APPROACHES FOR EMERGING FARMER PARTICIPATION IN WATER RESOURCE MANAGEMENT: THE CASE OF THE BREEDE-GOURITZ CATCHMENT MANAGEMENT AGENCY (BGCMA), WESTERN CAPE

Report to the
WATER RESEARCH COMMISSION

by

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EXECUTIVE SUMMARY

BACKGROUND

When the National Water Act (NWA) was enacted in 1998, one of the major aims was to ensure equity in sharing water resources. Chapter 8, Sections 91 and 98 of the Act, makes provision for the setting up of water user associations (WUAs), cooperative associations of individual water users who wish to undertake water related activities for their mutual benefit. WUAs are supposed to act as vehicles for poverty reduction, especially for historically disadvantaged individuals (HDIs). Water allocation reforms followed the NWA in 2005, 2008 and 2011, with particular emphasis on HDIs. In agriculture, the major focus was on resource poor emerging farmers. However, after many years of water allocation reform, emerging farmers are still lagging behind as far as equity and access to water resources is concerned, and their participation in WUAs is still limited or passive. The catchment management agencies (CMAs), that have the mandate to provide access to water to these farmers, are faced with various challenges, including water scarcity, drought, climate variability, and challenging institutional arrangements. The extent of these problems varies from CMA to CMA. This project was conceived as a result of discussions with the Breede-Gouritz Catchment Management Agency (BGCMA). The CMA had struggled to actively involve the public, especially resource poor farmers, in water resource management. Public participation was lagging in all BGCMA processes. As a result, there was still an outcry for equitable access to water in most parts of the CMA, especially from emerging farmers. The research project has therefore focused on emerging farmers. The main aim was to assess some of the issues and challenges that have resulted in limited progress in water allocation to HDIs in the BGCMA, despite all the efforts put into the processes; and to explore ways to alleviate the situation.

RATIONALE

Emerging farmer is a term used freely to refer to a range of farmers – farmers that have recently bought land, those that are developing, those that have poor resources and are mainly black farmers that were previously disadvantaged and having small-scale farms. Most emerging farmers are struggling to achieve commercial success and do not individually own land areas of more than 20 hectares. These farmers require grants for land access and property rights, and other farmer support.

Emerging farmers are stakeholders in the BGCMA and they are top of the priority list in terms of water allocation. The BGCMA developed its own water allocation reform strategy in order to meet the needs of emerging farmers and to improve their participation in water resource

management. Some emerging farmers are members of WUAs and other cooperatives in which they are involved in water resource management in their local areas and where skills transfer is done and networking is available. However, those who are not in WUAs are still struggling to access water for agricultural use, although the BGCMA is trying to ensure that emerging farmers get priority. The CMA initially conducted meetings with representatives of the resource poor farmer community to gain knowledge and understanding of their needs. This proved not to be enough to engage the farmers as they needed to be engaged in deeper and more participatory platforms. A number of questions arose around these farmers:

- What methods should the BGCMA use in order to identify the real problems and challenges that emerging farmers face?
- How can the BGCMA create trust and a level ground for participation in WUAs?
- How can HDIs and emerging farmers be made to feel that they are active and equal partners in the water re-allocation process?

The project tried to answer some of these questions on behalf of the BGCMA. The research team carried out initial scoping visits to case study sites and two sites were selected with the help of the BGCMA. The selection was based on the water allocation history of the case study areas and presence or absence of an active WUA.

OBJECTIVES AND AIMS

1. Review progress in accessing water resources by emerging farmers in two selected areas in the Breede-Gouritz Catchment Management Agency.
2. Explore the roles played, and challenges faced, by emerging farmers in participating in water user associations.
3. Explore opportunities for engaging emerging farmers' participation in water user associations and water allocation processes.
4. Develop a general approach for engaging emerging farmers' participation in water user associations in the Western Cape (and South Africa).

METHODOLOGY

The project started with a desktop review of the current role and influence in water resource management of the different stakeholders within the BGCMA. This was followed by stakeholder interviews with water related institutions to find out how each institution perceived their role in allocating water to HDIs and emerging farmers. This was followed by interviews and meetings with emerging farmers in the Hex Valley Water User Association, then interviews, meetings and focus group discussions with Barrydale Small Scale Farmers. The

findings were presented at a water institutions workshop held in October, 2015. At that stage, the project took an interesting turn with the institutions now wanting to play an active role in the project process. A number of dialogues were held with the institutions, while surveys and focus group discussions continued with the emerging farmers. A combined workshop was held at the BGCMA annual water seminar in March, 2016, where emerging farmers and institutions agreed on finding common solutions. Further dialogues between institutions, the research team and the farmers resulted in prioritisation of the compilation of a farmer information package. The information was shared during two information roadshows where attendance was surprisingly huge.

RESULTS AND DISCUSSION

The results are summarised according to the original aims of the project.

Aim 1 and 2: *Review progress in accessing water resources by emerging farmers in two selected areas in the Breede-Gouritz Catchment Management Agency, and explore the roles played, and challenges faced, by emerging farmers in participating in water user associations.*

The South African government has enacted legislation and policies to address access to water by emerging farmers since 1994. The water allocation reform strategy even came up with targets for historically disadvantaged individuals. However, there is evidence that the legislation and reforms have failed to address equity issues in the water sector despite all the legal instruments and policies put in place.

All water related institutions, including agriculture, have policies and strategies to support emerging farmers. The support is however not coordinated and it is ineffective in many ways.

The farmers in the Hex Valley Water User Association have access to water through WUA policies and processes that cater for them. The farmers also have access to government subsidies which allow them to pay the required fees. However, these farmers are few.

Emerging farmers in the Barrydale Small Scale Farmers Association face the following major challenges:

- Shortage of water for agricultural activities due to lack of infrastructure to capture and store water. They experience seasonal shortage of water and the water is also too expensive for certain individuals.
- Lack of information on water legislation and processes. Farmers suspect that the municipality and leadership are withholding information. Farmers did not know who was in

charge of water in the municipality, and there was lack of information sharing within the group. Farmers also lack training in farming.

- Lack of funding and no access to grants and loans has resulted in a lack of, or inappropriate, infrastructure. Funding for emerging farmers is also not understood. There were no start-up programmers to support farmers.
- Land shortage is an issue. Most farmers do not have a contract for the land they are using, or, if they do have a contract, the contract is short term and the rules relating to use of the land are not clear. Some plots are too small.

Aim 3: *Explore opportunities for engaging emerging farmers' participation in water user associations and water allocation processes*

Initial engagement with institutions yielded fruitful discussions and a commitment to address the challenges that farmers face. The institutions were cognisant that they could not change policy at local level, but they were prepared to address those issues that were within their mandate. Three areas were identified as critical for the success of emerging farmers:

- Information sharing
- Land rights (and long-term leases)
- Proper business plans when applying for water.

The institutions decided to tackle the information problem because it was already within their mandate to share information with farmers. The institutions already had public information that they were sharing with farmers, but the major problem was that it was not in one place and farmers did not know which offices to approach. The institutions therefore agreed to compile an information package as a group that they could share with farmers. The information covered the following areas for each institution: mandate, legislation, programmes, funding model, how farmers can access funds, and contact details (if there is a general contact for the Western Cape).

The information was first shared with farmers in a pilot roadshow with the Barrydale Small Scale Farmers. Sixty-two farmers and institutional representatives attended the pilot roadshow in Barrydale on 3 November, 2016. There was a presentation by an emerging farmer from the Hex Valley Water User Association. The farmers hailed the roadshow as one of the best interactions they had had with the institutions. After the roadshow, the institutions held a review meeting and decided that, instead of presentations, they would use the café style approach for future roadshows. A second roadshow was held in Caledon on 15 March, 2017, and this time 106 people attended including a representative of the Land Bank. The café style

approach worked well, and this is probably the approach that the group will adopt for future roadshows.

Aim 4: *Develop a general approach for engaging emerging farmers' participation in water user associations in the Western Cape (and South Africa)*

A general approach for engaging emerging farmers' participation in WUAs and water resource management was developed for water institutions in the Western Cape (and South Africa). A farmer information package was compiled and the team will continue to reach out to more farmers through roadshows. The team will eventually place the package in a web platform that will be accessible even via mobile phones. The platform will be regularly updated, so this is a sustainable outcome that should last for years.

The research team and the institutions will continue to work together until the end of 2017. Funding to complete the work has been acquired from the BGCMA.

CONCLUSIONS AND LESSONS LEARNT

The objectives of the project were largely met. However, there are a number of lessons from this project:

Benefits to sharing research results early in the project

The project allowed for sharing of results early in the project. When the results were presented to the water institutions, the rest of the research became a truly collaborative process, with phenomenal outcomes for everyone.

Researchers as facilitators rather than criticisers

The research team took a facilitative approach throughout the project. It was explained to the farmers at the start of the project that the team was there to collect evidence that will be passed on to relevant institutions. The team lived up to its promises by bringing the institutions and the farmers under one roof. As much as there were no immediate solutions to the farmers' problems, trust was built between the farmers and the institutions.

Institutional collaboration works better as a bottom-up process

It can be concluded from the experiences in this project that the collaboration worked well because the engagement was bottom up. The team presented the findings to the officers who have day-to-day interaction with the farmers and so could relate to the problems because they

experienced them on a daily basis. As a result, it was easy to collectively discuss and find solutions.

