is clearly evident in GTM's large scale farming sector (Cousins, 2015; Genis, 2012; Liebenberg and Kirsten, 2013). These dynamics receive a further impetus from the lucrative subtropical fruit, citrus and nuts sectors. There are a number of vertically integrated agribusiness firms operating in the municipality, which control the entire or

³⁴ The last three entities are all owned by the Vorster family.

substantial parts of value chains. In relation to avocado production, Genis (2019: 17) notes: 'at least three companies, ZZ2, Westfalia Fruit and Halls ... contain complete avocado value chains within their operations. Through these vertically integrated supply chains they "grow, source and ripen, pack, process and market" avocados and other produce "across the year and across the globe" ... Some of these functions they perform on behalf of small-scale avocado farmers'. Boche and Anjuere's (2015) study identified the following typology of white commercial farmers located in the southern section of the Nwandezi Catchment area in GTM and they also provide average annual incomes:

- Extensive commercial farmers, producers of fruit mainly for the domestic market (cattle breeders and mango producers): ZAR 100 000³⁵
- Medium-scale commercial farmers specialised in vegetable production for the local and domestic market: ZAR 500 000 - ZAR1 000 000
- Intensive large-scale commercial producers of fruit and vegetables for the domestic and export markets: ZAR 1 500 000 +

The commercial farming sector is experiencing an expansion, mostly through the concentration of farming enterprises in the municipality. As already noted, some of the land being acquired is under claim. Another way in which expansion is occurring is through the conversion of forestry land, mostly for avocado, but also for citrus and blueberries. Land around Magoebaskloof and Haenertsburg, that has been traditionally used for forestry, is being acquired by large corporate farming entities like ZZ2 and various citrus operations (Mahela Group, Bosveld Citrus and Laeveld Citrus). Several key informants noted that land was fetching very high prices, with buyers willing to pay above market price for land with water rights. The costs of converting land from forestry to tree crops is very high due to the costs of de-stumping. Since the land is mountainous, ridges also need to be constructed for avocado plantations.

There is a shortage of highly productive land. Companies that have done well in the last years have money to buy land... Citrus companies and ZZ2 are buying land there [Haenertsburg] but they pay a lot of money for it because they are paying for the water rights on the land (Respondent, Subtrop).

The Magoebaskloof area has a cooler climate and this means that it is a 'late production area' for avocado. Fruit can be harvested in November and December when prices are high. Farmers and agribusiness firms are also willing to purchase the land at higher costs with a long-term vision in mind. Since the area is cooler with higher rainfall, it will likely be more adaptive to any future negative impacts of climate change on subtropical fruit and citrus. During the research we came across two local groups who were concerned about the environmental implications of the conversions taking place, FROHG (Friends of the Haenertsburg Grasslands) and Haenertsburg's Mountain Environmental Watch³⁶. A respondent belonging to both groups notes:

Because of rising crime timber farmers are willing to sell to these massive corporate farmers who are buying up the land with the water rights ... All of this farming is meant for export, so it will not feed our people. They spray a lot of harmful chemicals and use lots of irrigation water ... it's the quality and quantity of water that will be affected. At Houtbosdorp they have bulldozed a wetland area and we are worried about when the rains come, because it will be an environmental disaster. Around Broederstroom river³⁷ many farmers bulldoze the land and

³⁵ Since they are not very productive and some may include 'life-style farmers' and landowners who are largely absent, some may want to exit or could possibly be targeted for redistribution.

³⁶ The latter had only been formed for a month at the time of interview (5 October 2019) and were in the process of formally constituting themselves as a CBO. They consist of 94 members.

³⁷ Flows out of the Ebenezer Dam.

then there is runoff into the river from those sand banks ... This is all for avos! This catchment area provides 23% of the entire supply of SA's water and no one is overseeing the distribution of rights.

When Z22 was approached about the matter, they had a very different view. They noted that, at least for land being acquired by their company, environmental impact assessments had been done and they didn't believe that avocado farming was utilizing more water than forestry had before.

The forestry business is coming to a standstill because mining is coming to a standstill ... In some cases, we are entering into Joint Ventures and in others, we are purchasing land. Eucalyptus trees are big drinkers and we can put 10 avocado trees in the ground for every eucalyptus tree we pull out, and we follow that ratio. We do impact assessments first and we are very aware... This Haenertsburg thing is a storm in a teacup! People there were living a peaceful life and they don't want their tranquillity disturbed and obviously to destump etc is a disturbance ... Z22 follows nature-friendly farming, so we look out for future generations (Respondent, Z22).

Further research would be required to ascertain whether water resources are in fact being depleted by the extension of avocado in the area, as concerned environmental groups claim. However, it is clear that government should be taking a more active role in monitoring the conversion of the land and not leaving it up to the good will of corporate farming entities. Given that the area is an Afromontane forest area with botanically diverse grassland (Woodbush Granite Grassland), there is a need to carefully balance conservation concerns with agricultural development moving forward. One suggestion made was that the area rather be used for a mix of job creation linked to eco-tourism opportunities and 'small-scale farming' that makes use of organic/permaculture approaches.

2.3.2 The role of white commercial farmers and agribusiness firms in land and agrarian reform

The role white commercial farmers and agribusiness firms should play in land reform is a contentious issue, with various views expressed by key informants and in the wider literature. Commenting on the role of Westfalia in supporting small avocado farmers in Limpopo Province, Makhabela and Khumalo (2011: 220) note that 'cooperation among farmers and the private sector is imperative to complement and augment government endeavours'. A LRAD beneficiary, on the other hand notes: 'Many people are scared now about expropriation, that makes it harder to make friends in the industry. Whites are scared that their farms will be taken'. A PLAS beneficiary notes, 'You ask yourself if they are doing it for the scorecard or doing it because they want to help ... Some land reform guys are complaining because they say they are not getting what they expected out of these joint ventures when it comes to the financials'.

Joint Ventures

Various commercial farmers and agribusiness firms are offering Joint Ventures (JVs) with small-scale farmers in the context of land redistribution and restitution e.g. Westfalia, Lombard Avocado, Z22 and Boyes Group. In a number of interviews, small-scale farmers themselves noted a preference for mentorships and management arrangements, being wary of profit and equity-share arrangements with white farmers and agribusiness. The following quote is representative of the more sceptical views held by respondents around the value of JVs in land reform:

The system is counter revolutionary with these strategic partnerships, it seems to be preserving the past. Government gives us the land and then leaves us to struggle. Then we fail and they say, 'go get a mentor'. Probably it's that first person who had the farm to begin

with. That white farmer co-opts some of the CPA members, then the majority of them are working for free because they are getting dividends... but only if they are lucky to even get those dividends! So, as the former white owner, I get my land back and I get free labour (CPA and FABCO member).

However, several other key informants noted that in the context of the sub-tropical fruit sector, the immense capital investment required to set up a farm often necessitates enlisting a strategic partner. There were equally as many people noting that JVs are the only viable way to involve new entrants into the high value, export-oriented sub-tropical fruit sector. However, the options that are noted as 'viable' are also strongly affected by the prominence of the JV model in the current land reform policy trajectory.

Lombard Avocado's JV model is used in cases where finance is required to develop larger avocado orchards. Private property rights are a condition of entering into these arrangements. They currently have around 12 JVs, including with white landowners. Contracts are adapted to different contexts, but landowners generally don't receive a rental fee. After Lombard recovers the establishment and running cost from the first few crops, the net profit is shared on a 50/50 basis. The contract is generally for 30 years and the farm and the orchards return to the landowner on expiry of the contract. There is also a formula through which the BEE partner can buy them out. An alternative 'management programme' that Lombard Avocado runs is the 'Farm Trace programme'. This is a farm management system, based on precision farming, in which farm advisors assist landowners with tasks to effectively manage orchards. Since specialist extension services are lacking in GTM, the latter could be a promising option to provide technical support to small-scale farmers.

Z22 Nkuri Project: A promising alternative to equity JVs?

Z22's Nkuri Project could perhaps provide an alternative to a profit-sharing arrangement, albeit on a much smaller-scale (1-10 avocado trees). Z22 is in the planning phases of implementing their 'Nkuri Project' (30kms outside Giyani). They will use grey water from households to establish small avocado orchards of 1-10 trees in backyards. The trees will be provided, boreholes drilled, and households will receive technical advice and inputs to take care of the trees. Z22 will facilitate GlobalGAP accreditation and will harvest and sell the avocados through their platform. Payments for produce will go to individual households to incentivize high quality production. A list of costs involved will be kept and then deducted slowly to allow households to earn an income early on. Should this model take-off, it could be a good way to get small-scale farmers into avocado since it doesn't involve equity ownership by a strategic partner. A key informant from Z22 noted that conceivably this model could also work on a larger scale, with up to 30 hectares, for example.

