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INTRODUCING THE GUIDEBOOK

As a policy advisor who develops or implements policies related to land reform or agricultural support for emerging farmers, you may benefit from some of the findings coming out of the Water Research Commission (WRC) study on Water Conservation in Food Value Chains by Beneficiaries of Water Allocation Reform and Land Reform Programmes¹. The study was conducted in the Maruleng Municipal Area.

The key findings discussed in this guidebook are:

- The successes, but also challenges and obstacles to implementing integrated land and water allocation reform in the Maruleng Municipal Area;
- 2) The different types of emerging farmers in the case study area. These farmers differ in terms of aspirations, objectives, resources and needs. For example, not all beneficiaries of water allocation reform and land reform in the study area have large scale commercial farming aspirations. They also have different levels of record keeping systems and different ways of interpreting what it means to be a commercial farmer;
- The idea that farming "commercially" is a complex notion with many different possible interpretations, and what this may mean for your day-to-day decision-making;
- 4) The many challenges that emerging farmers face on the ground. These challenges can be understood in the context of the food

- value chain that the emerging farmers in the Maruleng Municipal Area form part of. The team offers some advice about what can be done to help emerging farmers move further along the food value chain which they form part of;
- Recommendations about what you, as a policy advisor, could consider doing to assist emerging farmers and the agricultural extension officers who look after them to overcome some of the challenges they face on an everyday basis.

The next section summarises some of the key programmes that are in place to support integrated land and water allocation reform, and agricultural development.



¹ For more information on this study, please contact the project leader Dr Willem de Lange at wdelange@csir.co.za

Programmes that support land reform and water allocation reform in South Africa



Due to the many challenges² facing the land reform process in South Africa since the start of democracy, the Department of Rural Development and Land Reform published a new Green Paper on Land Reform in 2011 (DRDLR, 2011a).

According to the Green Paper, the South African land reform programme will in future have four pillars: restitution of land rights, redistribution, tenure reform and development. Also, three principles

will underlie land reform: deracialising the rural economy; democratic and equitable allocation and utilisation of land across race, class and gender; and sustained production discipline (DRDLR, 2011a).

These are some of the key programmes spanning different government departments that are currently in place to further land reform, water allocation reform and agricultural development (Funke and Jacobs, 2011):

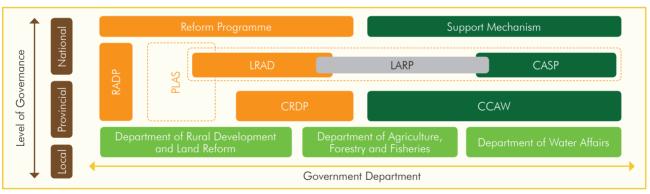


Figure 1: Key programmes spanning different government departments that are currently in place to further land reform, water allocation reform and agricultural development.

² For a full discussion by members of this project team on the challenges facing integrated water and land reform in South Africa, please go to http://www.intechopen.com/books/current-issues-of-water-management/integration-challenges-of-water-and-land-reform-a-critical-review-of-south-africa.

The Comprehensive Agricultural Support Programme (CASP) is designed to help black famers to participate in the market by mainly supporting infrastructural development. Money is also spent on training and capacity building and marketing (DAFF, 2014).

The Land and Agrarian Reform Programme (LARP) integrates the CASP with the Land Redistribution for Agricultural Development (LRAD) programme (which focuses primarily on land reform) (Greenberg, 2010). The LARP aims to facilitate collaboration of land reform and agricultural support. The idea is to have "one stop shop" service centres in close proximity to farms and beneficiaries (DAFF, 2008).

The Coordinating Committee on Agricultural Water (CCAW) is a non-statutory cooperative government structure that serves as a provincial mechanism to promote cooperation between DWA, DAFF and DRDLR. Its objective is to ensure that government-funded projects are sustainable from a water utilisation, agricultural engineering and economic perspective (NDA, n.d.).