RECOMMENDATIONS FOR FUTURE RESEARCH

One of the surprising findings of the project was the diversity of smallholder and emerging farmers in terms of farm size and ownership, resource endowment, farming objectives, etc. It appears as if farmer characteristics are not understood, and policies are set up as one-size-fits-all leading to deepening poverty for emerging and smallholder farmers. Even if the government was to provide water to all the farmers, there is no guarantee that the water will improve the farmers' lives because their livelihoods are not understood and catered for. There is, therefore, a need to classify and understand farmer characteristics so that relevant strategies can be developed, based on livelihoods and capability.

After successful engagement with the farmers, the team did not come up with a clear exit strategy for the Barrydale Small Scale Farmers. There is need to define what can be done to ensure that resource poor farmers will have access to water once they have all the information support they need from institutions. Should the team set up a pilot project that the farmers will implement? The BGCMA is currently the institution driving the process in collaboration with the Department of Water and Sanitation. There is need for these two institutions to take the project model up within their institutions for further action so that this does not remain a successful roadshow without further action.

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LIST OF ABBREVIATIONS

AFASA	African Farmers Association of South Africa
AIMS	Agriculture information management system
BGCMA	Breede-Gouritz Catchment Management Agency
BOCMA	Breede Overberg Catchment Management Agency
BSSF	Barrydale Small Scale Farmers
CCAW	Consultative Committee on Agricultural Water
CDD	Community-Driven Development
CEO	Chief Executive Officer
CMA	Catchment management agency
CPUT	Cape Peninsula University of Technology
DoA	Department of Agriculture
DRDLR	Department of Rural Development and Land Reform
DWA	Department of Water Affairs
DWAF	Department of Water Affairs and Forestry
DWS	Department of Water and Sanitation
ELU	Existing Lawful Use
FSD	Farmer Support Development
GA	General Authorisation
GIS	Geographic Information System
GWS	Government Water Scheme
HDI	Historically Disadvantaged Individual
HVWUA	Hex Valley Water User Association
IB	Irrigation Board
ICT	Information and Communication Technology
NWA	National Water Act
NWPR	National Water Policy Review
PLAAS	Poverty, Land and Agrarian Studies
RDP	Reconstruction and Development Plan
REID	Rural enterprise and industrial development
RRA	Rapid Rural Appraisal
SADC	Southern African Development Community
WAP	Water Allocation Plan
WAR	Water Allocation Reform
WARMS	Water Authorisation and Registration Management System
WCDoA	Western Cape Department of Agriculture
WMI	Water management institutions
WRC	Water Research Commission
WRM	Water resource management
WUA	Water user association

1 INTRODUCTION AND OBJECTIVES

1.1 Introduction

Water resources management presents enormous challenges in South Africa. Access to, availability and distribution of water are historically highly skewed (Seetal and Quibel, 2005), and inequality still prevails (Movik, 2011). The skewedness is a result of long-term imbalances that date back to the 17th century. Access to water and land was governed by laws which tended to benefit a few in the past. South African water legislation was based on the Roman and Dutch riparian rights principle which gave access to water to those who owned the land, who were a minority white population which owned at least 87 percent of the land (Guelke and Shell, 1992; Seetal and Quibel, 2005). Since 1994, South Africa has gone through a range of policy and legislation review processes in both water services provision and water resource management to address the skewedness and to redress the wrongs of the past, particularly in relation to racial and gender discrimination. The country has also been committed to poverty eradication (Schreiner and Naidoo, 2001).

1.2 Overview of Water Allocation Reform Processes in South Africa

This section will cover the water policy trajectory in South Africa, pre- and post-democracy.

1.2.1 Water Allocation in South Africa Pre-1994

Water was commonly owned in South Africa and people were free to use it, until the arrival of the Dutch East India Company and Jan van Riebeeck in 1652. The Dutch arrived and introduced a system of private land ownership, which placed the indigenous Khoikhoi people under pressure, as they used to use the water and land freely. The Dutch East India Company made many changes in the Cape, such as taking up the land from the indigenous people. The lands and the water resources and pasture were denied to the Khoikhoi pastoralists who found it increasingly difficult to sustain themselves in a land in which access to limited water resources was necessary for survival (Guelke and Shell, 1992). This forced the indigenous people to work for the Dutch East India Company. The Dutch rule ended in 1805, and then the British government took over and started expanding the process of water, land and institutional reform. The British government came with two new major developments, which were the permanent land tenure system and the formalisation of the riparian principle. The government placed major focus and importance on irrigation and agriculture, which led to the promulgation of the Irrigation Act of 1912 (Funke et al, 2007).

The National Party came into power in 1948 and introduced the apartheid government, which promoted an increase in the number of water resource projects to stimulate economic

development of the country. The government also initiated a number of Acts that increased its control over water resources and gave rise to the Water Act of 1956 (Funke et al, 2007). These Acts also included the National Land Act, which led to 80% of the black population occupying less than 20% of the land. The 1956 Water Act entrenched riparian rights, which also led to inequalities in water access across race (Kidd, 2011). The Acts affected mostly the black community to the extent that it affected their access to potable water and sanitation (Msibi and Dlamini, 2011).

The Water Act of 1956 made a clear distinction between private and public water (Kidd, 2011). Private water was defined as all the water that rises or flows naturally on any land or naturally drains or flows on one or more original grants but is not for common use for irrigation. The exclusive use and enjoyment rested on the owner of the land on which the water was flowing or rose, but the owner was not permitted to pollute it. Public water was defined as the water that flowed or was found or derived from the bed of a public stream, whether it was visible or not (Vos, 1978; Kidd, 2011). The right to use public water was divided into agricultural, urban and industrial purposes. Riparian owners were allowed to use public water for agricultural and urban purposes, but not to infringe the rights of other riparian owners in using the water (Kidd, 2011).

The emergence of democracy in 1994 provided South Africa with an opportunity for government to revise legislation to repeal the old apartheid laws and create equal opportunities, and also to address crippling poverty affecting the majority of the population (Seetal and Quibel, 2005).

1.2.2 Water Policy Review

The water law review process started in 1995 with a public booklet which was aimed at stimulating debate on water rights and soliciting comments which were incorporated into a set of principles by a water law review panel (Seetal and Quibel, 2005). The principles were approved by cabinet in 1996. The principles were followed by the 1997 White Paper on a National Water Policy for South Africa which described the framework for water management in South Africa. The main objectives of the document were not just to promote equity in access to and benefit from the nation's water resources for all South Africans, but to make sure that the needs and challenges of South Africa in the 21st century could be addressed. Some of the key proposals which were to guide water management in South Africa were:

Water as a national resource

The White Paper confirms and formalises the status of water resources as an indivisible national asset. All water is part of a common resource and will be required to meet the goals of water resource management, subject to a common approach. National Government will act as custodian of water resources and will exercise the powers of a public trust.

Water as a right

Only water required to meet basic human needs and maintain environmental sustainability will be guaranteed as a right. This will be known as the Reserve. All other water usage will only be recognised if it is beneficial to the public interest.

Obligations to South Africa's neighbours

In shared river basins, Government will be empowered to prioritise other uses to ensure that the requirements of neighbouring countries are met. Management will be carried out in regional or catchment water management areas. Provision will be made for phased establishment of catchment management agencies.

System of allocation

The Riparian System, whereby the right to water is tied to the ownership of land along rivers, will be abolished. Under the new system, allocations will be made on the basis that it promotes water use that is optimal and for the achievement of equitable economic and social development. The new system of allocations will be phased in, beginning with water management areas already under stress. It will use water pricing, limited term allocations and other administrative mechanisms to create a balance between the demand and supply of water.

Water charges

To promote equitable access to water for basic human needs, provision will be made for some or all water charges to be waived. Further, to promote access for disadvantaged communities, some or all the charges of water used for productive purposes may also be waived. Users will be charged, on an equitable basis, the full financial costs of providing access to water. All water use, wherever in the water cycle it occurs, will be subject to a catchment management charge and resource conservation charge.

Water resource protection

All sectors must develop a water use, conservation and protection policy, and regulations will be introduced to ensure compliance in key areas. Farming, including agriculture and forestry

plantations, and the mining industry will have to re-evaluate their use of and impact on our water resources, and will have to pay a price that reflects the real economic costs of water.

This White Paper was developed over two years of hard work and wide consultation and the product was a very summarised product of the water law review process. It did, however, outline the direction for the development of water law and water management systems for South Africa.

1.2.3 The Water Services Act, No. 108 of 1997

Building on the foundations laid by the 1994 White Paper on Water Supply and Sanitation, and in close consultation with organised local government, a new Water Services Bill, regulating water supply and sanitation services, was drafted. The Water Services Act (Act 108 of 1997) also gave legal force to the mandate of the Reconstruction and Development Plan. It is the governing legislation for water services and sanitation and provides for:

- rights of access to a basic water supply and basic sanitation
- the setting of national standards and of norms and standards for tariffs
- water services development plans
- a regulatory framework for water services institutions and water service intermediaries
- the establishment and disestablishment of water boards and water service committees and their powers and duties
- the monitoring of water services and intervention by the minister or by the relevant province
- financial assistance to water services institutions
- certain general powers of the minister
- the gathering of information in a national information system and the distribution of that information.

1.2.4 The National Water Act, No. 36 of 1998

The main purpose of the National Water Act (NWA) of 1998 is to provide for fundamental reform of the law relating to water resources; to repeal certain laws; and to provide for matters connected therewith. Redressing the issues of past racial and gender discrimination, promotion of equitable access to water and facilitation of social and economic development are some of the issues that the act takes into account (Water Act, 1998).