Mentorships

While some farmers still expressed hesitation regarding the intentions of mentors, other farmers had very close relationships with their mentors. However, the two black farmers who spoke most highly of mentors, were also members of Agri-Letaba. Therefore, their enthusiasm towards the mentorship model should be contextualized in light of their affiliation to Agri-SA and Subtrop. The PLAS farmer seemed to have received substantial support not only in terms of mentorship and technical advice but also other assistance e.g. Westfalia was testing a new Mango cultivar on his land free of charge and preparing the land for him, Z22 had donated two Jojo tanks and another 4 tanks had been donated by two other agribusiness firms. All black farmers interviewed did, however, agree that a mentorship was preferable to JVs involving profit sharing and shared ownership of a farm operating company. However, some were still distrustful of the intentions of white South African farmers and agribusiness firms and preferred they not be involved at all.

3 Analysis

3.1 Promising commodities, production systems and marketing strategies

3.1.1 Labour-Intensity of Different Agricultural Commodities

Official data on the numbers of people employed, levels of production and incomes earned by small-scale farmers are scarce (Genis, 2019). The number of potential jobs (including self-employment) for different types of commodities would also depend on how production is organised (level of mechanisation, scale of production etc). In many cases farmers are not just growing one commodity, so labour-intensity per commodity can't always be isolated. The choice of commodity needs to take into account various factors: market access, availability of water, suitable land, labour and capital and the specificities of the social reproduction of households etc. A general analysis of the labour-intensity³⁸ of different commodities in GTM, based on interviews with various respondents and other sources, is as follows:

- Mango: 1 worker per 2.2 hectares³⁹
- Avocado: 1 worker per 3 hectares, (in a mountainous area where production can't be mechanized) but 1 worker per 4.5 hectares on a flat farm⁴⁰
- Citrus: 1 worker to maintain every 1- 4 hectares of citrus⁴¹ (variation depends on level of mechanization)
- Macadamia: 1 worker per 2.3 hectares⁴²
- Blueberries: 2.64 workers per hectare⁴³
- Vegetables: 1-5 workers per hectare, depending on the crop⁴⁴
- 2 herders per 100 LSU cattle (100 head)
- 4 herders per 100 LSU goats (400 head)

³⁸ All estimates given are based on full-time equivalents e.g. 264 days per year. These are thus a year-round average that account for both permanent and seasonal labour.

³⁹ Broken down into permanent and seasonal labour, it would be one permanent worker to maintain every five hectares of mango orchards out-of-season and one seasonal worker per 1-2 hectares. A respondent from Groter Tzaneen noted that on a 25-hectare mango orchard (considered a commercially economical unit), one would need five regular workers and 10-15 seasonal workers. However, one PLAS beneficiary noted that you need one worker per hectare in season.

⁴⁰ This is an estimate provided by a respondent from Lombard Avocado, and agreed upon subsequently at a workshop with 20 respondents. Several respondents from Lombard Avocado, Subtrop, Westfalia, AgriSA and ZZ2 agreed that +- 30 hectares is considered to be a commercially economical unit. On a 30-hectare farm you would average out with 10 workers.

⁴¹ The estimate of one worker per hectare comes from the Citrus growers association and is quoted in the National Development Plan (NPC, 2011) See also: <https://bizconnect.standardbank.co.za/media/123273/citrus.pdf>. However, Genis (2015/8) found that in Limpopo farmers had found ways to mechanise and organize production so that some only required one worker for every four hectares and made more frequent use of seasonal labour. This was in part a response to the rise in the minimum wage.

⁴² Estimate from Subtrop (2016)

⁴³ An additional 0.22 jobs per hectare are created in the extended value chain. 'This is the highest employment intensity amongst the major fruits grown in South Africa' (Pienaar et al., 2019: 5).

⁴⁴ Estimates from various interviews and studies (BFAP, 2011; Bunce, 2019).

Figure 6. Subtropical Fruit Statistics: Production, value, employment and number of growers

Subtrop Industry Headline Stats, 2016

| | Avocado | Litchi | Macadamia | Mango | Total |
|----------------------------|-----------|-----------|-----------|-----------|------------|
| Area under production (ha) | 15 500 | 1 730 | 20 000 | 7 000 | 44 230 |
| Annual production (t) | 115 000 | 5000 | 40 000 | 75 000 | 235 000 |
| Annual value | R1.3 bil. | R120 mil. | R3.5 bil. | R320 mil. | R5.24 bil. |
| Employment | ±5 100 | ±2 400 | ± 8 000 | ±3 000 | ±18 500 |
| Commercial growers | ±340 | ±100 | ±500 | ±120 | ±1060 |
| Emerging growers | ±60 | ±30 | ±110 | ±70 | ±270 |

Source: DARD (2018)⁴⁵

The above statistics for subtropical fruit production for the country as a whole, allow us to conduct a simple analysis of the labour-intensity of various commodities. Notably the estimates are more or less in line with those quoted above:

- Avocado: 1 job per 2.8 hectares
- Macadamia: 1 job per 2.3 hectares
- Mango: 1 job per 2.2 hectares
- Litchi: 1 job per 0.7 hectares

Although the figure above indicates that litchi produces many jobs, key informants noted that GTM was not as competitive as Mpumalanga and litchis were considered a risky crop for small-scale farmers. Mpumalanga produces around 60% of all litchis in South Africa and they are able to harvest before Limpopo's farmers can. By the time GTM litchis reach the market, the price has already been driven down. A small-scale farmer who produces litchis was interviewed; he was planning to replace litchis with avocados. Key informants also had hesitations about the suitability of bananas, although there are small-scale farmers in GTM currently producing them. 'Banana takes a lot of water that is why everyone is taking it out' (LRAD beneficiary).

If the estimates for vegetables above are correct, then a conservative estimate of one job per hectare produces almost three times as many regular jobs as avocados and twice as many jobs as mangos and macadamias. The job potential in the vegetable sector is clearly worth taking note of. 'Take your tomatoes, it could be even 50 workers per hectare seasonal and at least five per hectare permanent. It depends on the crops, maybe cabbage is less but for the rest- it's a lot of workers that you need!' (Respondent, Lombard Avocado).

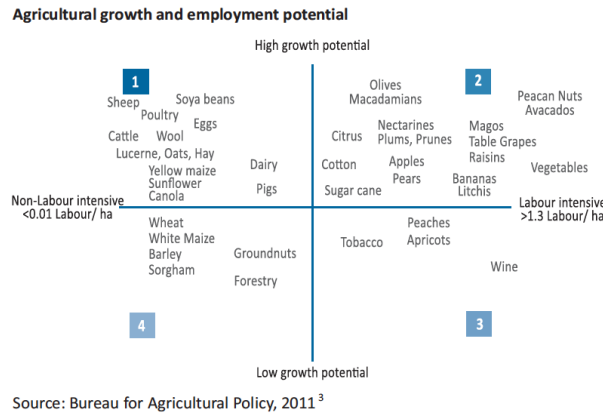
3.1.2 Promising Production Systems and Crops

The National Development Plan (2011) identified various subtropical fruits and vegetables as agricultural commodities which are both labour-intensive and show high growth potential. The matrix below demonstrates that vegetables, pecan nuts and avocados are the agricultural commodities that provide the most promise for stimulating job creation. Other promising commodities grown in GTM include mangos, macadamias and citrus. Although poultry is produced widely in GTM, it is clearly not labour-intensive and thus will not be considered here. Given the favourable agro-ecological conditions and market opportunities, there are definitely opportunities to expand subtropical fruit and nut production under small-scale farmers in GTM. This report suggests that a small-scale farmer focused land redistribution programme should focus on a mixed farming

⁴⁵ "READINESS FOR 2018/19 PLANTING SEASON, 04 September 2018, Portfolio Committee Meeting on Agriculture, Forestry and Fisheries" See: <http://pmg-assets.s3-website-eu-west-1.amazonaws.com/180904Limpopo.pdf>

system, combining various combinations of vegetables, subtropical fruits (mango, avocado), blueberries, citrus, macadamia nuts and livestock⁴⁶.

Figure 7. Employment potential matrix



As noted above, 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, competitive advantage with large commercial farmers (crop dependant), and more flexible local market conditions (Bunce, 2019). If fresh vegetables could be combined with a high-value fruit and/or nut crop, the profitability of fresh-produce farmers could be improved, and more seasonal jobs created.

A number of small-scale farmers noted that they would like to move into avocados. The overwhelming focus of commercial farmers on avocado in GTM was apparent during the fieldwork. In 2017, an interview with Clive Garrett from ZZ2 noted that the company was ‘looking at planting 200-300 hectares each year... for the next four or five years, although it could be more’ (in McGregor, 2017). Over the last five years there has been a dramatic rise in global demand for avocados, coupled with rapid increases in global market prices. The EU has also shown interest in sourcing avocados from emerging farmers in South Africa (EU, 2019). Over 60% of avocado orchards in South Africa are found in Limpopo and many GTM farmers are currently converting land to avocado (including forestry land). This, coupled with the fact that the avocado sector is growing at an average of 1000 hectares per year, indicates how lucrative the avocado sector is (SAAGA, 2019).