The Comprehensive Rural Development Programme (CRPD) aims to promote trans-

sectoral coordination between agriculture and land reform and has an additional focus on broader rural development (DRDLR, 2014a). An important component of revising the land reform programme has been the Proactive Land Acquisition Strategy (PLAS), which currently involves approximately 1000 farmers. Under this programme, land is leased out to beneficiaries for a trial period of three to five years during which they have to prove that they can productively use the land for agricultural purposes (DRDLR, 2011b).

The Recapitalisation and Development Programme (RADP) applies to all emerging farmers needing support and future land transactions, and aims to ensure increased production and food security; to graduate small farmers into commercial farmers; to create employment opportunities in the agricultural sector; to promote capacity building through training and mentorship; and to establish rural development rangers (DRDLR, 2014b).

In parallel to the land reform process, the water reform process has also been underway, with one of its central pillars being the Water Allocation Reform Strategy of 2008. Water Allocation Reform (WAR) aims to provide water

for subsistence farming or for sustaining basic livelihoods, and to start a development path of commercial and competitive water use in support of broad based black economic empowerment (DWAF, 2006). Compulsory licensing is a key part of the Water Allocation Reform programme (DWA, 2014) and allows for water currently allocated to users to be re-allocated to historically disadvantaged individuals. All commercial water users must now register their water use and will have to apply for a water use license (DWA, 2014).

There is still a weak link between land reform, agricultural support and water resource provision (Greenberg, 2010) despite the trans-sectoral programmes that are in place. In South Africa, many land reform farms have failed because of water not being available for production. The synchronisation between water allocation and land reform programmes in irrigation areas therefore has to be improved (Groenewald, 2004).

In the following section the project team reflects on some of their findings regarding the successes and challenges of water allocation reform and land reform initiatives that are evident in the Maruleng Municipal Area.



Findings from the Maruleng Municipal Area

According to the 2011/2016 IDP for the Maruleng Local Municipality (Maruleng Local Municipality, 2011) 21 registered land claims make up 18.5% of the total land area. In their research, the project team focused on a number of these land claims. These include irrigation schemes on predominantly restituted communal land (e.g. Lorraine Irrigation Scheme, Madeira Irrigation Scheme, Metz Irrigation Scheme, Sofava Irrigation Scheme, and Makgaung Irrigation Scheme), and two major Communal Property Associations (CPAs) situated within Maruleng: the Moletele CPA and the Makhutswe CPA (on behalf of the Sekororo Traditional Authority), Both CPAs have a large number of individuals registered as beneficiaries of the land reform process.

The project team's research has found that the land reform process in the Maruleng Municipal Area has been characterised by both successes and challenges. Many of the respondents on the irrigation schemes argue that the land reform process has not been a success, and that while they may have been given land, the necessary support in the long term has not been forthcoming from

government. Land reform beneficiaries in the Makhutswe CPA expressed similar sentiments. Despite several individual successes, the Makhutswe CPA has also been victim to internal structural challenges specifically also relating to which individuals in the CPA have the right to access the land, withdraw water, make improvements on water utilisation (management right), are allowed to exclude other users, and may lease land to private farmers (alienation right) (Liebrand, 2007). Because rights are only awarded to the CPA and not individual beneficiaries, individuals can only enact their land and water rights by being involved in CPA activities and by getting permission from the CPA. This has led to internal unrest and many disgruntled beneficiaries who are challenging the authority of the CPA.

The Moletele example is very different from that of Makhutswe and the CPA has often been cited as one of the success stories of the government's land reform process. The land claim involved over 13,000 beneficiaries who lodged a claim for 7 800 ha of land in a prime export-oriented subtropical zone

(Moletele CPA, 2008). Presently, a total of 7,142ha of land has been restored to the community, which accounts for less than 10% of the total area under claim, at a cost for land alone of R1832 million (approximately US\$26 million) (Davis and Lahiff, 2011). The claimants are all members of the historical Moletele community, and are organised under the Moletele CPA, led by an elected community, which has taken ownership of the land in freehold title on behalf of the community (Davis and Lahiff, 2011). This CPA has been praised for its agricultural productivity and the successful operation of its joint strategic partnerships despite several challenges articulated by various interview respondents i.e. access to financing, greater Moletele community not benefitting from strategic partnerships because they have not received shareholder status etc. In contrast to the Makhutswe CPA example, and examples from the irrigation schemes, individual Moleteles do not farm the land (except if in training with the strategic partner). Instead, the land (as previously mentioned) is farmed by strategic partners (these partners are all white commercially established farmers who

in some cases owned the land before it was returned to the Moleteles as part of the land reform process).