The purpose of the NWA of 1998 is to ensure that the nation's water resources are protected, used, developed, conserved, managed and controlled in ways which take into account, amongst other factors:

- meeting the basic human needs of present and future generations;
- promoting equitable access to water;
- redressing the results of past racial and gender discrimination;
- promoting the efficient, sustainable and beneficial use of water in the public interest;
- facilitating social and economic development;
- providing for growing demand for water use;
- protecting aquatic and associated ecosystems and their biological diversity;
- reducing and preventing pollution and degradation of water resources;
- meeting international obligations;
- promoting dam safety;
- managing floods and droughts.

The Act also established institutions such as catchment management agencies (CMAs) that manage water resources at a local level. According to the NWA (1998), CMAs are required to develop a catchment strategy for their area of jurisdiction that corresponds with the national water strategy and engages stakeholders and interested people. The catchment strategy also needs to include a water allocation plan, which sets out principles for the allocation of water to existing and prospective users and takes into account the protection, use, conservation, management, development and control of water resources (NWA, 1998; Funke et al, 2007).

1.2.5 The Creation of Catchment Management Agencies

The establishment of CMAs is contained in Sections 77-90 of the 1998 Water Act. The purpose of the CMA is to delegate water resource management to the regional or catchment level and to involve local communities, within the framework of the national water resource strategy. The creation of the CMA can be initiated by the community or stakeholders of an area. The information needs to be communicated to the Minister, or the Minister can initiate the process. In order to create the CMA, a proposal needs to be written, usually by the Minister. The proposal needs to contain:

- a proposed name for the CMA and a description of the area which the CMA will serve;
- a description of water resources in the area and how these resources are managed, controlled, developed, protected and conserved;
- a description of the proposed CMA functions and how it will be funded;

- the feasibility of the proposed CMA in terms of technical, financial and administrative matters;
- indication of consultation with stakeholders, communities and any interested and affected parties.

When the proposal is finished, it needs to be published in the Government Gazette and be open for comments for 60 days. After that, the proposal and the comments are taken into consideration; then the decision is made for the CMA to be established and published. The Minister then appoints a board which performs the initial functions. The appointment of board members is done by the Minister, but the members are elected by various water users. The Minister can also elect and appoint board members, the chairperson, deputy chairperson and a chief executive officer. The CMA may also establish committees which will help in performing functions of the CMA. After establishment, the CMA will then perform initial functions which are:

- to investigate and advise interested and affected persons on the protection, use, development, conservation, management and control of the water resources in its water management area;
- to develop a catchment management strategy;
- to coordinate the related activities of water users and of the water management institutions within its water management area;
- to promote the coordination of its implementation with the implementation of any applicable development plan established in terms of the Water Services Act (Act No. 108 of 1997);
- to promote community participation in the protection, use, development, conservation, management and control of the water resources in its water management area.

Additional functions can be assigned to the CMA, and these may include the establishment of water use rules and management systems, to direct users to terminate illegal uses of water, and to temporarily limit the use of water during periods of shortage. The CMA may be financed by the state from water use charges made in its water management area or from any other source. However, the CMA also needs to raise funds in order to support its functions (NWA, 1998).

1.2.6 The Role of Water User Associations

Water user associations (WUAs) are enacted in Chapter 8 (Sections 91-98) of the Water Act of 1998. The establishment of a WUA follows the same process as a CMA, which is proposal

writing and submission of the proposal in the Government Gazette (NWA, 1998). A proposal for the establishment of a WUA must contain at least:

- the reason for making the proposal
- a proposed name and area of operation for the association
- the proposed activities of the association
- a description of any existing or proposed waterwork within the proposed area of operation which is relevant to the proposed activities of the association
- a description of the water-use licences and any other authorisations which the proposed members hold or intend applying for
- the proposed constitution and a list of members of the association
- an indication as to whether there has been consultation in developing the proposal and the results of the consultation.

Most of the WUAs in South Africa are transformed from irrigation boards. WUAs operate at a restricted localised level and are in effect cooperative associations of individual water users who wish to undertake water related activities for their mutual benefit. The association may exercise management powers and duties only if these have been assigned or delegated. The Act also enables individual water users who wish to undertake water related activities for their own benefit to form cooperative associations (Masangu, 2009). In WUAs where there are emerging farmers it is expected that the more experienced farmers will assist these farmers through skills transfer and assistance in other matters (Saruchera, 2008).

1.2.7 Position Paper for Water Allocation Reform (2005)

The draft Position Paper for Water Allocation Reform for South Africa (DWAF, 2005) highlights the importance of equitable access to water, or to the benefits derived from using water for eradicating poverty and promoting growth. Allocation is defined as the allocation of “allocable water” in catchments that are not water stressed. The objectives of the position paper were to provide greater clarity on how water allocation would be undertaken in future. The intention was to provide a stable environment for existing lawful users of water, while taking positive steps towards the allocation of water to historically disadvantaged individuals (HDIs) in society. The position paper recognised that while water allocation was founded on sound water resources management approaches, it was also profoundly a social, political, economic and legal process. The framework outlined in the document sought to identify and present an appropriate balance for the process, taking account of the implications of all the factors.

The draft document interpreted and consolidated the intent and ideals of South Africa's Constitution, the Water Law Principles (from the National Water Policy) and the NWA as guidelines for the water allocation reform process. These guidelines were a reminder of the concerns and issues raised by stakeholders over the previous ten years and re-stated these in the context of the approaches for water allocation reform. These guidelines therefore provided:

- A link between the Constitution, the Water Law Principles in the National Water Policy, the NWA and the water allocation reform process;
- A basis for stakeholders to contribute to and influence the development of approaches to water allocation and re-allocation;
- A commitment to stakeholders regarding the intent of the process;
- The basis for developing the water allocation principles that must be included in catchment management strategies (NWA, Section 9 (e)).

The guidelines helped in shaping approaches to water allocation (DWAF, 2005). They also became critically important for developing methods for water allocation to make it possible to:

- Take proactive steps to meet the water needs of HDIs and the poor;
- Ensure participation by HDIs and the poor;
- Work with other agencies to help build capacity to use water productively;
- Promote the sustainable use of water resources;
- Promote the beneficial and efficient use of water in the public interest.

Water allocation is the Department of Water Affairs and Sanitation's key programme for redressing the inequalities caused by past laws. Water Allocation Reform (WAR) describes a number of processes that will ensure equitable, productive, and sustainable allocation of water. The focus is on activities that promote applications that address race and gender reform, as well as those that support the establishment of viable water using enterprises. WAR also includes actions to facilitate authorisation of those water uses that represent the most beneficial use of water resources in the public interest. The strategic intent of WAR was ultimately to achieve the following:

- Redress both race and gender inequality
- Sustainable and efficient water use
- Support socio-economic initiatives
- Support government programmes aimed at poverty eradication, job creation, economic development and rural development, i.e. broad government development objectives (BOCMA, 2010).

1.2.8 Water Allocation Reform Strategy (DWAF, 2008)

The need for targets in water allocation arose out of the realisation that there was nothing against which to measure the success or failure of the WAR programme. Targets were essential in ensuring that resources were channelled towards the achievement of the strategic goals. They would serve as indicators of progress towards the attainment of these goals (DWAF, 2008). Inequalities were prevalent in water access or benefits derived from using water. It was critical to address these for eradicating poverty and promoting economic growth. These inequalities were based on race and gender, therefore black people and women remained disadvantaged (DWA, 2014; Msibi and Dlamini, 2009). In due recognition of the challenges facing the black beneficiaries of the WAR process, specific mechanisms to enable and empower blacks to access and exercise the new water licence opportunities were identified. The WAR strategy therefore set out objectives and targets in order to solve the imbalances in water access:

- By 2014, 30% of water must be allocated to blacks, and 30% of this water must be in the hands of women
- By 2019, 45% of water must be allocated to blacks, and 40% of this water must be in the hands of women
- By 2024, 60% of water must be allocated to blacks, and 60% of this water must be in the hands of women (DWAF, 2008; Msibi and Dlamini, 2011).

There were several strategic mechanisms and approaches by which the WAR strategy was to achieve the set targets. However, the process of WAR is very complex and it requires collaboration between institutions and, more importantly, public involvement. The approaches of WAR are there to facilitate and assist beneficiaries of WAR by all means and to achieve the objectives of WAR. The objectives of WAR are to:

- Take steps to meet the water needs of HDIs and the poor
- Ensure participation by these groups in water resource management
- Promote the sustainable use of water resources
- Promote the beneficial and efficient use of water in the public interest (DWA, 2014).

The strategy of WAR set out approaches or processes that were critical for the achievement of the WAR objectives. These included set-asides, general authorisations, strategic alignment with other national initiatives, compulsory licensing, and development support

Set-Asides

Set-asides refer to water that is set aside in a catchment specifically for allocation to black people. This water may come from water conservation, water demand management or from discovered illegal water use. Therefore, application for water licences will be open to blacks (DWAF, 2008).

General Authorisation

General Authorisation is a process that allows for the authorisation of a large number of people to take up water from a water course without the need to apply for a licence. The process is used to support the WAR process, both within compulsory licensing and in other areas, to make it easier for the rural poor to take up water. People taking up water under a General Authorisation may need to register their water use. Taking up water under the General Authorisation is applicable to specific groups of people or specific water resources, such as the following:

- Smaller scale emerging users would not need to be ready to apply for a licence;
- General authorisations can be adapted for specific regional and social needs;
- General authorisations can promote the uptake of smaller amounts of water by many people and hence can have a greater impact on poverty;
- They can allow for the gradual uptake of water by the poor, parallel with the gradual reduction of use by existing lawful water users (NWA, 1998; DWAF, 2008; DWA, 2014).