There are, however, limitations to small-scale production linked to the huge costs involved in setting up avocado orchards (ZAR106 768 – 200 000⁴⁷ per hectare) and the environmental implications (avocados need lots of water). The crop is also export-driven, requiring Global GAP certification which can be costly. For example, in 2018, 50% of South Africa’s avocados were exported, mainly to Europe, 10% was processed to oil and purée and the remainder was consumed domestically (SAAGA, 2019). There is a big push in the sector to open Asian export markets, which could precipitate a drastic rise in the demand for South African avocados. Alternative and less

⁴⁶ It may be worthwhile broadening the scope of possible ‘niche’ commodities through further research. One respondent noted the potential for fish farming in the area and dilapidated fish farms (tilapia), which could be revitalised. It was suggested that this could potentially be linked to the school-feeding scheme, for example.

⁴⁷ Lima (2016) noted a price of ZAR 106 768 per hectare for the first four years of establishment costs. However, a number of commercial growers noted a figure of around ZAR 200 000 (Respondents from Subtrop, Lombard Avocado, Westfalia and AgriSA). A PLAS beneficiary was told that on his farm he would be able to establish a hectare for ZAR 125 000. Therefore, costs are variable.

demanding ways for small-scale farmers to enter the avocado market also exist e.g. processing of avocados through Westfalia, NFPMS, the informal market and the local retail sector.

The nature of avocado production does, however, require a long-term investment because avocado trees only reach full production after six to eight years (SAAGA, 2019; Genis, 2019). Avocado is an 'alternate bearing fruit', meaning that trees bear fruit in alternate seasons, skipping certain seasons or bearing little or no fruit at all (Mkhabela & Khumalo, 2011). By implication, avocado may not be appropriate for households who require consistent cash flow. However, this may be overcome if households were to combine avocado with other commodities like vegetables. A respondent from Subtrop notes, 'Most farmers have other commodities and investments to keep the cash coming in while they wait for their avos to become profitable'.

It was common to hear from commodity associations, white commercial farmers and some black small-scale farmers that 30 hectares of avocado was an 'economically viable unit'. However, we came across a LRAD beneficiary who was producing five hectares of avocado, along with mango, litchi and cattle. This seemed to be a good way to establish oneself in the avocado market and he planned to expand the orchard slowly (replacing his mango and litchi), through accessing private finance. A respondent from Groter Tzaneen also noted that he believed a model of black small-scale farmers producing 10 hectares or less of avocado could be viable. This respondent's farm was only producing four hectares of avocado for export, along with his extensive mango orchards and his commercial nursery. Based on an estimate of producing 16 tons of avocado per hectare, he estimated one could make ZAR 240 000 per hectare (estimating a harvest of 3000 cartons, fetching a price of ZAR 80 per carton) on the export market.⁴⁸ As discussed above, ZZZ's model of introducing 1-10 avocado trees could prove to be a useful alternative model for smallholders.

For Venda Farmers, Sikhapha (2019) noted that smallholder farmers' yields are often half that of the industry average for commercial farmers. 'Remember they don't have irrigation, and some are not fertilizing. They maybe do spraying. For avocado they get 10 t/ha instead of 25 t/ha (no irrigation, no fertilization), for macadamia 2 t/ha instead of 4 t/ha and for mango 12 t/ha instead of 35 t/ha. We do have farmers who can reach up to 25 t/ha, but we don't count them that much because they are few' (Sikhapha, 2019 in Genis, 2019). The estimates for possible income earned will therefore have to be reduced for different categories of small-scale farmers in line with their access to land of variable quality, labour, water, markets and farmer support.

According to key informants at Subtrop, there are currently no small-scale macadamia growers in GTM. Macadamia is grown by white commercial farmers around Tzaneen Dam and in Agatha. 'The value chain for macadamia nuts is predominantly formal due to the amount of processing the nuts need to undergo before they can be sold and consumed... The South African macadamia industry is export driven' (Genis, 2019: 14). There are, however, examples in nearby Vhembe district, where 184 small-scale macadamia producers are registered. Macadamia is sometimes referred to as 'South Africa's most lucrative crop', with average gross earnings of **ZAR 374 400 per hectare or ZAR 1200 per tree**. The costs of establishing a hectare of macadamia are less than avocado but range according to the requirements of soil preparation from ZAR 100 000 (SAMAC in Van Wyk, 2018) to ZAR 112 884 (Lima, 2016). However, after a 20% raise in the average price across kernel grades in 2019, the price per kilogram stood at ZAR 266/KG. Small-scale farmers in GTM expressed interest in expanding into macadamia, which is another avenue through which to include a high value commodity with livestock and/or vegetables. Key informants from Subtrop and AgriLetaba believed it could be a good option for small-

⁴⁸ This estimate is based on a slightly lower average ton per hectare, compared to large commercial farmers. The average price per kilogram of avocados at Joburg NFPM was ZAR 15.00 on 28.11.2019. This works out to a slightly lower figure of ZAR 217 725 for 16 tons. See: <http://www.joburgmarket.co.za/dailyprices.php?commodity=12&cid=107>

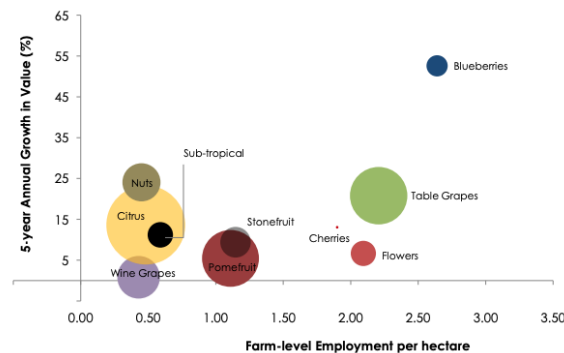
scale black farmers: ‘Even if you have five hectares you can make good income from macadamia’ (Respondent, Groter Tzaneen).

Key informants from Westfalia, ZZ2 and Subtrop all noted that blueberries could also provide a potential avenue for small-scale farmers. The advantage of blueberries is that you can harvest within a year, although it usually takes about two to three years for the orchard to produce fruit of export quality (Sikuka, 2017) and four years to begin making a profit (Pienaar et al., 2019). The costs of establishing production are high because producing productively requires establishing expensive shade netting structures (although 40% of farmers produce without these). Other important factors include water quality, favourable climate and well-drained and semi-acidic soils. An estimate per hectare (for the Western Cape) is ZAR 392 209 per hectare ‘for blueberries grown in soil-on ridges and under shade netting’ (Casidra, 2019). Introducing small-scale farmers to blueberries would clearly require state or private-sector investment.

Limpopo produces 15% of all blueberries in South Africa. Around 70% of all blueberries get exported, 13% sold at NFPM and 17% is processed. Hectarage remains low, with 1300 hectares recorded in 2016/17 but with a significant projected growth to 2000 hectares by 2020 (Sikuka, 2017). The figure below indicates that not only do blueberries employ the largest numbers per hectare, but the industry has significantly outperformed other fruit industries over the last five years. Its gross value of production was ZAR 1.25 billion in 2018, up from ZAR 15.8 million in 2008 (WCDoA, 2019). Global demand for blueberries is set to grow in the coming years, making them an attractive option for small-scale farmers (Pienaar et al., 2019). A key informant from ZZ2 comments on the potential of blueberries:

You try to compete with ZZ2's tomatoes and you're dead before you start. The problem with small-scale farmers is you are all going to grow cabbages and tomatoes, but you have the large farmers producing with economies of scale ... So, you need to produce a unique product. Blueberries could be a good thing for small-scale farmers to export but you need clean water and it's expensive to set up.

Figure 8. Comparison of Growth in Value (%) and Job Creation per Hectare in the Crop Sector.



Source: Pienaar et al., (2019)

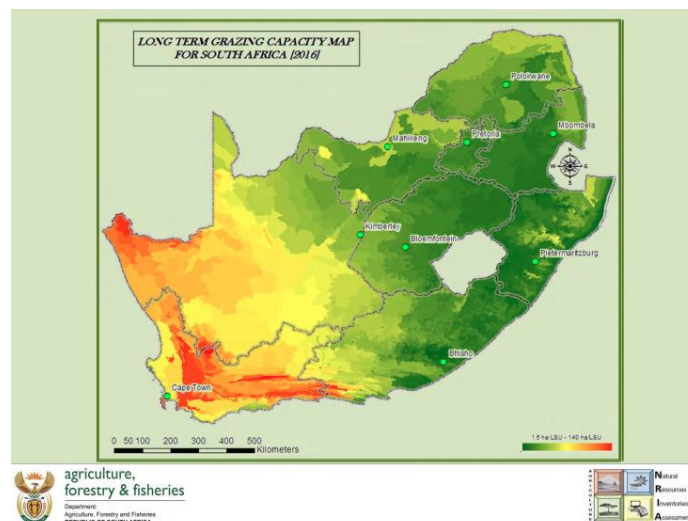
There is a large citrus sector in GTM, which is largely dominated by white commercial farmers, although some JV arrangements have been set up. One example in GTM, considered to be a success by LDARD and the Citrus Growers Association, is the Maraveni Cooperative. In 2015 the cooperative of 26 communal landowners (including the traditional leader) entered a 50/50 JV with the Boyes Group and established Lizilor (Pty) Ltd⁴⁹. The

⁴⁹ Previously a JV arrangement was in place with De Roi from 2002.

farm produces 145 hectares of citrus (including tangos) and 72 hectares of bananas and the fruit is exported through FruitOne (CGA, 2019; Qomondi 2019 interview). There are challenges in creating opportunities for small-scale farmers in the citrus industry. It costs between ZAR 100 000 – 150 000 to develop a hectare of citrus and around ten years to break even (Chadwick, 2016 in Genis, 2018; Lima, 2016). This leads many to emphasize JVs as the only viable route (Lahiff et al., 2012). However, Genis (2018: 59-60) believes that there is space for ‘smaller-scale citrus enterprises’ and that they ‘could be an appropriate model for new farmers’ and can and do already ‘exist alongside the very large citrus growing enterprises’. Government, together with the citrus industry could develop citrus processing (oil, pectin, fodder for livestock and small-scale fresh juice processing) to provide viable markets for small-scale farmers.