Water allocation reform in the Maruleng Municipal Area case study has not been as prominent, and not nearly as influential as the land reform process. For the most part is has been non-existent with the majority of beneficiaries not having any knowledge of water allocation reform processes in their area. The level of knowledge regarding the quantity of water used, licensing and water use authorisation, financial support for resource poor farmers and efficiency practices has been found to be extremely low.

During the project team's research, it became evident that not a single farmer from the irrigation schemes the project focused on had a water use licence in place. In the case of the Makhutswe CPA, very few farmers knew about water use licensing and it was only the management structure of the CPA that was concerned with water allocation and water use licensing. In contrast, all of the Moletele CPA strategic partnerships have water licences in place and their water allocations comprise of direct abstraction from the Lower Blyde River, an allocation from the Lower Blyde Irrigation Pipeline project, as well as a share of what is referred to as the "Blyde 800."

Until the 1990s irrigation water from the Blyde River was distributed via earth-lined canals. Due to large amounts of water losses, farmers could not develop all of the land area earmarked for irrigation. A new piped system of delivering irrigation water was approved by the Department of Water Affairs to replace the old canals on condition that it should also be a subsidy scheme that set out an allocation of water specifically earmarked for emerging farmers in the area (Karar and Hollingworth, 2008). The Department's interest was to save water and to "empower former disadvantaged people" at a minimum cost. In pipeline plans it was estimated that 10% of water savings could be made on top of the regular savings. The amount of this extra water is approximately 8 million cubic meters and was estimated to provide sufficient irrigation for 800 ha farmland in the area. It is therefore called the Blyde "800".

While the idea behind the Blyde 800 was to provide support for black emerging farmers through the provision of water, it can be argued that this project has not had the success that was originally envisaged (Schreiner and Hassan, 2011). Many of the project's respondents stated that only farmers who are in a strategic partnership can benefit from the scheme

DIFFERENT GROUPINGS OF EMERGING FARMERS

What are different possible groupings of emerging farmers that I need to be aware of when making decisions based on existing policy or formulating new policy?

In South Africa, the concept "emerging farmer" has been very loosely defined and can mean a number of different things. One possible definition of the concept "emerging farmer" is that this is "an ambiguous, yet widely used term describing black farmers who receive support to engage in agriculture" (Denison and Manona, 2007). For the purposes of the WRC study, the project team identified six types of emerging farmers based on qualitative research conducted in the project's study area.

Type 1	•	The "really" big players Generally identified as large scale commercial farmers who do not need to be in a strategic partnersh
Type 2	•	The big players in training Generally identified as large scale commercial farmers who still need to be in a strategic partnership
Type 3	•	The entrepreneurs Generally identified as small scale commercial farmers with aspirations to grow their farming busines
Type 4	•	The transitioners Generally identified as subsistence farmers well on their way to becoming commercial farmers
Type 5	•	The wishful thinkers Generally identified as subsistence farmers with vague aspirations to become commercial
Type 6	•	The survivalists Generally identified as subsistence farmers with no aspirations to become commercial

"There is no doubt that many black South Africans are strongly attached to South African land in general, and the lands of their ancestors in particular. This attachment must be respected; it is a socio-political fact that only the foolish would ignore. However, it should not be equated with wanting to farm for a living. Far fewer black South Africans want to farm than is commonly supposed; most blacks regard jobs and housing in urban areas as more important priorities.