Compulsory Licensing

Compulsory licensing is a mechanism created in the NWA of 1998 in order to allow the Department of Water Affairs and Forestry to review all the water use in an area to make sure that:

- All South Africans have an equal opportunity to apply to use water;
- Water is shared out fairly;
- Everyone who wants to use water to improve their livelihoods, or for commercial purposes, can get a chance to do so;
- Water is used in the best and most efficient way possible, to the benefit of the public, the applicants, and the nation as a whole;
- Our water resources are protected and kept clean and healthy.

The compulsory licensing process is done through communication with various stakeholders. To achieve this process, the Department of Water Affairs and Sanitation (DWS) announces

the process about 6 to 12 months before the start of the process for licence application. The Water Allocation Plan (WAP) developed by the CMA indicates all the amounts of water required for all water uses and the amount of water available for further allocation. The WAP also indicates how this water will be allocated to different users. The WAP is then discussed with the stakeholders and the allocation process can proceed (DWS, 2014).

Development Support

Members of the targeted beneficiaries of WAR do not have the financial means to participate fully in economic activities based on water as a productive resource. This is because these members were disadvantaged, and most are located in rural areas. In order to facilitate and achieve the objectives of WAR, financial assistance is made available to these members in various forms. These forms include assistance for infrastructure, technical support and other types of support. Financial assistance is to enable the beneficiaries to take change of their farming activities, provide for the basic food requirements of their families and become economically independent commercial farmers (DWAF, 2008; DWA, 2014).

1.2.9 Water Allocation and the National Water Resource Strategy

The National Water Resource Strategy (NWRS, 2008, revised 2013) set out priorities that were articulated in the National Development Plan (National Planning Commission, 2011), which laid out the key drivers that will make change and shape the strategy. These priorities include the economy and development, economic infrastructure, an inclusive rural economy, education and innovation. The economic and development priorities were aimed at creating job opportunities. The water sector is required to ensure water conservation, integrated catchment management and resource protection. It also highlights the importance of ensuring that water is available to the economic sector in order to create jobs.

The economic infrastructure priority aims at ensuring that people have access to clean, potable water and that there is sufficient water for both agricultural and industrial use. It also aims at supporting HDI farmers. The water sector is required to ensure that existing water boards are expanded and the management of water resources is prioritised, especially at regional level. The inclusive rural economy priority aims at activating rural economies through improved infrastructure and service delivery. The water sector ensures WAR and accelerated infrastructure and water supply programmes.

South Africa aims to develop regional markets for food, energy and water and also to initiate water management agreements with neighbouring countries. The water sector is putting in

place institutional and trans-boundary agreements on water management. The educational and innovation priority aims to educate and raise awareness about water management, protection, use and conservation, and at creating and developing strategies to improve skills and production in the water sector (NWRS, 2013).

It has been recognised that water has social, economic and ecological value. It is especially difficult to pin down the ecological value of water. Therefore, it is important to put in place priories that will make it easier to allocate water between important competing uses. The NWRS 2013 put in place five allocation priorities. The first priority is the Reserve, the second is meeting international water requirements in terms of agreements with riparian countries, the third priority is the allocation of water for poverty eradication, to improve the livelihoods of the poor and marginalised and to contribute to gender and racial equity. The fourth priority is national economic purposes and the fifth priority is to ensure general economic purposes (NWRS, 2013).

1.3 Water Allocation in the Breede-Gouritz Catchment Management Agency

A business case for the formation of the Breede-Gouritz Catchment Management Agency (BGCMA), formally the Breede Overberg Catchment Management Agency (BOCMA), was developed after public consultation. A forum was established which consisted of all the stakeholders in the Breede Overberg area. A business case explored the purpose of the CMA, its powers, functions and associated risks. This led to a discussion on corporate form, and governance and institutional arrangements. The sections of the business case described the arrangements required to ensure that the entity is sufficiently empowered to deliver on its mandate while adequate systems and structures of oversight and control are maintained within government. The final draft of the business case for the BGCMA was submitted to the Department of Water and Sanitation (DWS) for approval by the Minister and it was subsequently gazetted.

Following extensive consultation, the Minister of Water Affairs and Forestry who was the executive authority for the CMA and accountable to parliament for the performance, compliance and entity appointed a governing board which consisted of the following representatives:

- Local Government - Integrated Planning
- Local Government - Water Services Authority
- Western Cape Provincial Government – Integrated Environmental Management
- Statutory Conservation and Environment

- Industry and business
- Commercial agriculture: Surface water scheme
- Commercial agriculture: Surface water non-scheme
- Commercial agriculture: Groundwater
- Emerging farmers
- Potential agricultural water uses by emerging farmers
- Farm workers on private property
- Access to water by the poor / rural settlements
- Civil society
- Water and environmental civil society / NGOs.

The appointed board was responsible for the development of the organisational structure of the CMA. As a new institution, the BGCMA focused on structures that would help to ensure financial viability and build trust among stakeholders. The CMA developed a strong corporate and financial structure and a strong stakeholder participation unit as well as strong technical water resource management (WRM) structures. A business plan which focused on organisational development, human resources, financial considerations and operating expenditure was developed. The CMA became functional with the appointment of the Chief Executive Officer (CEO) and staff in 2007.

1.3.1 Initial Functions of the BGCMA

The initial functions of the BGCMA, as stipulated in Section 80 of the NWA (1998), were:

- To investigate and advise on the protection, use, development, conservation, management and control of the water resources in its water management area;
- To promote coordination between implementation of the catchment management strategy and the implementation of water services development plans;
- To develop the catchment management strategy;
- To coordinate the activities of water users and water institutions;
- To promote stakeholder involvement and participation.

The BGCMA is accountable to the Minister but reports through the DWS. In order to play its coordinating and regulatory role, the BGCMA has a close cooperative relationship with the DWA, largely through the DWA regional office, but also with key line functions at the national office.

This organisation has achieved a lot within a short space of time. At the time of this study, the BGCMA was seven years old, and, since the beginning, it has been consistently building its own service delivery mechanisms, whilst discharging its mandate. The organisation achieved the adoption and approval of its first catchment management strategy for gazetting, and this has made the path of the CMA clearer than ever before. The uniqueness of the catchment management strategy is that it was developed with the water users. It followed a bottom-up approach whereby the end product articulates the objectives as informed by the affected and interested water users.

The BGCMA has also established partnership agreements with sister organisations from two Southern African Development Community (SADC) countries, namely the Olushandja Sub-basin Management Committee from Namibia and the Water Resource Management Authority of Zambia. It remains the BGCMA's assurance that the best way to promote sound water resources management principles is through working and sharing lessons with other organisations within SADC and Africa at large. To date, the BGCMA has gone beyond the first five initial functions of a CMA. Some of the highlights from the external auditor's report show that as the organisation has grown, so has its internal control systems, and these are signs of goodwill and commitment by the board and staff.

1.3.2 Water Allocation Reform Processes in the BGCMA

The BGCMA follows the DWA water allocation reform processes and modifies these processes where possible. The BGCMA has developed a catchment strategy for its area of jurisdiction which corresponds to the national water resource strategy (BOCMA, 2009 and BOCMA, 2012). A strategy for redressing social inequalities through water re-allocation to emerging farmers is a central issue for the BGCMA (BOCMA, 2010 and 2012). The catchment management strategy describes how water resources will be managed in the BGCMA and WAR is highlighted as one of the key priorities.

There are specific catchment management drivers that create a need for WAR in the BGCMA. These drivers include:

- The existence of communities of HDIs or potential emerging farmers who require water for agricultural purposes;
- The Reserve for the BGCMA is currently not being met;
- Existing lawful users who are using more than their authorised allocations;
- The catchment is in some parts currently over allocated with water uses;

- A certain volume of water needs to be made available in the catchment for dilution purposes;
- To retain an acceptable water quality (BOCMA, 2010).

The BGCMA has been, and is still, assisting the DWA in water licence applications in its area of jurisdiction, especially with previously disadvantaged communities. The CMA also assists in providing relevant information regarding the licence application process (BOCMA, 2012). The BGCMA and the Western Cape Regional Office of DWS held workshops to increase awareness and to resolve various challenges with water licence applications, as the process seems to be time consuming due to a knowledge deficit and other factors (BOCMA, 2010). The BGCMA also formed a partnership with the Department of Rural Development and Land Reform in order to ensure WAR through cooperative governance. The CMA also supports and assists in water resources planning and management issues in various water forums which include WUAs (BOCMA, 2012).

The CEO of the BGCMA launched a “meet and greet” campaign with the aim of meeting with stakeholders and particularly resource poor farming communities to gain knowledge of their needs. Meetings with Barrydale and Digby farmers gave insights into the challenges faced by these groups of farmers. The CMA has initiated a number of studies that will support future decision making in terms of water management in the region. These studies include the Reserve determination of the Heuningnes Estuary. These studies will also help in determining the amount of available water in the catchments in order to achieve fair and equal allocation of water to different users (BOCMA, 2012).

Strategic alignment with other initiatives is very critical for water allocation processes as the process is very complex and requires input from other institutions and departments. The CMA also collaborates with many other institutions to gather all the required assistance and information in achieving the objectives of WAR (DWAF, 2008; BOCMA, 2012).