Livestock are a good complement to fresh produce and fruit production. Cattle, sheep and goats provide a high-value commodity (Alcock and Geraci, 2019). While the ownership of cattle tends to be gendered due to their cultural significance, with elder males claiming ownership, goats in particular show promise for female ownership (Cousins, 2015; Kariuki, 2018). Limpopo accounts for 21% of total goat production in South Africa and they are the most common livestock in GTM (DAFF, 2012; StatsSA, 2016). Live goats are in high demand for ceremonial purposes and are most likely to adapt to climate change in the future (especially indigenous breeds). Goats are more labour-intensive because they are harder to control than sheep or cattle. The capital investment required for one cow is equal to eight goats or 12 sheep, making small livestock more accessible and a better return on investment. Due to the severe problem of stock theft for sheep, goats are often considered a safer investment (Alcock and Geraci, 2019). Small-scale farmers are also able to combine off-farm businesses or wage employment more easily with livestock. For example, a female member of Mopani Farmer's Association combined a brickmaking business with rearing sheep and goats, largely for the informal ceremonial market. According to the map below and DAFF (2016) report, GTM has a carrying capacity of around 9.3 hectares per Large Stock Unit (LSU). Map 1 above indicated that there is no moderate potential grazing land, only low to moderate (95023.2 hectares) and low potential (19743.1 hectares) (DAFF, 2016).

Map 9. Long Term Grazing Capacity Map.



Source: DAFF (2016)

3.1.3 Promising Marketing Strategies

Proposals to improve market access for small-scale farmers include:

- Providing market information and education, particularly in relation to NFPMs to avoid market slumps;
- Ensuring that the retail sector meets AgriBEE quotas to source from small-scale farmers;

- Providing government secured markets for small-scale farmers (schools, hospitals and prisons);
- Creating exclusive fresh produce markets for black small-scale farmers e.g. local farmer's markets;
- Support small-scale farmers to meet GlobalGAP certification;
- Integrate small-scale sub-tropical fruit and nut growers into the marketing channels of ZZ2 or Westfalia to make the costs of meeting export standards viable;
- Create black-owned marketing channels;⁵⁰
- Agri-processing is an important outlet for low quality produce but must not be seen as a panacea. Policy must ensure that small-scale farmers have a range of market choices e.g. First grade produce should be sent to export, second grade to local retail and wholesale markets and third grade for processing.

Improving market access for small-scale farmers entails rethinking the ways in which government and other stakeholders provide farmer support. The main focus of smallholder support from the state has been production oriented. More recently, there is growing acknowledgement that marketing support is required (Mkhabela & Khumalo, 2011). There are examples of small-scale farmers in Vhembe District who are exporting through Westfalia and ZZ2, which could potentially be replicated in GTM. Several key informants and the literature note the success of Vhembe small subtropical fruit growers (mango, avocado and macadamia) in accessing export markets (Genis, 2019). Mkhabela & Khumalo (2011: 220), however, note that these small-scale farmers still face a number of constraints. For example, the Venda farmers should in principle be able to take advantage of out-of-season prices fetched in February. However, they often fail to do so due primarily to challenges related to insufficient capital. Their smaller scale of production exposes them to higher transaction costs than large commercial farmers (Greenberg, 2013). Therefore, one should be cautious of integrating them, into these 'buyer-driven' value chains. That said, this is certainly not a basis to completely exclude small-scale farmers from lucrative export markets for subtropical fruit. Rather the benefits of a range of markets for differentiated small-scale farmers with variable levels of capitalisation and expertise should be carefully considered.

3.2 Promising land (types, location, means of access)

Targeting suitable land for small-scale farmers, should be done through an intensive research process. However, GIS mapping data (2014) can assist as a starting point. Table 6 below, which overlaps land capability classes with various other categories e.g. orchards and commercial cultivation, can be used as a means to target numbers of hectares per land class for redistribution (pending intensive research). In all cases, this could technically be done without acquiring farms with existing orchards or under commercial cultivation (see 'total area not disturbed' in Table 6 below). However, in certain cases it is advisable to acquire (portions of) existing orchards, to keep investment costs down. Table 8 indicates this could be done without a net loss of farm jobs (conditional on adequate post-settlement support). The number of hectares targeted per land capability class has also taken into account the possible cost of acquiring the land e.g. a smaller area of high potential land is suggested due to the high value of the land.

⁵⁰ For example, FABCO's Chairperson said they preferred not to rely on white agribusiness companies, 'we would like to open a FABCO wholesale fruit and veg'.

Table 6. Disturbed areas in hectares across land capability classes

| Land Capability Classes: | High potential arable land | Moderate potential arable land | Marginal potential arable land | Non-arable; low to moderate potential grazing land | Non-arable; low potential grazing land | |
|---|----------------------------|--------------------------------|--------------------------------|--|--|-------------------------------|
| Built-up | 1077.1 | 16 371.4 | 2548.5 | 5551.7 | 8.1 | |
| Commercial cultivation (Rainfed and pivot) | 248.3 | 4501.7 | 1744.6 | 591.0 | 103.1 | |
| Forest plantation | 3514.8 | 1366.6 | 11 566.8 | 17 082.8 | 1584.7 | |
| Orchards | 3860.3 | 13 822.2 | 8152.6 | 4902.2 | 87.6 | |
| Subsistence cultivation | 7.5 | 6425.6 | 436.1 | 5136.2 | 2.0 | |
| Total 'disturbed' area: | 8707.9 | 42 487.6 | 24 448.7 | 33 263.9 | 1785.5 | |
| Total area: | 12 576.50 | 112 445.10 | 61 509.80 | 95 023.20 | 19 743.10 | 301 297.7 |
| Total area 'not disturbed': | 3868.55 | 69 957.46 | 37 061.1 | 61 759.28 | 17 957.63 | |
| Total proposed targeted area for redistribution: | 2050 | 36 000 | 8000 | 25 500 | 0 | Total: 71 550 hectares |
| Proposed target of which are existing orchards: | 500 | 6910 | 4000 | 1735 | 0 | Total: 13 145 hectares |

A reliable record of the area of land under restitution and redistribution projects could not be accessed. However, for the latter DRDLR records indicated that 8292.05 hectares have been transferred through redistribution. If this figure is correct, then only 2.6% of the total area of land in GTM has been redistributed so far. According to the Mopani District Rural Development Plan of 2016, there are 25 claims that are yet to be validated and a total of 12.8%⁵¹ of the total area of the municipality has been claimed through the restitution programme. Government's initial target for redistribution of agricultural land to black South Africans was 30% or 86 million hectares by 1999 (subsequently extended to 2014). In line with the National Development Plan, government now hopes to reach the 30% target by 2030 (Manenzhe, 2018; Mahlati et al., 2019). However, this report suggests a more ambitious target of 50% of all commercial farmland, over and above that already transferred through redistribution and restitution.

Of the total 301 297.7 hectares of farmland, the area under traditional authorities/communal tenure is 109 189.1 hectares, and is not suitable for redistribution, as it is subject to communally held rights, which instead require tenure reform to ensure they are secure. This brings the total area of agricultural land *potentially* available for redistribution down to 192 108.6 hectares. 40 718.2 hectares of land is under restitution claim in GTM and there are 8292.05 hectares of existing redistribution projects, which should both be excluded from this total. This brings the total area of commercial farmland to 143 098.35 hectares. Therefore, to meet the 50% target the state would need to redistribute 71 550 ha⁵² of agricultural land. A second option is to target 50% of all commercial farmland as well as the area of land already transferred through land reform (including both

⁵¹ Accordingly, these 40 718.2 hectares should be mapped in further research (data was not made available for this report) because this land should be excluded from redistribution targets.

⁵² This is only an estimate. Further research is required based on a more accurate data set. For example, some of this land is noted to be 'built-up', however, this includes residences on farms and has thus not been subtract from the total area. Our research also suggests that there are limited cases of black farmers who purchased their land.

redistribution and restitution), which would bring the total to 120 560 hectares. The intension of this latter option would be to improve on the current livelihood and job creation potential of existing land reform projects.