A national survey commissioned by CDE shows that only 9 per cent of black people who are currently not farmers have clear farming aspirations. 24 Other surveys suggest that only about 15 per cent of farm workers have aspirations to farm on their own, or to farm full-time."

(CDE, 2005)

T1: The "really" big players

This type of emerging farmer can generally be described as a large scale farmer who does not need to be in a strategic partnership. It is interesting to note that the project team did not find any farmers in the project's case study area that fit this description. One could list a number of possible reasons for this finding, such as the legacy of Apartheid, the current government's inability to provide adequate support for emerging farmers, lack of education or entrepreneurial spirit among many emerging farmers. These reasons were also cited by many of the farmers who were interviewed as part of the research study.

T2: The big players in training

This type of emerging farmer can generally be described as a large scale farmer who is not yet ready to operate independently and still needs to be in a strategic partnership. In general the farmers under T2 see farming as a business and their aspirations are to grow and improve their farming operations. A particular example is water conservation. While many of the farmers in the case study area were found to practice water conservation effectively, they indicated that they would want

to keep improving their water conservation practices. It is also significant to note that T2 farms are often successfully run despite the strategic partner not owning the land. These farms are mostly owned by CPAs and as such security of tenure lies with the emerging farmer and not the strategic partner. The strategic partners that the project team engaged with often mentioned that the reason why they are so successful is because farming is more than a business for them: it is a passion.

T3: The entrepreneurs

This type of emerging farmer can generally be described as a small scale farmer with well-defined aspirations to grow their farming enterprise and become commercial. T3 farmers are still small scale farmers but their farming activities steer towards the commercial side of farming. T3 farmers often obtain their land through a Permission to Occupy (PTO) agreement with a traditional authority or through the land reform process. Many of the T3 farmers in the case study area expressed the desire to be in a strategic partnership. In many of the cases, they have either not had the opportunity to find a strategic partner, or they have been unable to sustain a strategic partnership for various reasons. It is also

interesting to note that many of the T3 farmers believe that being a successful, commercial farmer equates to increasing the size of one's land, owning more equipment and having a big turnover. There is perhaps not always the realisation that farming is a hard, risky business and that a fight for survival rather than making large profits is often the order of the day. All of the T3 farmers in the case study area believe that they are already practicing water conservation, although the project team's assessment showed that there is room for improvement.

T4: The transitioners

This type of emerging farmer can generally be described as a small scale farmer with aspirations to grow their farming operations and to slowly transition towards commercial farming. What is significant about this group of farmers is that they generally acknowledge that they still need help, especially from government, and that they have much to learn. Some of these farmers have "mentors" who help and give direction but are not strategic partners. It is interesting to note that the T4 farmers in the case study area all thought that they use water responsibly and efficiently. However the project team found

that this was not necessarily the case. The reason why T4 famers might think that they use water responsibly and efficiently could be because several of them have moved from practicing flood irrigation or rain fed agriculture to drip irrigation. The problem is that often these farmers are not able to maintain their drip irrigation systems.



This study indicates that it cannot be assumed that a beneficiary of water allocation and land reform will necessarily want to become a commercial farmer.

T5: The wishful thinkers

This type of emerging farmer can generally be described as a subsistence farmer with vague, ill-defined aspirations to become commercial. T5 farmers are subsistence farmers. While many of these farmers express an aspiration to become commercial, it is clear that most of them do not fully comprehend what commercial farming entails. Rather, it seems that these farmers understand "commercial farming" simply as having practices in place that make their farming more efficient. These include knowing how to keep records, being

able to hire farm labourers or owning a tractor. Many of the T5 farmers interviewed said that they felt pressure from government to become commercial because this would mean more financial support from government. In addition to income from farming, many of the T5 farmers in the case study area rely on social grants, such as government pensions. Generally, T5 farmers do not know how much water they use, need or have access to, and are not familiar with the concept of having to pay for water. T5 farmers also feel that practicing water conservation is not about producing more crops for less water, but about using as much water as one can gain access to, rather than letting it go to waste.