1.3.3 Institutions Involved in Water Allocation in the BGCMA

The BGCMA engaged with nine municipalities in the region to discuss activities related to water management and planning and to understand the needs of the municipalities. The BGCMA, Western Cape Provincial Department of Agriculture and the Wolsley WUA are also partners in a project for alien vegetation clearance. The project will improve water quantity in the upper Breede River (BOCMA, 2012). The CMA has a governing board that guides and

advises the catchment to achieve its objectives and to develop. The board is made up of stakeholders who represent the following interests in water allocation:

- Western Cape Provincial Government
- Water and environmental civil society / NGOs
- Industry and business
- Commercial agriculture: Surface water non-scheme
- Statutory Conservation and Environment
- Access to water by the poor / rural settlements
- Potential agricultural water use by emerging farmers
- Commercial agriculture: Groundwater
- Local government: Integrated Planning
- Commercial agriculture: Surface water schemes
- DWA's Western Cape Regional office
- Chief Executive Officer

The BGCMA is working hand in hand with the Inkomati CMA on issues of common concern as well as in sharing ideas and approaches. The BGCMA has formed a relationship with the Wetterskip Fryslan, which is the Fresian Regional Water Authority in the Netherlands. Such a relationship proved valuable in providing governing board members and staff members opportunities to expand their understanding of key concepts of governance, water resource management, and institutional development (BOCMA, 2012).

1.3.4 The Verification and Validation Process

The verification and validation process is critical in determining how much more water can be allocated from a specific water resource, and what the most beneficial use of that water would be. The validation and verification process does not only map the quantity of water that is currently used in various CMAs, but it also looks at the lawfulness of its use, hence the need for registration of the water use (WARMS). This process is mainly technical as it makes use of satellite images and different databases, such as WARMS, to validate and verify water use (BOCMA, 2012). Verification is being carried out in a phased approach throughout the country, starting with catchments or areas where there is the greatest water stress or there is concern about the extent of unlawful use of water. Registered information is used to determine actual water use. Once the actual water use has been calculated, the DWA draws up a water use table (validation table) which shows the area under irrigation and forest on each property and calculates how much water was actually used during the quantifying period. The responsible authority then examines any previous legislation which may have further limited the water use

in the qualifying period and makes a fair and reasonable assessment of the extent of existing lawful water use, based on all available information. All users in a specific area are then asked to come to a public meeting, at which the water use information collected during validation is made available to all stakeholders.

In May 2011, the BGCMA initiated a validation and verification process to determine how much water is used by whom in specific catchment areas of the Breede Overberg region. Aurecon South Africa (Pty) Ltd was appointed by the BGCMA to undertake the verification and validation process, mainly in the upper reaches of the Breede River (Ceres Basin and Brandvlei Dam), the Hex River, and the catchment of the Onrus River and Riviersonderend up to the confluence with the Breede River. Subsequently, the BGCMA has now appointed BKS (Pty) Ltd to do the verification and validation process in the catchments in the coastal areas between the Steenbras and Duivenhoks Rivers, including the Lower Breede River downstream of the confluence with the Sonderend River (BOCMA, 2012).

The BGCMA used guidelines for verification and validation, but they also introduced other methods to improve accuracy. The processes use the Geographic Information System (GIS) approach. Relevant data on water use for all registered water users is collected and checked for accuracy. The data is taken from many different sources, including field surveys, as well as satellite imagery. The SAPWAT model is then used to calculate water use per property. This process proved to be very difficult and complicated, so the CMA decided to use a standardised method to come up with values per quaternary catchment. So far, the BGCMA has completed two projects and the verified data has been sent to individuals. There are however some delays in signing the letters.

1.3.5 Water Authorisation and Use

Registration of water use through the water authorisation and registration management system (WARMS) is required in terms of Section 26 (1) (c) and 34 (2) of the NWA of 1998. There are several reasons why water users are required to register their water use with the DWA. The most important of the reasons is to manage and control water resources for planning and development, to protect water resources against over use, and to ensure fair allocation of water among users (DWA, 2013). It is important for individuals such as farmers, smallholders, landowner groups and WUAs to register their water use.

Registration of water use started in 2003 in the BGCMA. The process was inaccurate due to lack of data. The verification and validation process now rectify WARMS. Access to the water

use registration electronic system was granted to the BGCMA on 15 October, 2012. The BGCMA registration includes more than 10 m^3 of groundwater, and more that 50 m^3 for surface water. All dams that are greater than 10 000 m^3 must be registered. Rainwater harvesting is not registered but storage of the harvested water can be registered.

To date, the BGCMA has about 2 500 active registrations that are invoiced. About 70% of these are willing to pay. The BGCMA is however currently unable to see who the non-payers are as the system is centralised in DWA. The BGCMA hopes to access the database by early 2015. Not all users are currently registered in the system.

The BGCMA facilitates the water use licence application process between applicants and the regional and national water use authorisation application assessment committees. The staff support the DWA's objective to concentrate on the present major licence backlogs. The BGCMA and the Western Cape Regional Office held three workshops in the region to improve awareness and to assist in resolving the various associated challenges. The BGCMA is also focusing its activities on the registration and licensing of water users (BOCMA, 2012)

Water use registration is a time-consuming process as many of the application processes involve a broad range of complex issues and clients do not always understand the essential information required in terms of Sections 28 and 29 of the NWA. The major challenge with the registration process lies with incomplete licence/registration applications.

1.3.6 Water Allocation Challenges Faced by the BGCMA

WAR (water allocation reform) is implemented through various processes. These processes are set by the DWA, guided by the NWA (1998) and various policies. The BGCMA follows and uses the processes to implement WAR, although some of the processes are complex and pose many challenges in implementation. The CMA had taken over some of the DWA processes, but the transfer of functions is still far from completion. There is a lack of delegation for some processes and the final authorisation still sits with DWA. As a result, some activities take unnecessarily long to complete.

Sustainability is a major concern for the BGCMA. The CMA still heavily relies on central government for funding as the revenue raised from water sales is not enough to sustain the CMA. The water pricing policy needs to be revised in order to sustain the CMA, which is currently heavily dependent on subsidies. The timing of the release of funds from central government also stifles projects on the ground, as the funds come rather too late.

Another major challenge in the BGCMA is water availability. By 2010, almost 100% of the water in the BGCMA was allocated, which makes it a challenge to allocate any more water. Processes such as validation and verification processes are conducted in order to validate the water that is already allocated and the potential of allocating more water (BOCMA, 2012). These processes are very complex and time consuming. There is a backlog in water licence application as a result of a lack of information on the application process.

Successful water resource management requires active public participation. The BGCMA has found it very difficult to actively involve the public in water resource management, especially the poorly resourced farmers. Public participation is lagging behind all other BGCMA processes. As a result, there is still an outcry for equitable access to water in most parts of the CMA, especially from the HDIs and poorly resourced emerging farmers. The research project is therefore focused on this group of water users. The project will try to unpack some of the issues and challenges that have resulted in limited progress in water allocation to HDIs and emerging farmers despite all the efforts put into the processes.

1.4 Rationale of the Research

1.4.1 Water Allocation Reform Institutional Arrangements

The Water Act of 1998 is a tool for addressing water allocation and many other issues caused by previous Laws and Acts. Inequitable access to water resources was resolved by abolishing the riparian rights (Funke et al, 2007; Kidd, 2011). However, the process of achieving equitable water allocation is time consuming. There are various unforeseen problems that both government and the implementation agencies face. The large majority of already allocated water in the country still benefits the previously advantaged individuals, which implies that redress and equity are competing with other applicants for the remaining unallocated water (DWA, 2013).

The White Paper policy of 1997 required the national department to establish and support CMAs and the transformation of irrigation boards to WUAs. However, since the process of establishing CMAs started, many challenges have cropped up. At regional level, water management is still carried out by offices of the national department as only two CMAs have been gazetted so far. These regional offices continue to function as part of the national department, which does not address the intent of Principle 23 which requires the responsibility for the “development, apportionment and management of available water resources” to be delegated to a “catchment or regional level in such a manner as to enable interested parties

to participate" The CMAs are still limited in terms of capacity and this prevents the delegation of more functions. There is a problem with the transformation of irrigation boards (IBs) to WUAs because most of them are privately functioning and others refuse to be transformed. The transformed IBs are also not performing as they were expected to in improving public participation in water management resources (DWA, 2013).

Sections 61 and 62 of the Water Act provide for the promotion of access to irrigated agriculture and sustainable irrigation development, including grants for the acquisition of water entitlements for irrigation and grants for training the management committees of WUAs. Various reforms and direct support have been implemented in an effort to redistribute and equitably share water resources. The policy on financial assistance to resource poor irrigation farmers (2004) is one such effort. The most recent efforts include water allocation reforms (DWAF, 2008) that recommend that 30% of all water should be allocated to previously disadvantaged individuals by 2014, and 50% of this water should be in the hands of women. (Formerly, this was set at 30% but then increased to 50%).The reforms also recommended that 60% of water should be in the hands of blacks by 2024 (Msibi and Dlamini, 2011). Despite all these reforms in water management, local tensions and conflicts continue to plague water users (Levite et al, 2003), especially the resource poor HDIs and emerging farmers.

The disconnection between resource management and supply is another problem. Water resources are managed at a local level by CMAs, while water service provision takes place at the municipal level. The problem arises when more water is allocated for supply purposes than is feasible from an ecological perspective. This problem is due to local water services development plans that do not take sufficient account of existing water resource management principles (Pollard and du Toit, 2008).

1.4.2 Stakeholder Engagement and Participation

The NWA (1998) is founded on public participation, which allows previously disadvantaged communities to not only directly influence the way in which water is allocated but also allows for proactive interventions to provide previously disadvantaged groups with legal entitlement to use water (Seetal and Quibell, 2005). Stakeholders in water resource management include municipalities, major water users such as industry and commercial irrigation and emerging farmers who are resource poor and face many challenges in agriculture and food production. One of the major aims of the NWA is to ensure equity in sharing water resources. Sections 91 and 98 of Chapter 8 of the Act make provision for the setting up of WUAs. WUAs are supposed to act as vehicles for poverty reduction, and the role of women is also to be recognised (Mjoli

et al, 2009). However, after so many years of WAR, historically disadvantaged groups, including the newly resettled emerging farmers, are still lagging behind as far as equity and access to water resources is concerned. Their participation in WUAs is still limited or passive.