Targeting land for redistribution should also be informed by the availability of water rights and the land's suitability for various commodities. According to Subtrop the land around the Tzaneen Dam is considered prime land for avocado, as are the north of the municipality and the cooler regions of Agatha and Magoebaskloof near Haenertsburg. Prime land for Macadamia is around Tzaneen dam and in Agatha. Mango is grown extensively across GTM. Citrus production is centred around the Letsitele Valley, where it benefits from access to the Groot-Letaba River and elsewhere in the municipality (see maps 4-6 above).

In cases where landowners have very large land holdings, it may be worthwhile investigating whether portions can be redistributed without completely disrupting the farming enterprise and creating net job losses. As the Presidential Panel on Land Reform has suggested, one means by which to access this land could be by investigating whether there is 'emerging interest to donate land by private owners', as has been documented elsewhere and has the added benefit of positively contributing to nation-building. This could be affected with the help of the 'draft Voluntary Land Donations Policy' which is being developed and would provide incentives such as 'tax exemptions as well as correlations in terms of empowerment legislation' (Mahlati et al., 2019: v-vi). Where donations are not forthcoming the state will need to proactively acquire land for subdivision and redistribution to small-scale farmers, which should be informed by an in-depth 'land needs analysis' (see Bank et al., 2017⁵³).

Several small-scale farmers noted that it was not necessary that a whole farm be redistributed but rather smaller parcels could be redistributed, as long as they were accompanied by water rights. 'Commercial farmers must also have a mind to share. They can say "I can give you five or 10 hectares and you can farm part of my farm". They must come to the table! Along the Letaba river there is some land that is not being used there, we could use that land and produce vegetables and fruit' (small-scale farmer, Mopani Farmer's Association). Most respondents appeared to appreciate the necessity of not compromising existing jobs by disrupting productive farms which employ large numbers of people.

Many potential beneficiaries of land redistribution are located in the former homeland areas. Opportunities to extend farms through acquiring land immediately bordering these areas may enable expansion of small-scale farming, without disrupting existing livelihoods systems. This is especially pertinent for those less willing to resettle further afield in the municipality. Maps 1 and 8 above indicate that the communal areas to the south of the municipality, are surrounded by large areas of arable land with 'moderate potential', alongside 'low to moderate potential' grazing land. Given the close proximity of the area to Tzaneen town and the keen interest demonstrated by households to settle along the R36 road, a proactive and orderly redistributive land reform programme in this area has potential. This would be particularly appropriate for households wanting to combine wage employment and off-farm incomes with farming. Although there are several 'willing-sellers', wanting to get out of forestry in the Magoeboesklouf area, key informants doubted that government would be able or willing to invest in the high costs involved in land conversion. However, the viability of this could be investigated further, as it is likely to be a key productive area in the long-term due to the effects of climate change.

⁵³ The HSRC developed a relatively simple 'land use and needs assessment' tool which could be used to inform a local municipality-based land redistribution process.

3.2.1 Beneficiary selection

Among a diverse group of small-scale farmer respondents, a broad consensus emerged regarding the selection of beneficiaries. Several respondents emphasised that selection should be done carefully and should be monitored to avoid political co-optation:

It mustn't be about distributing as much as you can to people through land reform though, we have to do this carefully. There are people who are committed, and you must be very careful about selecting those people (PLAS beneficiary and FABCO member).

What is making land reform fail is giving land to people who don't care. The previous government they would allocate it to you, then you must use it or lose it! If we did that now, a whole lot of people would pull up their socks (LRAD beneficiary and AgriLetaba member).

Subdivision of large farms is a good idea, but it needs to go with a time frame so people can be assessed. If I'm not using the land well then government must take it from me and give it to someone else. Give them five years to prove themselves (Mopani Farmers' Association member).

At the time of research, terrible fires broke out around the municipality, destroying subtropical fruit orchards on both land reform and white commercial farms. Several respondents commented that the fires were exacerbated by some land reform beneficiaries who were not ensuring effective fire breaks were maintained. This seemed to amplify the necessity of effective land management and beneficiary selection in the minds of respondents.

You see, if people don't look after their land, they will burn down my farm too! That is why we have to be careful about how we do land reform. The land is not enough for all the black people in this municipality. One piece of land must create many jobs, wealth and food (FABCO member).

3.2.2 Land values and land availability

A review of the valuation roll⁵⁴ indicates that the mean price per hectare of private agricultural land in GTM is ZAR 65 183. Acquiring 71 550 hectares of land at market-value would thus cost the state ZAR 4 663 843 650. The 2032 properties analysed included 153 properties that were noted to be 'vacant' and could thus presumably be acquired with relative ease and without job losses. There are also a number of properties transacting on the market, including land under claim. On Farmer's Weekly there were 110 farming properties advertised in 'Tzaneen and surrounds'⁵⁵. There are a number of smaller properties available which could be suitable for distribution to small-scale farmers. A review of the valuation role highlights a number of prominent landowners/companies who own large areas of farmland in GTM, notably: Hans Merensky Holdings PTY LTD (subsidiaries Westfalia Fruit and Merensky Timber), Mahela Group, Bosveld Sitrus, Laeveld Sitrus, Letaba River Orchards, Rein Noffke PTY LTD and African Realty Trust. Pending an analysis of the possible implications in terms of job losses, they could be requested to donate or make land available for purchase by the state.

⁵⁴ The valuation roll was last updated in 2017 and includes 2032 private agricultural properties. State land has been purposefully excluded from this calculation, although it is documented in the valuation roll. Smaller plots of 'agricultural land' that have been developed into expensive residential properties and business parks with very high values per hectare have also been omitted from this calculation since it artificially pushed up the price of land.

⁵⁵ As of 2 February 2020, see: https://www.privateproperty.co.za/farms-for-sale/limpopo/tzaneen-and-surrounds/1248?utm_source=farmersweekly&utm_medium=referrer&utm_campaign=caxtons

3.3 Opportunities to improve farmer support

There are existing programmes and resources that can be built on to improve farmer support. Subtrop’s study groups appear to be valuable and could be upscaled (Genis, 2019; various interviews). However, although there are large numbers participating in Vhembe District, only a few small-scale farmers attend them in GTM. Efforts should be made to improve attendance at these groups because extension officers in GTM don’t have sufficient capacity or technical knowledge. Interviews also revealed that management and capacity building support is required:

The type of support that we want is capacity building support, we need to have a visioning workshop from where we can develop a business plan. All we wanted was a facilitator, we have the venue ... When we were ready to contract this service, government said 'no you can't do that because we have this service internally', but to this day it has never materialized ... The CPA is robbed of the opportunity to improve itself because they are not supported (Deputy Secretary of Mokororwane CPA).

Many respondents noted that better use could be made of resources if there was an effective means of managing shared resources among small-scale farmers, especially tractors and ploughs. In some cases, people had received these through CASP but used them only once or twice a year. Suggestions were made that farmer coops should instead be empowered to manage these services because government was unable to do so effectively. Farmers should be able to access tractor services for a subsidized amount.

Urgent effort needs to be focused on realigning water and land rights to ensure all land redistributed is accompanied by water rights. Any future augmentation of water from Dams in Tzaneen should be reserved for small-scale farmers. These policy measures will involve more effective coordination between GTM, LDARD and DWS. Large numbers of small-scale farmers could be assisted through implementing measures to support ‘farmer-led irrigation’. Interestingly, Koppen et al. (2017) found that in the Mopani District, the area under ‘informal irrigation is three to four times as large as the area equipped in public irrigation schemes’. This suggests a refocus of support towards informal, self-financed irrigation or 'farmer-led' irrigation systems e.g. through duty-free imports of irrigation equipment, as surrounding African countries like Malawi and Zimbabwe have undertaken (Scoones et al., 2019; Woodhouse et al., 2017). Urgent analysis on the potential to expand underground water resources, as suggested by a DWS (2010) report is needed, and following this, possible assistance with borehole financing for redistribution beneficiaries. Table 6 below outlines a number of measures to improve farmer support for different categories of small-scale farmers.