T6: The survivalists

This type of emerging farmer can generally be described as a subsistence farmer with no aspirations to become commercial. The project team came across a number of T6 farmers who produce minimal crops for domestic use in the case study area. T6 farmers generally have no aspirations to sell their crops, and at most might exchange some of their crops with their neighbours. They also only plant seeds if and when they have access to them. T6 farmers generally have no irrigation strategy and their crops are mostly rain-fed. They are mostly concerned with water conservation in terms of being limited to their household water use.

"If you make
lots of money.
If you're not running
short of things and
can meet all of your
requirements – then
you are a commercial
farmer!"

Emerging farmer - Hoedspruit



HOW DO EMERGING FARMERS IN THE CASE STUDY AREA PERCEIVE COMMERCIAL FARMING?

Here it is important to note that emerging farmers in the case study area often do not seem to grasp the full implications of becoming full-scale commercial farmers. Rather than realising the financial and other risks that are involved when aspiring to farm commercially, many emerging farmers seem to romanticise the idea of being a commercial farmer. The project team's findings include emerging farmers talking about commercial farming as a way to "feed the nation", "make money", own and use modern technology and infrastructure, and grow crops at a large scale.

HOW CAN THESE INSIGHTS INFORM MY DAY-TO-DAY DECISION-MAKING?

Not all beneficiaries of water allocation and land reform have the will, the determination, the resources or the ability to take on full scale commercial farming, and all the positives and negatives that it entails. Beneficiaries need to be made aware of what is required to successfully manage a commercial farming enterprise and need to be given the opportunity to decide whether they want to follow this route. At the same time, if beneficiaries do not want to become full-scale commercial farmers, they need to be given alternatives. These alternatives may involve commercial farming at a smaller scale, or they may involve activities other than farming. An important question is: "In what ways other than commercial farming can land reform and restitution land be used productively by land and water allocation reform beneficiaries?" These are some of the issues that you, as a policy advisor, might want to take into consideration when making decisions regarding land reform and agricultural support for emerging farmers.

Emerging farmers in Maruleng participating in the food value chain – what do I need to be aware of?

What are some of the challenges that emerging farmers on the ground face?

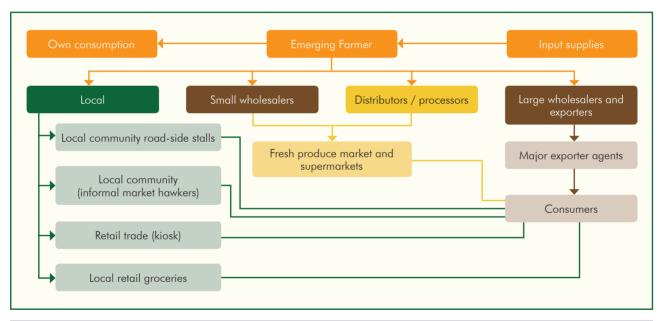
The emerging farmers in the case study area, particularly T3, 4, 5 and 6, face a range of challenges when it comes to their farming operations. For instance, many of the farmers do not have record keeping systems, and therefore find it difficult to estimate how much water they use and whether they practice water conservation. Financial resources are also a big problem, with many farmers not being able to source the capital to invest in tractors, farming implements and irrigation infrastructure and only making enough to pay their farm labourers and keep their farms going. Finally, many of the emerging farmers do not have the know-how and experience to run a farm and expressed a need for mentors and or sustainable strategic partnership relationships.

How do these challenges fit into a food value chain?

The challenges listed above are often the reason why farmers find themselves "stuck" in a particular position within a food value chain and are not easily able to progress along the value chain. A value chain is often recognised as a network of economic transactions and relates, or describes, the flows or exchanges of goods and services (Crafford et al., 2013). A food value chain therefore shows us the links between the production, processing, storage, marketing, distribution and retail of farm or food products (UNIDO, 2009). More simply put, a food value chain shows us the important steps from growing the food on the farm to getting it to the consumer.