Water users perceive a wide range of problems which lead to tensions and resentment. The major issues for HDIs and emerging farmers revolve around competition for water against historical large water users such as mines, commercial farmers and municipalities. The NWA envisaged a bottom-up approach in the management of water resources where local water users would play an important role, but the establishment of WUAs took a top-down approach (Mjoli et al, 2009). This has caused problems of engagement and participation by resource poor HDIs and emerging farmers who have remained marginalised with very little or no access to water resources. Resource poor farmers have remained as passive beneficiaries who are hardly involved in planning (van Koppen et al, 2007). Government institutions are supposed to play a major role through implementing policies, alignment issues, financial assistance and technical support. Efforts to implement enacted policies and recommendations continue to meet with challenges. The catchment management areas that are supposed to be the overall governing bodies of water management are still being set up in most parts of South Africa. The slow progress in transforming irrigation boards into WUAs is another issue. The provincial agricultural and water departments have failed to support uptake of water set aside for emerging farmers (Msibi and Dlamini, 2011). There is a high turnover in government offices and there are also difficulties in implementing legislation. There is, however, another critical dimension – the needs of smallholder farmers and emerging farmers are misunderstood, not just by government policy implementers, but possibly by the emerging farmers themselves.

Water allocation is a necessity, due to problems of water scarcity, the threat posed by climate change, shared water resources and the current skewed historical distribution of water, combined with the fact that South Africa has almost reached its full irrigation potential. The dynamics of water allocation and sharing depend a lot on the dynamics of communities, but past community-driven water development programmes assumed single water use, although often aware of people's multiple water needs and their factual multiple uses (van Koppen et al, 2007). Emerging farmers are, in many cases, receiving very little government support and they are also poorly networked when it comes to water allocation issues. There is a need to fully engage emerging farmers and encourage active participation in water resources management and water allocation issues. There is also the challenge of sharing costs among water using sectors. There is need for formalisation and re-allocation of water use entitlements in a context of growing water scarcity. Resource poor farmers need to be re-engaged so that

they can understand that the water that flows through the rivers and canals is not necessarily freely available water.

1.4.3 HDIs and Emerging Farmers in the BGCMA

Emerging farmer is a relatively new term used to define formerly underprivileged farmers who are determined to enter into commercial farming (NDA, 2006). Emerging farmers are also described as farmers that were previously disadvantaged that are now entering into commercial farming and have the potential to expand and develop into commercial farming; hence, also known as developing farmers (Louw et al, 2007). There is no universal definition of an emerging farmer in South Africa. The term is used freely and interchangeably to describe famers that have recently bought land, those that are developing, and those that have poor resources and are mainly black farmers that were previously disadvantaged and having small-scale farms (Saruchera, 2008). Emerging farmers are comprised of black farmers who were formerly denied the opportunity to farm successfully by apartheid, are still facing difficulties in penetrating already established markets and have limited resources in production (Jari, 2009, Makhura et al, 2011). AgriSETA (2010) describes emerging farmers as those farmers that are struggling to achieve commercial success and do not own a land area of more than 20 hectares. These farmers also require grants for land access and property rights, and comprehensive farmer support.

Emerging farmers are stakeholders in BGCMA and they are represented in the governing board. They are very important stakeholders and are top of the priority list in terms of water allocation. The BGCMA is following all the processes of WAR in order to meet the needs of emerging farmers and to improve their participation in water management. Emerging farmers are also in WUAs and other co-operatives, in which they are involved in water resources management in their local areas and where skills transfer and networking takes place. However, there are those who are not in WUAs who are also struggling to access water resources, although the BGCMA is trying to ensure that emerging farmers get priority (BOCMA, 2013).

The BGCMA started conducting meetings with resource poor farmer communities in order to gain knowledge and understanding of their needs (BOCMA, September 2012). The pertinent question is whether it is enough to engage the farmers in such platforms, or do they need to be engaged in a deeper and more participatory platform? These platforms did not produce the desired results because the BGCMA still faces very low public participation in the water allocation debate. A number of questions have arisen around this debate:

- What methods should the BGCMA use in order to identify the real problems and challenges that the emerging farmers face?
- How can the BGCMA create trust and a level ground for participation in WUAs?
- How can HDIs and emerging farmers be made to feel that they are active and equal partners in the water re-allocation process?

The project tried to answer some of these questions on behalf of the BGCMA. The research team carried out initial scoping visits to two case study sites which were selected with the help of the BGCMA. The selection was based on the water allocation history of the case study areas and presence or absence of an active WUA. The two selected case studies were Barrydale Small Scale Farmers and the Hex Valley Water User Association.

1.5 Research Approach

The South African NWA (1998) and National Water Resource Strategy (DWA, 2013) are entrenched in integrated water resource management principles. The second principle is participation. The principle outlines that: *Water development and management should be based on a participatory approach, involving users, planners and policy makers at all levels.* For South Africa, the users include HDIs and emerging farmers, who have so far remained excluded from water resource management processes; hence, equitable access to water remains a big issue for this group. There is, therefore, a need to improve participation in water resources management processes for this group.

The NWA and the National Water Resource Strategy both have major aims of addressing both equity and participation issues in water resource management in South Africa, (through WUAs). However, despite all these efforts, water institutions set up to address water resource management seem not to be effective due to a number of issues:

- Existing water rights
- Complex licensing and verification processes
- Lack of set-asides and general authorisations to assist WUAs in allocating water to HDIs and emerging famers
- The understanding of water needs by HDIs and emerging farmers seems to vary.

For the BGCMA, the need to solve the water allocation issue is rather urgent, especially for HDIs and emerging farmers. Initial indications from preliminary engagement with emerging

farmers in Pietercieliesskloof, Barrydale, Swartrivier (Prince Albert) and Hex Valley proved that the BGCMA had real water allocation problems:

- The application processes and procedures for water allocation take much longer than expected, especially in areas where there are no WUAs
- Some emerging farmers do not know what type of water is available to them
- Emerging farmer objectives are varied; some farmers need water for survival while others want the water for business, i.e. they want to become commercial farmers
- HDIs and emerging farmers living in commonage land have to deal with the delegated authority of municipalities in allocating water to them, and they are not priority users
- Where there is a working WUA like Hex Valley, the water may already be over allocated, resulting in intense competition
- Emerging farmers do not collectively participate in water allocation debates in order to have a collective voice on water allocation problems.

The pertinent question is whether there is a common understanding of the water needs of HDIs and emerging farmers. There is need to understand and articulate the water needs of HDIs and emerging farmers so that proper water resource management processes can be followed. There is need to be clear on what the real challenges are and in what spaces they lie? The catchment management strategy provides a platform for addressing HDI and emerging farmer needs through participation in WAR in the CMA. The BGCMA is actively focused on WAR, and water needs for emerging farmers are part of the process. However, the level of engagement and participation remains low. To improve participation, one therefore needs to critically look at the WAR process.

There are three levels at which HDIs and emerging farmers can directly engage with the CMA. Figure 1 shows these three levels and the processes/activities through which participation and engagement can take place.