Table 6. Measures to improve farmer support

| Farmer Typology | Farmer Support & Financing Required |
|--|---|
| Small-scale capitalist farmers | <ul style="list-style-type: none"> • Mentors/ Managers • JV for new subtropical fruits, nuts & blueberry • Membership and support in commodity associations and cooperatives • Study Groups (Subtrop) • Support for GlobalGAP certification • Integration into Westfalia/ZZ2 marketing channels • Access to ‘bridging capital’ and blended finance • Training to improve marketing skills • Private extension services funded by proportion of statutory levy on formal market sales |
| Smallholders targeting (mostly) formal value chains | <ul style="list-style-type: none"> • Mentors/ Managers • JV for new subtropical fruit & blueberry • Membership and support in commodity associations and cooperatives |

| | |
|---|--|
| | <ul style="list-style-type: none"> • Study Groups (Subtrop) • Support for GlobalGAP certification • Use AgriBEE Act to get retailers to procure produce • Joint marketing with other small-scale farmers or integration into Westfalia/ZZ2 marketing channels • Subtropical fruit trees and technical advice subsidized by Westfalia programme • Grants for specialised extension e.g. Lombard Avocado's 'Farm Trace programme'- a management system based on precision farming • Access to bridging capital and blended finance • Grant for collective packing and storage facilities • Training to improve marketing skills • Support farmers to go organic or sustainably branded • Veterinary support, animal production support and address stock theft |
| <p>Smallholders targeting (mostly) informal value chains</p> | <ul style="list-style-type: none"> • Mentors • Membership and support in commodity associations and cooperatives • ZZ2 model to introduce avocado and macadamia • Study Groups (Subtrop) • Joint marketing with other small-scale farmers • CASP grants • Government grant to NGOs/ trainers to teach farmers low input, low cost farming methods • Support for simple packing and storage facilities • Market information system for informal markets and training • Procurement for government markets (schools, hospitals, prisons) • Municipal livestock auctions and monthly fresh produce markets • Veterinary support, animal production support and address stock theft • Support farmers to process local stover, residues and invasive trees to reduce costs on feed and create more jobs |

3.3.1 Improving Financial Support for Small-Scale Farmers Producing Fruit and Nuts

The long-term investment required for fruit and nuts presents challenges to small-scale farming. A LRAD beneficiary notes: 'Even though I have that private title deed I can't go to the bank because they want the money paid back straight away... They should have programmes for different types of crops'. He noted that for tree crops private banks don't provide a reasonable turnaround time as they generally want the money back within five years and it takes at least eight years to break even with avocados or 10 with citrus, if nothing goes wrong (e.g. hail, drought or fire). 'The Land bank gives you a one-year holiday and then you need to start paying back, so for tree crops it's not good either'.

A manager at LDARD noted that government grants and funding are not going to be sufficient to assist small-scale farmers to enter subtropical fruit and citrus. The approach is to focus on blended funding models: 'Our aim is to have blended funding from land bank and private investors for example'. Alternatively, LDARD will assist farmers who are 'willing to take a risk and take a private loan' with the application process. However, this would likely only be viable for *small-scale black commercial farmers*. The perceived limitations in funding are also linked to what is understood to be a viable unit e.g. 'minimum 30 hectares of avocado'. However, a more reasonable model to fund would be assisting farmers to diversify their production on a smaller scale e.g. the 1-10 tree model of ZZ2 or starting with one to five hectares of avocado. This may not appear 'viable' on commercial standards, but it would provide added livelihood benefits, job opportunities and an initial way to access new commodities and possibly export markets.

Supermarkets and export companies have demonstrated a growing interest in procuring from small-scale black farmers, often incentivised by AgriBEE or corporate social responsibility (Mkhabela and Khumalo, 2011). An agricultural offtake agreement is a deal between a farmer and a company, which formalizes the latter's intention to purchase the farmer's future output. These agreements have the benefit of making it easier for farmers to secure finance because it provides lenders and investors with some confidence that the farmer at least has a secure market. It may also involve upfront payment by the buyer at a particular price. This provides cashflow for the farmer and protection from price volatility for the buyer (Abel, 2018). An LRAD beneficiary involved predominantly in avocado, mango and litchi had this arrangement with Westfalia and Mpack and was satisfied with the arrangement.

4 Options

This section discusses various options for implementing a labour-intensive land redistribution process in GTM. This report suggests that making use of a typology of small-scale farmers can assist in better identifying and supporting the varied needs of land reform beneficiaries. The following typology of small-scale farmers is suggested:

- Small/medium-scale black commercial farmers
- Smallholders targeting (mostly) formal value chains
- Smallholders targeting (mostly) informal value chains

Prioritising these beneficiaries would contribute to the largest number of jobs and livelihood opportunities in the extended value chain. *Subsistence-oriented smallholders* would be best served by programmes focused on promoting food security, improving productivity in household gardens and communal grazing camps and improving access to jobs (some may also benefit from job opportunities on land redistribution farms). Due to the limited availability of arable land, unfortunately some difficult choices need to be made regarding beneficiary selection. It is necessary to be realistic about the role that land and agrarian reform can feasibly play in addressing the crisis of social reproduction which poorer households face in South Africa (Bernstein, 2010; Cousins, 2015).

'Smallholders targeting informal and formal value chains' are the most obvious candidates for land redistribution on subdivided plots. In spite of their trying circumstances, they have managed to succeed, are selling a surplus and agriculture is already a major focus of household livelihoods. Many of them succeed in spite of having received little or no government support and lacking access to finance, labour and adequate natural resources (especially water). The fact that many of these farmers are well organised in the municipality under various farmer's and commodity associations (FABCO, AgriLetaba, Groter Tzaneen, Mopani Farmer's Association, Subtrop etc.), representing a spectrum of different interests, provides an opportunity for land reform. This could potentially allow for a more participatory process, which could avoid the top down and political nature of beneficiary selection to date (Hall and Kepe, 2017). It would, however, be important that LDARD and GTM officials ensure that those who are not aligned to farmer's associations also have an equal chance at selection. A detailed survey would need to be conducted to identify potential beneficiaries and their land needs (See Bank et al., 2017).

4.1 *Employment-intensive land redistribution in GTM: outcomes for job creation and livelihoods and the potential costs involved*

Table 8 below presents the possible outcomes for job creation. A range of different mixed-farming systems are suggested: sub-tropical fruits, citrus, macadamia, blueberries, vegetables and livestock. These are differentiated

according to the typology of small-scale farmers in different agro-ecological zones of GTM. The scenario presented involves redistributing 50% of all farmland (71 550 hectares) to 2745 farmers. According to this model, 13 145 hectares of existing orchards would be redistributed, and 13 495 hectares of new orchards would be developed. This would create 31 612 net on-farm jobs at a costs of ZAR 79 787 per job⁵⁶. The job estimates are inclusive of 2745 self-employment opportunities for land reform beneficiaries/farmers and potentially around 825 family members. This model would involve an investment of ZAR 2.52 billion in establishment costs. Another possible model which could keep investment costs lower would involve developing fewer hectares of fruit and nuts. For example, if only 2 943 hectares of new orchards were developed, this would bring the total cost down to ZAR 1.23 billion but would raise the cost per job to ZAR 85 572.

Table 7. Costs of implementing labour intensive land redistribution

| Cost Items | Hectares / LSU/unit | Cost per hectare/ (LSU)/unit | Total ZAR (Rm) | Cost/ gross job | Displaced jobs | Cost/net job | Redistributed orchards ha |
|----------------------------------|---------------------|------------------------------|----------------|-----------------|----------------|-----------------|---------------------------|
| Mango orchards | 9100 | 124 216 | 1130.37 | 146 282.6 | 3590.9 | 273 275.2 | 7900 |
| Avo/Mac orchards | 4035 | 109 825 | 443.14 | 182 208.1 | 909.4 | 291 036.3 | 2410 |
| Macadamia orchards | 0 | 112 884 | 0 | 0 | 173.9 | 0 | 400 |
| Blueberry orchards | 260 | 392 209 | 101.97 | 148 564 | 0.0 | 148 564 | 0 |
| Citrus Orchards | 0 | 0 | 0 | 0 | 811.7 | 0 | 2435 |
| Vegetables | 13395 | 62 524 | 837.51 | 33 513.8 | 0.0 | 33 513.8 | |
| Funding 50% LSU (Cattle + goats) | 1230 | 7225 | 8.89 | 125 175.4 | 0.0 | 125 175.4 | |
| Dips | 4 | 20 000 | 0.08 | | | | |
| Fencing for kraals ⁵⁷ | 68 | 4 000 | 0.27 | | | | |
| Totals | | | 2522.23 | 68 362.2 | | 79 786.8 | 13 145 |
| Option 2⁵⁸ | | | 1235.40 | 66 092.4 | | 85 571.8 | 10 377.5 |

Table 8 below includes estimates for both gross jobs created and net jobs. The latter takes into account possible job losses where existing orchards have been redistributed. The additional jobs created result from a number of factors including: changes in the commodity mix e.g. the inclusion of fresh vegetables to subtropical fruit focused farms; moving from capital-intensive farming systems to labour-intensive within the same commodity; reducing the size of farm units, so there are more farmers and family members; and expanding the area under

⁵⁶ This is inclusive of the establishment costs for orchards for first 4 years, livestock, vegetable farming development and inputs, funding 50% of LSU, dips and fencing for kraals but doesn't include the costs of land purchase, relocation and other possible costs. A 2013 evaluation of RECAP quotes an estimate of ZAR 645 000 per job. This proposal would involve a considerable reduction in the cost per job.

⁵⁷ Fencing (and irrigation infrastructure) included above in orchard and vegetable costs.

⁵⁸ To lower costs less orchard development is proposed (2942.50 ha new orchards and the rest are redistributed orchards), while the other vegetable and livestock costs remain the same.

labour-intensive production methods and commodities. In certain cases, the addition of new jobs may be a consequence of paying lower wages⁵⁹. Table 9 in the index provides details of the jobs created per commodity.

⁵⁹ This is not a recommendation but is a wide-spread reality of small-scale farming which needs to be acknowledged as a possible outcome.