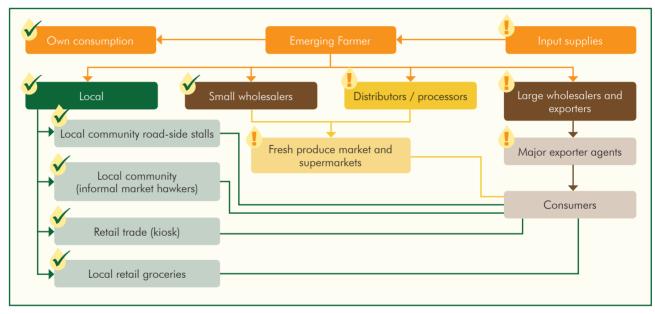
Emerging farmers' participation in food value chains in Maruleng

It is important to understand that food value chains can be very broad, but also very specific to a certain geographical area and even a certain type of crop. The project team's research in the Marulena Municipal Area tried to understand the food value chains of emergina farmers in the context of land and water allocation reform. The project team's research revealed a typical³ food value chain for emergina farmers in the Maruleng Municipal Area, which looks like this:



³ Please note this is a generic representation of a broad range of crops across a variety of types of emerging farmers in the Maruleng Municipal Area. The purpose is not to stipulate specifics, but rather to highlight general trends.

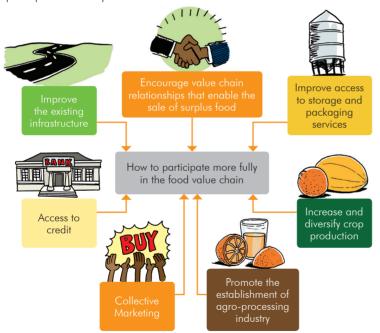
While this chain might look quite typical, the project team's research revealed the areas in the chain that require more attention. Below is the Maruleng Municipal Area's food value chain, but this time with some more information:



In this version of the food value chain, the project team has indicated the areas that, according to our research findings, need more attention. From this food value chain it is evident that emerging farmers in the Maruleng Municipal Area are generally good at entering the local informal market (marked with a \checkmark). However, very few emerging are able to move beyond the local market. While a few emerging farmers are able to access regional and even national markets (through Woolworths contracts for example), hardly any are able to do so, and none that we interacted with were able to access international markets (marked with a ?). This is important information to have for you to help emerging farmers develop their farming enterprises in the Maruleng Municipal Area.

How can I improve emerging farmers' participation in food value chains?

There are a number of ways in which you, as a policy advisor, can boost emerging farmers' participation in the Maruleng Municipal Area's food value chain. In the following section we summarise seven interventions that can help emerging farmers participate more fully in their local food value chain.



Improve the existing infrastructure

Inadequate infrastructure and incomplete markets in rural areas are often the reasons for high food prices. Poor road infrastructure may raise transport costs. In cases where processing takes place outside the Maruleng Municipal Area, food will then be brought back to the area at high cost. Therefore there is a need to upgrade and improve existing market and road infrastructure in the area so as to enable emerging farmers to progress from their current position in the food value chain

Encourage value chain relationships that enable the sale of surplus food

For farmers who are new to agriculture (emerging farmers), surplus crop production typically occurs in small quantities. This limits the potential to market their surpluses. Value chain relationships that can create new market opportunities for these farmers to be involved in food value chains should be encouraged. For example, a value project that focuses on linking farmers with transporters, processors, wholesalers, retailers and final consumers and trains farmers to pool their resources will create more income and thereby encourage farmers to participate more fully along the food value chain.

Improve access to storage and packaging services

Facilitating access to storage facilities for emerging farmers can reduce post-harvest loss. There is therefore a need to establish a warehouse receipt system that enables farmers to store and package crops (thereby adding value), when they would otherwise be forced to sell earlier. Such systems can support income smoothing and assist farmers to manage risks associated with variations in production between the harvesting season and the off season.