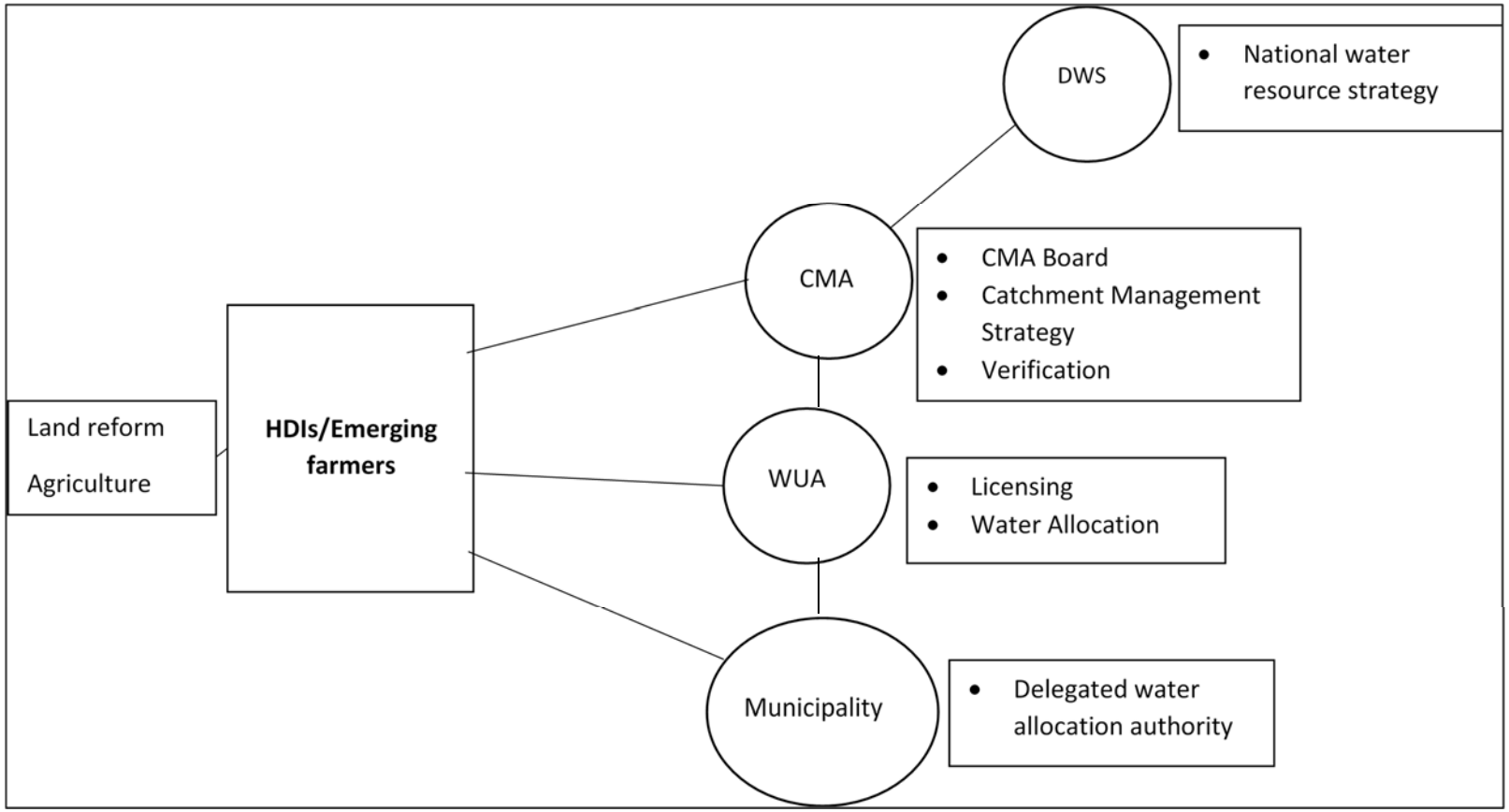

Figure 1: Water institutions and their roles in the BGCMA

Emerging farmers have representation in the BGCMA board. There is therefore opportunity to influence the CMA strategy and the verification and validation processes at that level. Access to central government is through the CMA board. At WUA level, emerging farmers can engage and participate in water allocation and water licensing dialogues. Some HDIs and emerging farmers such as the Barrydale Small Scale Farmers are affected by municipality processes through the delegated water allocation authority. According to the current structure, WUAs are involved in allocating water to municipalities, therefore this should allow HDIs and emerging farmers to engage with the municipality through that process. The research project attempted to address some of these issues, because, even in areas where WUAs exist, emerging farmer participation in water allocation processes is either very low or passive (van Koppen et al, 2007). The project hypothesis was therefore centred on these arguments

Project Hypothesis:

Effective emerging farmer participation in water allocation reform in a catchment management agency will contribute towards the achievement of the strategic intent of (integrated) water resource management.

The project had four aims that were explored over three years:

- Review progress in accessing water resources by emerging farmers in two selected areas in the Breede-Gouritz Catchment Management Agency.
- Explore the role and challenges faced by emerging farmers in participating in water user associations.
- Explore opportunities for engaging emerging farmers to participate in water user associations and water allocation processes.
- Develop a general approach for engaging emerging farmers to participate in water user associations in the Western Cape (and South Africa).

The main objectives of the research were to assess the progress made in water allocation to HDIs and emerging farmers in the Western Cape, with emphasis on the two identified case study areas, Barrydale Small Scale Farmers and the Hex Valley Water User Association. The project assessed how processes of access and water allocation in the two areas affected HDI and emerging farmer needs. The project also explored the challenges faced by these farmers in accessing water, using participatory tools and techniques. The results were presented to water institutions to stimulate

dialogue/debate between the institutions and HDIs/emerging farmers. Capacity building and empowerment of emerging farmers focused on exploring opportunities for engaging them in processes of accessing water, also using participatory tools and techniques.

2 INSTITUTIONAL ROLES IN WATER RESOURCE MANAGEMENT

2.1 Introduction

The NWA (1998) was enacted to ensure that South Africa's water resources are protected, used, developed, conserved, managed and controlled in ways which take into account many factors, including: meeting the basic human needs of present and future generations, promoting equitable access to water, redressing the results of past racial and gender discrimination, promoting the efficient, sustainable and beneficial use of water in the public interest, etc. The Water Act also established institutions to manage water resources at local level.

CMAs (catchment management agencies) were established with a mandate to develop catchment strategies for their area of jurisdiction that correspond with the national water strategy, and to engage the stakeholders and interested people, to the lowest level, represented by the water user association (WUA). The catchment strategies also needed to include water allocation plans, which set principles for allocation of water to existing and prospective users, and take into account the protection, use, conservation, management, development and control of water resources (NWA, 1998; Funke et al, 2007).

The debate on whether CMAs and WUAs were the best governing structures to govern and provide access to water continues to heat up in South Africa. As this happens, HDIs and newly resettled emerging farmers continue to cry foul in terms of accessing productive water to improve their livelihoods. It is important to assess why this continues to be such a hot debate, more than 20 years after the change of the national government. One way of getting a clearer picture would be to assess the effectiveness of the mandated institutions in providing water to disadvantaged groups. Cleaver and Franks (2008) developed a framework for examining water governance and poverty (Figure 2). The framework was an attempt to understand the complexity of local arrangements for accessing water, within the wider context of allocation of resources in society (Cleaver and Hamada, 2010).

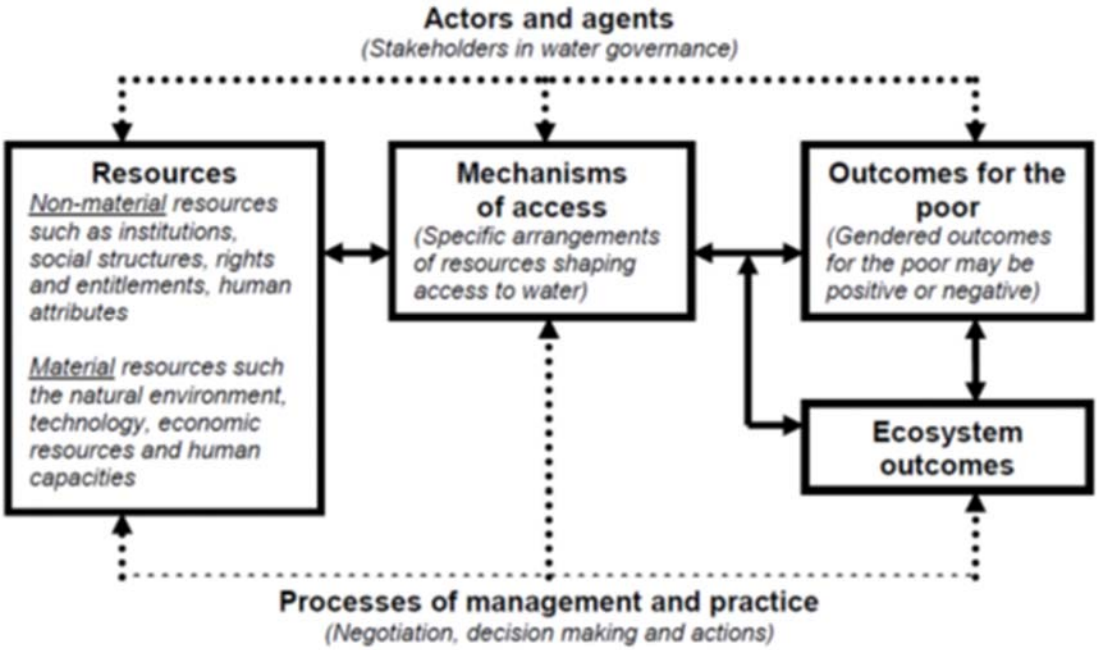

Figure 2: A framework for analysing water governance and poverty *(Cleaver and Franks, 2008)*

The research project borrowed some aspects of this framework in analysing water governance and water resources management in the Breede-Gouritz Catchment Management Area (BGCMA). The BGCMA was one of the first CMAs to be commissioned in South Africa. The CMA became functional in 2007. The initial functions of the BGCMA, as stipulated in Section 80 of the NWA, 1998 were to:

- To investigate and advise on the protection, use, development, conservation, management and control of the water resources in its water management area
- To promote coordination between implementation of the catchment management strategy and the implementation of water services development plans
- To develop the catchment management strategy
- To coordinate the activities of water users and water institutions
- To promote stakeholder involvement and participation.

The last three functions directly address water allocation, participation and inclusion of HDIs in water resource management. Preliminary assessments indicated that these functions had not worked well in the BGCMA. A number of factors could be responsible for this trend, and the CMA is keen to find solutions. The main objective of this phase of the project was to investigate some of these factors through engaging with stakeholders in the BGCMA, to determine their level of

interest and influence (Jackson et al, 2012) and how each stakeholder perceived their role in allocating water to the HDIs and emerging farmers.

2.2 Identification and Classification of Stakeholders

The stakeholders in the BGCMA were classified according to their level of influence in water resource management, starting with the Department of Water and Sanitation who are the custodian of all the water in the country. Emerging farmers were identified as a separate group, in order to include those who do not belong to a WUA, like the Barrydale Small Scale Farmers. The water institutions and their main strategic roles in water management in the BGCMA were identified in Figure 1. Institutions that fall under the groups in Figure 1 were selected for interview, as shown in Table 1

Table 1: Institutions identified and consulted during the research period

Type of institution	**Name of institution/department**	**Number of interviews/meetings**	**Total number of people interviewed**
Department of Water and Sanitation	Institutional Management	2	4
Catchment Management Agency	BGCMA • Chief Executive Officer • Technical Manager • Stakeholder Engagement Manager • Water licensing officers	 1 1 3 1	7
Water User Association	Hex Valley Water User Association • Chief Executive Officer • Emerging farmers	 2 2	3
Municipality	Swellendam Municipality	1	1
Government department	Department of Agriculture	1	4
Government department	Department of Rural Development and Land Reform	1	1
Commercial farmers	Barrydale Commercial Farmers Association	1	1
Emerging farmers/HDIs	Barrydale Small Scale Farmers	2	24

The Institute for Poverty, Land and Agrarian Studies (PLAAS) was consulted in the initial stages to get some background information, and to get their view as a research institute carrying out research in related areas. PLAAS is not directly involved in water resource management, but their insights into smallholder agriculture were very important.