Table 8. Estimate of potential job creation and livelihoods through employment-intensive land redistribution in Greater Tzaneen Municipality

| Agro-ecological zone/ land use | Production system | A. Farmers⁶⁰ | B. Family members⁶¹ | C. Gross jobs created⁶² | D. Net jobs created⁶³ |
|---|--|--------------------------------|---|---|---|
| High potential arable land <ul style="list-style-type: none"> Target to redistribute: 2050 hectares (of which 500 hectares are existing orchards) | <i>Small/medium-scale black commercial farmers</i> (30- 50ha individually owned/leased plots over 1000 ha in total). Sub-tropical fruit and nut focused farms (avocado & macadamia) under irrigation <ul style="list-style-type: none"> - 675ha subtropical fruit (½ macadamia & ½ avocado) - 125 ha vegetables - 200 ha residential and other (e.g. domestic residence, sheds, packhouse, grazing etc.⁶⁴) | 25 | 8 | 505 | 410 |
| | <i>Smallholders targeting formal and informal value chains</i> (15 to 30 ha individually owned/leased plots over 1050 ha in total). Sub-tropical fruit and nut focused farms (avocado & macadamia) under irrigation <ul style="list-style-type: none"> - 570 ha subtropical fruit (½ macadamia & ½ avocado) - 270 ha vegetables - 210 ha residential and other | 47 | 14 | 755 | 661 |
| Moderate Potential Arable Land <ul style="list-style-type: none"> Target to redistribute: 36 000 hectares (of which 6910 | <i>Small/medium-scale black commercial farmers</i> (30 to 50 ha individually owned/leased plots over 12 000 ha in total). Mixed-farming systems: sub-tropical fruit and nuts, blueberries and vegetables under irrigation <ul style="list-style-type: none"> - 6000 ha mango - 2400 ha avocado /macadamia - 1040 ha vegetables - 160 ha blueberry - 2400 ha residential and other | 300 | 90 | 6135 | 5227 |

⁶⁰ Calculated as number of hectares divided by size of median plot.

⁶¹ Assumed to be 0.3 of A.

⁶² Full-time equivalents are considered to be 264 days per year. Total gross jobs subsume (self) employment for both A and B. Gross and net jobs have been calculated according to industry estimates as follows: 1 job per 3 ha avo; 1 per 2.3 ha macadamia; 1 per 2.2 ha mango; 1 per 2-4 ha citrus; 1 per 2.87 ha for a mix of all fruit; 1 job per 2.65 ha avo/macadamia mix; 2.64 jobs per 1 ha blueberries; 2.5 jobs per ha veg; 2 herders per LSU cattle (100 head); 4 herders per LSU goats (400 head). Research indicates that small-scale farming can in certain contexts create part-time equivalents, however, this would differ for different categories of small-scale farmers. This level of detail has not been attempted here.

⁶³ This includes the number of existing farm jobs that are likely to be lost if existing orchards are redistributed e.g. For *High potential arable land* 500 hectares of existing orchards are redistributed. Therefore 500 / 2.65 (hectares of avocado/macadamia per job) = 189 jobs that could be lost.

⁶⁴ +- 20% of all land redistributed is reserved for this purpose. Livestock may be kept by all categories of farmers on remaining land or on communal grazing land.

| | | | | | |
|--|--|------|-----|--------|--------|
| hectares are existing orchards) | <i>Smallholders targeting formal and informal value chains</i> (5 – 30 ha individually owned/leased plots over 12 000 ha in total). Mixed-farming systems: sub-tropical fruit and nuts, blueberries and vegetables under irrigation <ul style="list-style-type: none"> - 5000 ha mango - 2000 ha avocado /macadamia - 2500 ha vegetables - 100 ha blueberry - 2400 ha residential and other | 686 | 206 | 8291 | 7380 |
| | <i>Smallholders targeting informal value chains</i> (5 – 15ha individually owned/leased plots over 12 000 ha in total). Mixed-farming systems: sub-tropical fruit and nuts and vegetables under irrigation <ul style="list-style-type: none"> - 3000 ha mango - 800 ha avocado /macadamia - 5800 ha vegetables - 2400 ha residential and other | 1200 | 360 | 13 266 | 12 092 |
| Marginal potential arable land <ul style="list-style-type: none"> • Target to redistribute: 8000 hectares (of which 4000 hectares are existing orchards) | <i>Small/medium-scale black commercial farmers</i> (60 ha individually owned/leased plots over 2000 ha in total). Mixed-farming systems: citrus, macadamia (Agatha) and vegetables under irrigation <ul style="list-style-type: none"> - 1000 ha citrus - 200 ha macadamia - 400 ha vegetables - 400 ha residential and other | 33 | 10 | 1220 | 883 |
| | <i>Smallholders targeting formal and informal value chains</i> (10-60 ha individually owned/leased plots over 3000ha in total). Mixed-farming systems: mango, citrus, macadamia, vegetables under irrigation <ul style="list-style-type: none"> - 500 ha citrus - 1000 ha mango - 200 ha macadamia - 700 ha vegetables - 600 ha residential and other | 86 | 26 | 2108 | 1487 |
| | <i>Smallholders targeting informal value chains</i> (5 – 15ha individually owned/leased plots over 3000ha in total). Mixed-farming systems: mango and vegetables under irrigation <ul style="list-style-type: none"> - 1200 ha mango - 1200 ha vegetables - 600 ha residential and other | 300 | 90 | 2946 | 2400 |

| | | | | | |
|---|---|---------------------|---------------------------|----------------------------------|--------------------------------|
| <p>Low to moderate potential grazing land</p> <ul style="list-style-type: none"> Target to redistribute: 25 500 hectares (of which 1735 hectares are existing orchards) | <p><i>Small/medium-scale black commercial farmers</i> (on individually owned/leased or collectively owned plots⁶⁵ over 3525 ha in total). Mixed-farming systems: livestock focused with citrus and vegetables under irrigation</p> <ul style="list-style-type: none"> - 300 LSU⁶⁶ on 2790 ha (75 LSU per HH) - 635 ha for citrus - 60 ha for vegetables - 40 ha residential and other | 4 | 1 | 341 | 182 |
| | <p><i>Smallholders targeting formal and informal value chains</i> (on individual or collectively owned plots over 6420 ha in total). Mixed-farming systems: livestock focused with citrus, mango and vegetables under irrigation</p> <ul style="list-style-type: none"> - 600 LSU on 5580 ha (50 LSU per HH) - 300 ha for citrus - 300 ha for mango - 120 ha for vegetables - 120 ha residential and other | 12 | 4 | 494 | 283 |
| | <p><i>Smallholders targeting informal value chains</i> (on individual or collectively owned plots over 15 555 ha in total). Mixed-farming systems: livestock focused with mangos and vegetables under irrigation</p> <ul style="list-style-type: none"> - 1560 LSU on 14 510 ha (30 LSU per HH) - 500 ha of mango - 280 ha for vegetables - 265 ha residential and other | 52 | 16 | 834 | 607 |
| Total: | 71 550 ha of land redistributed | 2745 farmers | 825 family members | 36 895 gross on-farm jobs | 31 612 net on-farm jobs |

⁶⁵ These could be subdivided individually owned/leased plots and/or collective ownership of land with clear rights for members i.e. collective ownership may work well for grazing land while fruit and vegetable plots could be individually owned/leased plots. Same concept applies to *smallholders*.

⁶⁶ Carrying capacity of the land is 9.3 ha/ LSU.

4.2 Land Rights

Although the mainstream economic literature suggests that land reform beneficiaries prefer private, individual titles to their farms, many respondents emphasized alternative systems (e.g. leases, nationalisation and collective ownership). A number of respondents cautioned that providing land titles straightaway risked attracting beneficiaries who don't have a heart for farming. Concerns were expressed that private titles might lead to land being sold due to its high value in this subtropical fruit focused region. Many suggested some sort of 'trial period' and that a limit on resale should be implemented.

A respondent from FABCO also suggested nationalisation of land with a 'use it or lose it' approach: 'I would support nationalization of land because this will ensure that the land is better utilised...if I fail to keep my farm productive I would be moved out and someone else would come in to farm it, without state money circulating around land again and again'. Nationalisation is not currently within the scope of government policy. However, the state could perhaps be willing to replace beneficiaries more easily to deal with the challenge of failed land redistribution farms. Other respondents, like those from Agri Letaba and Mopani Farmer's Association, didn't mention nationalisation but did emphasize that a trial period should be in place with preference for a long-term lease arrangement. Some suggested that farmers should be allowed to purchase their land or to be awarded titles once they had proved their commitment.