Increase and diversify crop production

There is a need to improve the capacity of emerging farmers to produce increased quantities of diversified crops for their own consumption and for sale. Emerging farmers in the Maruleng Municipal Area produce a variety of agricultural products. Some of the most common agricultural products produced by emerging farmers are maize, green beans, potato/sweet potato, tomato, cabbage, spinach and mango. There is therefore room for emerging farmers to consider producing other varieties of crops such as avocado, citrus, butternuts, pumpkin, red chillies, green squash, litchi, sugar beans, banana and guava. Production of these crops will ensure that farmers enter into other food value chains as well.

Promote the establishment of agro-processing industry

Development of an agro-processing industry in the area can improve the productivity of food production. Such an industry should focus on improving access to improved varieties of seed and markets, capacity building and linking producers to markets. An agro-processing industry could also assist farmers in the area to engage in food production, processing, manufacturing, packaging and distribution so that farmers are able to participate fully in the food value chain.

Collective marketing

There is increasing evidence from both research and practice that one way for small scale farmers to overcome market failures and maintain their market position is through organisation into farmer groups or a producers' organization. Acting collectively, small scale farmers would be better positioned to reduce transaction costs for their market exchanges, obtain necessary market information, secure access to new technologies, and tap into higher-value markets. This would allow them to compete more effectively with large farmers and garibusinesses. In order for small scale farmer groups to be able to compete in markets effectively, there is a need for certain basic interventions to take place. These should include improving rural infrastructure, providing extension services. making credit markets accessible to the poor, and making relevant market information available. Since the main challenge for small scale farmers to engage in markets is high transaction costs, such interventions would lower the costs for farmer groups to participate in markets, creating additional incentives for them to organise around an appropriate marketing activity.



How can I assist these farmers and the agricultural extension officers that look after them?

To summarise, beneficiaries of land and water reform need to be made aware of what to expect when embarking on the challenging road of becoming a commercial farmer. They need to be given the opportunity to acquire the knowledge and resources to become commercial farmers if they want to. At the same time, the government might need to consider what other options could be available to emerging farmers if they do not aspire to farm commercially and

develop a strategy to further develop such potential options. It is important for national government to assist extension officers to raise awareness about these issues amongst all kinds of emerging farmers (see types of farmers above).

Training for emerging farmers with commercial aspirations could take the form of training days presented by extension officers and non-governmental organisations (NGOs) and learning workshops where farmers share their experiences and learn from each other. You, as a policy advisor, might also benefit from attending such events. Being exposed to "on the ground" experiences and challenges of emerging farmers is crucial to making decisions that will benefit them in future.

REFERENCES:

CENTRE FOR DEVELOPMENT AND ENTERPRISE (CDE). 2005. Land reform in South Africa: a 21st century perspective. Research Report No. 14. CDE: Johannesburg.

DAVIS, N. & LAHIFF, E. 2011. Africa's land reform programme: strategic partnerships or strategic resource grab? Paper presented at the International Conference on Global Land Grabbing, 6-8 April 2011, Brighton, United Kingdom.

DENISON, J. & MANONA, S. 2007. Principles, approaches and guidelines for the participatory revitalisation of smallholder irrigation schemes (Volume 1 of 2), A rough guide for irrigation development practitioners, WRC Report No TT 308/07. Pretoria: Water Research Commission

DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES (DAFF). 2008. Land and Agrarian Reform Project (LARP). Concept document. Internet: http://www.daff.gov.za/daffweb3/Programmes/LARP. Accessed: 6 March 2014.

DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES (DAFF). 2014. Comprehensive Agricultural Support Programme (CASP). Internet: http://www.daff.gov.za/daffweb3/Programmes/Comprehensive-Agricultural-Support-Programme. Acccessed: 6 March 2014.

DEPARTMENT OF RURAL DEVELOPMENT AND LAND REFORM (DRDLR). 2011a. Green Paper on Land Reform. Government Gazette, 16 September 2011. NO. 34607. Pretoria: Department of Rural Development and Land Reform.

DEPARTMENT OF RURAL DEVELOPMENT AND LAND REFORM (DRDLR). 2011b. Personal communication with government official. 27 January 2011. Pretoria, South Africa.