As already discussed in section 2, a number of respondents agreed that overall the PLAS programme has produced more success than previous approaches to land redistribution e.g. the LRAD and SLAG programmes. This report suggests that PLAS continue to be the programme through which land is redistributed to beneficiaries, however, a number of improvements should be made. The benefit of this approach is that it could be achieved within the bounds of the existing policy framework without the need for a lengthily and costly process of policy reform. PLAS has not yet been used in GTM to provide land for small to medium-scale farmers nor has subdivision of acquired land been attempted. PLAS does, however, in theory, allow for both subdivision and targeting a range of beneficiaries (PLAAS, 2016; Kepe and Hall, 2016). The following typology of households are mentioned as potential beneficiaries of PLAS:

- (1) Households with no or very limited access to land;
- (2) Small-scale farmers farming mainly for subsistence and selling some produce locally;
- (3) Medium-scale farmers already farming commercially but constrained by insufficient land; and
- (4) Large-scale commercial farmers with potential to grow but disadvantaged by location and farm size

(SLLDP, 2013)

The disproportionate focus on large-scale commercial farmers has been the general approach of the PLAS programme and of the State Land Lease and Disposal Policy (SLLDP) of 2013, which applies to farms acquired through PLAS. 'This policy appears to be aimed mainly at medium-scale and large black commercial farmers. It assumes that there will be only one lessee per farm, and no mention is made of subdividing large farms' (PLAAS, 2016: 13).

Another key challenge that PLAS beneficiaries noted, were the long delays and challenges in receiving RECAP and CASP grants, which delayed production. PLAAS (2016) notes that the state insists 'that beneficiaries provide commercial business plans before they can get leases – yet few are able to start production in the absence of such leases'. Making a 'commercial business plan' a condition of receiving a lease is clearly a hurdle to small-scale farmer development and is unlikely to be necessary in all cases. If these challenges with post-settlement support were to be addressed and committed effort invested in extending blended-finance models to small-scale farmers and securing markets, then the status of land rights would cease to be a stumbling block for land

reform beneficiaries (Aliber, 2020). The experience of LRAD in GTM and elsewhere, indicates that private property rights are not the answer (PLAAS, 2016).

4.3 Subdivision

Subdivision has not been seriously attempted in the municipality to date. Respondents expressed different views on subdivision of redistributed farms to small-scale farmers. However, the concept is so far out of the scope of current policy, that it was clearly foreign to small-scale farmers, commodity associations and government officials alike. It was therefore a challenge to clearly ascertain credible opinions on the matter of subdivision. Some respondents believed that it would create the same challenges that large group farms have created in the past e.g. through the SLAG programme or with CPAS and trusts in the land restitution programme. This viewpoint displays a misunderstanding of what subdivision entails, as 'problematic group dynamics' are certainly an argument for breaking large farms up into smaller units based on household production, while retaining the possibility of marketing collectively.

Many people expressed concern regarding what would happen to the water rights on subdivided land, particularly if only certain parts of large farms had boreholes, dams or rivers running through them. There were concerns that government wouldn't have the ability to manage the complications of this and that this may result in elite capture of water rights, which has been a concerning trajectory in GTM to date. However, others were supportive of the idea of subdivision, once it was established that it would not only entail small units of ½ to five hectares (which was the perception) but could also accommodate what are perceived as 'economical units' e.g. 25 hectares for mango and around 30 hectares for avocado. Some respondents noted that allowing for smaller farming units could provide a viable avenue through which to support black small-scale farmers to gain access to the subtropical fruit and nut value chains.

The fact that subdivision has not been commonly attempted by the state as of yet, is linked to the fact that 'the Prohibition Subdivision of Agricultural Land Act No. 70 of 1970' remains intact. The Presidential Panel on Land Reform argued that the Act should be repealed as it 'is based on archaic views that regarded small farms as unviable. This act is also antithetical to the land reform agenda' (Mahlali et al., 2019). Until this is resolved, subdivision is unlikely to be possible. Undertaking subdivision would also require a shift in government thinking and policy, which has been characterised by a bias towards policies that seek to transform 'small-scale farmers' into large-scale commercial farmers (Aliber and Hall, 2012).

5. Conclusions

This report has evaluated the current status of land and agrarian reform in GTM and presented policy proposals for embarking on an employment-intensive rural land reform programme. The proposal is focused on black smallholders and small-scale commercial farmers, with the intention of enhancing the incomes and livelihoods of large numbers of beneficiaries. Agricultural commodities which provide the greatest number of jobs and livelihood benefits have been selected to form part of mixed-farming systems: vegetables, mango, macadamia, avocado, blueberries, citrus and livestock (cattle and goats). Table 8 of this report suggests redistributing 50% of all commercial farmland (71 550 hectares) to 2745 farmers. This would create 31 612 net on-farm jobs at a cost of ZAR 79 787 per job. This is inclusive of 2745 self-employment opportunities for farmers and around 825 family members. This proposal would involve an investment of around ZAR 2.52 billion in establishment costs. This report also provides a number of suggestions to improve the redistribution programme and to offer more effective farmer support (Mahlali et al., 2019; Aliber, 2019/20; Kepe and Hall, 2016/7; PLAAS, 2016).

The research encountered four key design and implementation issues. Firstly, both the literature and a large proportion of key informants interviewed, demonstrated serious misgiving about subdivision of land acquired for redistribution. It is necessary to critically interrogate these hesitations and to more seriously evaluate the

possible advantages in terms of reaching a larger number of beneficiaries. This report suggests that seriously undertaking subdivision could radically improve the outcomes of the land redistribution programme and the number of linked jobs created. The second issue is how to go about 'beneficiary selection'. The current process seems plagued by inefficiencies and corruption and certainly there is space for improvement (see Mahlati et al., 2019; Kepe and Hall, 2016; Bank et al., 2017 for alternative models). Third, is the issue of what to do with failed redistribution projects. The 'use it or lose it' principle was often supported by a diverse range of key informants (including small-scale farmers and land reform beneficiaries). However, there are clearly democratic perils in implementing such an approach and this would require a strong and transparent institutional framework. Lastly, is the issue of how land rights should be held. Respondents showed a preference towards continuing with the PLAS programme, and this is advised with some adjustments to improve its functioning and reach.

This report indicates that land redistribution presents immense promise for improving livelihoods and job creation in GTM. However, key risk factors to the proposal are water shortages and the associated challenge of water governance in the Tzaneen area. If not dealt with, these could pose serious challenges to the successful expansion of small-scale farming in the area. Careful consideration of agricultural commodities and appropriate farming systems, which conserve scarce water resources, should be central to the planning of future agrarian scenarios. Land redistribution must also be accompanied by careful redistribution of water rights to small-scale farmers.

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Table 9. Possible jobs created per commodity in Greater Tzaneen Municipality

| Greater Tzaneen | | Farms | Total Ha | | | | | | | | | | | | | | | | |
|--------------------------------|---|-------------|--------------|-------|------|-----------|------|-------------|------|--------|------|-----------|------|-------|-------|-----------|------|------------------|------------------|
| Land type | Farm type | | | Mango | | Macadamia | | Mac/Avo mix | | Citrus | | Blueberry | | Veg | | Livestock | | Total Gross jobs | Total net jobs |
| | | | | Ha | Jobs | Ha | Jobs | Ha | Jobs | Ha | Jobs | Ha | Jobs | Ha | Jobs | Ha | Jobs | | |
| High potential arable | Commercial | 25 | 1000 | | | | | 675 | 255 | | | | | 125 | 250 | | | 504.72 | 410.377 |
| | SH1 (Smallholders targeting formal & informal value chains) | 47 | 1050 | | | | | 570 | 215 | | | | | 270 | 540 | | | 755.09 | 660.755 |
| Moderate potential arable | Commercial | 300 | 12000 | 6000 | 2727 | | | 2400 | 906 | | | 160 | 422 | 1040 | 2080 | | | 6135.33 | 5227.100 |
| | SH 1 | 686 | 12000 | 5000 | 2273 | | | 2000 | 755 | | | 100 | 264 | 2500 | 5000 | | | 8291.44 | 7379.437 |
| | SH 2 (Smallholders targeting informal value chains) | 1200 | 12000 | 3000 | 1364 | | | 800 | 302 | | | | | 5800 | 11600 | | | 13265.52 | 12092.281 |
| Marginal potential arable | Commercial | 33 | 2000 | | | 200 | 87 | | | 1000 | 333 | | | 400 | 800 | | | 1220.29 | 883.333 |
| | SH 1 | 86 | 3000 | 1000 | 455 | 200 | 87 | | | 500 | 167 | | | 700 | 1400 | | | 2108.17 | 1487.121 |
| | SH 2 | 300 | 3000 | 1200 | 545 | | | | | | | | | 1200 | 2400 | | | 2945.45 | 2400.000 |
| Grazing land | Commercial | 4 | 3525 | | | | | | | 635 | 212 | | | 60 | 120 | 2790 | 9 | 340.67 | 181.917 |
| | SH 1 | 12 | 6420 | 300 | 136 | | | | | 300 | 100 | | | 120 | 240 | 5580 | 18 | 494.36 | 283.000 |
| | SH 2 | 52 | 15555 | 500 | 227 | | | | | | | | | 280 | 560 | 14510 | 47 | 834.08 | 606.806 |
| Totals | | 2745 | 71550 | 17000 | 7727 | 400 | 174 | 6445 | 2432 | 2435 | 812 | 260 | 686 | 12495 | 24990 | 22880 | 74 | 36895.13 | 31612.128 |
| Net Jobs per commodity: | | | | | 4136 | | 0 | | 1523 | | 203 | | 686 | | 24990 | | 74 | | |