DEPARTMENT OF RURAL DEVELOPMENT AND LAND REFORM (DRDLR). 2014a. Comprehensive Rural Development Programme. Internet: http://www.ruraldevelopment.gov.za/about-us/growing-tomorrow-tv-programme/309-growing-tomorrow/515-comprehensive-rural-development-programme-update-12-september-2013#.Uxh16oVNdSQ. Accessed: 6 March 2014.

DEPARTMENT OF RURAL DEVELOPMENT AND LAND REFORM (DRDLR). 2014b. Recapitalisation and Development Programme. Internet: http://www.ruraldevelopment.gov.za/services/land-reform/recapitalization-and-development#.Uxh3z4VNdSQ. Accessed: 6 March 2014.

DEPARTMENT OF WATER AFFAIRS AND FORESTRY (DWAF). 2006. A strategy for water allocation reform in South Africa. Pretoria: Department of Water Affairs and Forestry.

DEPARTMENT OF WATER AFFAIRS (DWA). 2014. Compulsory Licensing. Internet: http://www.dwaf.gov.za/WAR/compulsorylicensing.aspx. Accessed: 6 March 2014.

FUNKE, N. & JACOBS, I. 2011. Integration challenges of water and land reform: a critical review of South Africa. In Current Issues of Water Management, edited by U. Uhlia, Rijeka, Croatia: InTech Publishers.

GREENBERG, S. 2010. Status Report on Land and Agricultural Policy in South Africa, 2010. Research Report 38, Programme for Land and Agrarian Studies. Cape Town: University of the Western Cape.

GROENEWALD, J.A. 2004. Conditions for successful land reform in Africa. South African Journal of Economic Management Science, 7, 4, 673-682.

KARAR, E. & HOLLINGWORTH. B. 2008. Redressing inequities through irrigated agriculture in South Africa. IWRM-IHP Cape Town. Internet: http://www.wrc.org.zg/Other%20Documents/Website%20direct%20links/093.pdf, Accessed: 6 March 2014.

LIEBRAND, J. 2007, Securing water through land: field findings on water reform and water re-allocation in South Africa: Trichardtsdal, Ofcolaco and Leydsdorp. M.Sc. thesis, January 2007, Irrigation and Water Engineering Group, Wageningen University, the Netherlands. MARULENG LOCAL MUNICIPALITY. 2011. Integrated Development Plan 2011/2016. Internet: http://www.maruleng.gov.za/docs/idp/ MARULENG%20IDP%202011-12.pdf. Accessed: 6 March 2014.

MARULENG LOCAL MUNICIPALITY, 2011, Integrated Development Plan 2011/2016, Internet: http://www.marulena.gov.za/docs/idp/ MARULENG%20IDP%202011-12.pdf, Accessed: 6 March 2014.

MOLETELE COMMUNAL PROPERTY ASSOCIATION (CPA). 2008. Moletele Bulletin. October 2008. Issue 2 Volume 1. Moletele Communal Property Association.

NATIONAL DEPARTMENT OF AGRICULTURE (NDA), n.d. National guidelines for integrated management of agricultural water use. An integrated approach to upliftment and local economic development through the transformation of state support for agricultural water use. Internet: http://www.google.co.za/url?sa=t&rct=j&g=&esrc=s&source=web&cd=2&ved=0CCwQFjAB&url=http%3A%2F%2Fwww.dwaf. gov.za%2FDocuments%2FOther%2FAgricWaterUsePolicy2407002,pdf&ei=HnUYU9XEB-ik7Qbi3IGICQ&usg=AFQjCNHjwuaT 7e 4 6pomRXDUQP-grv42A. Accessed: 6 March 2014.

SCHREINER, B. & HASSAN, R. M. 2011. Transforming water management in South Africa: designing and implementing a new policy framework. Global Issues in Water Policy Series, Vol. 2. Springer: London and New York.

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANISATION (UNIDO), 2009. Agro-Value Chain Analysis and Development: AN UNIDO Approach, UNIDO: Vienna.