A desktop review of the strategic function of each of the identified institutions was carried out. Reference was also made to the initial engagements already carried out with some of the stakeholders. Semi-structured interviews were set up with the identified stakeholders, and, where possible, group meetings were organised. Table 2 shows the research framework with an outline of the interview questions and the methods used to administer the questions.

Table 2: Research framework for collecting information from stakeholders

Aims	**Objectives**	**Questions**	**Methodology**
Stakeholder consultations and surveys of water institutions and their roles in water resource management in the Breede-Gouritz Catchment.	To determine the current role and influence of the different stakeholders within the BGCMA and how each stakeholder perceives their role in allocating water to the HDIs and emerging farmers.	What roles does the institution play in water resources management? - What role does the institution play in assisting HDIs and emerging farmers in accessing resources? - Challenges and concerns towards WUAs.	- Policy and strategy documents - - Interviews with stakeholders - Policy and strategy documents - Interviews - Survey questionnaire - Desktop - Interviews

In addition to the interviews, separate iterations were carried out on the water licensing process to understand how it is monitored and evaluated, and the types of relationships and roles of different stakeholders in water licensing. The results of this process will be presented separately as part of a student MSc thesis

2.3 Functions and Roles of the Department of Water and Sanitation

2.3.1 The Role of the Department of Water and Sanitation

The Province of the Western Cape has two approved catchment management areas: Berg-Olifants and Breede-Gouritz. The latter is under the management of the BGCMA which reports to the national office of the Department of Water and Sanitation (DWS). The DWS Western Cape regional office also reports to the national office. Within the DWS Western Cape regional office, water resource management functions are performed. These functions include:

- Water use authorisation
- Water quality management
- Assistance to emerging and commercial farmers
- Yield balance and reconciliation
- Water resource protection
- Water use management
- Water conservation and demand management
- Integration and cooperative governance
- Institutional development and support
- Social strategy
- Waterworks development and management
- Monitoring and Information.

2.3.2 The Role of the DWS in Assisting HDIs and Emerging Farmers

Access to water by emerging farmers is one of the priorities of the DWS, to redress the injustices of water allocation set up in the past. The implementation of WAR (water allocation reform) has been instrumental in allocating water to HDIs. In addition, programmes such as validation and verification, assistance to resource poor farmers, capacity building, and facilitation of water licence applications are steps taken by the department to ensure that HDIs have access to water.

Set-asides

Set-asides have been established as one of the tools to achieve WAR in the country. This means that water has to be specifically reserved for the use of previously disadvantaged groups. The WAR set a target that by 2014, 30% of the water should be reallocated to black people, of which 30% of this water should be in the hands of women; this has now been extended to 40-50%. To ensure effective water reform, the DWS adheres to the water licence application guidelines such as black economic empowerment. A commercial famer applying for a water licence should ensure that 30% of the water will go towards the empowerment of previously disadvantaged groups. In addition to what has been put aside, if resource poor farmers have a requirement for water, and

should that water be available, their needs are given priority over any other agricultural use (DWAF, 2004).

Verification and *Validation*

The verification and validation programme was rolled out by DWS in order to determine available water by verifying lawful water use granted in the current and the previous NWA. Through the validation and verification process the department hopes to be able to determine water that is available and unlawful water use. Water that is available will partly be made available to emerging farmers.

Assistance to Resource Poor Farmers Strategy

The purpose of the strategy is to provide a measure of equity in the allocation of water resources within the catchment management area through WUAs or irrigation action committees (DWAF, 2004). Grants are channeled to the irrigation action committees or WUAs to assist emerging farmers. Funds are made available to support emerging farmers with insufficient finances to carry out water related expenses for agricultural purposes for a period of five years. The assistance has mostly assisted emerging farmers that joined a WUA but struggle to afford the membership and annual tariffs. Once a farmer is granted assistance, in the first year DWS will pay 100% of the annual tariff; then during the next four years, DWS pays 20% less and the farmer covers the rest of the fees until the support is phased out.

Capacity Building

DWS acknowledges that some processes of the department cannot be fully comprehended by emerging farmers. As a result, they offer capacity building to emerging farmers where the NWA (1998) and the water licence application process are thoroughly explained. This information is shared with farmers individually or in groups.

Facilitation of the water licensing process

Emerging farmers are also assisted in obtaining water licences. The following steps are usually taken by the department in assisting emerging farmers:

- A pre-licensing meeting is held between the farmer and the department where the farmer explains his intentions. Following this, the two parties discuss topics such as existing lawful use, how the water licence water might impact the environment, downstream users, forms to be completed, and reports which need to accompany the application form;

- The department assists the farmers to fill in the application form and, in some cases, provides specialists to conduct runoff calculations and environmental impact assessment reports;
- Once the application package is complete, the department writes a recommendation which is sent to the national office of DWS.

The DWS officials stated that their unit has potential to offer additional assistance to emerging farmers. However, this is hindered by their work load as they run different functions in the department. They strongly believed that a special unit focusing solely on the needs of HDIs is required in order to successfully implement WAR and offer the assistance required by HDIs.

2.3.3 Relationship with Water User Associations

The WUA is a platform for accessing water for most emerging farmers, where a WUA exists. To ensure that emerging farmers truly have access to water, DWS follows up on the process of a WUA, as they are part of the executive board. They ensure that a minimum of 10% of the water is strictly accessible to emerging farmers. The DWS officials added that if farmers are struggling to access water through the WUA, the department explores the use of groundwater as this source is currently not managed by a WUA.

Although the WUA is the appropriate platform for emerging farmers to have access to water, the DWS officials believed that additional processes need to be put in place to speed up the re-allocation of water. A closer working relationship with the Department of Agriculture (DoA) and Department of Rural Development and Land Reform (DRDLR) and a review of water policies is paramount to achieving this.

2.4 The Breede-Gouritz Catchment Management Agency

2.4.1 Establishment of the Breede-Gouritz Catchment Management Agency

Like all other CMAs in South Africa, the BGCMA was established in terms of the NWA (1998) to carry out water resource management activities specified in the NWA of 1998 under Section 80. Additionally, the DWS may delegate some roles which are not specified in the NWA to be undertaken by the BGCMA. During the early stages of its formation, the BGCMA engaged with nine municipalities in the region to discuss activities related to water management and planning and to understand the needs of the municipalities. The BGCMA also formed a partnership with the DRDLR for the Winelands District in assuring water allocation reform through cooperative governance. The BGCMA, Western Cape Provincial Department of Agriculture and the Wolsley

WUA were also partners in a project of alien vegetation clearance. The project was meant to improve water quantity in the upper Breede River (BOCMA, 2012). The BGCMA has a governing board that is there to help, guide and advise the catchment in order for it to achieve its objectives and to develop. The board is made up of the following stakeholders:

- Chief Executive Officer
- Emerging farmers
- Western Cape Provincial Government
- Water, environmental civil society / nongovernmental organisations (NGOs)
- Industry and business
- Commercial agriculture: Surface water non-scheme
- Statutory Conservation and Environment
- Commercial agriculture: Groundwater
- Local government: Integrated Planning
- Commercial agriculture: Surface water scheme
- DWS Western Cape office

The BGCMA also worked hand in hand with Inkomati CMA on issues of common concern as well as in sharing ideas and approaches. The BGCMA also formed a relationship with the Wetterskip Fryslan, which is the Fresian Regional Water Authority in the Netherlands. Such a relationship proved valuable in providing governing board members and staff members opportunities to expand their understanding of key concepts of governance, water resource management, and institutional development (BOCMA, 2012).

2.4.2 Role of the Breede-Gouritz Catchment Management Agency

The core function of the BGCMA is to manage and decentralise water resources to a local level and in line with the legislation. The BGCMA identifies a number of strategic areas in its functions (Table 3). Progress in these activities is monitored through regular management meetings.

Table 3: Water resource functional areas of the BGCMA

Water resource management areas	Functions
Water resource planning	• planning the development of water resources • allocation and utilisation of water resources • reconciliation of supply and demand • water resources infrastructure
Institutional engagement	• marketing of BGCMA activities and communication with stakeholders • establishment and maintenance of forums • regulation of water management institutions • transformation of irrigation boards into WUAs
Water allocation reform	• support to resource poor farmers • assist DRDLF
Water use management and regulation	• licensing • registration of water users • pollution control • water use compliance
Water resource protection	• determining reserves and resource quality objectives • managing the river health programme • protecting the state of water resources
Information systems	• water use registration and water resource information system • Information and communication technology (ICT) strategy • corporate systems
Strategic support	• human resources
Management and governance	• provide strategic management • provide governance

(Source: BGCMA, 2013; DWA, 2012)

2.4.3 Role in Assisting HDIs and Emerging Farmers

The institution works with farmers in the water licence application process. The BGCMA assists emerging farmers through the entire process. The water licence application procedure between the BGCMA and emerging farmers is as follows:

- Pre-consultation: The purpose of the meeting is for the emerging farmer to explain his/her needs. Depending on need, a water licence or water authorisation might be required. If the farmer requires a water licence, the BGCMA provides a checklist of what the farmer needs to prepare.

- Once the checklist is complete, the farmer forwards the completed application form to the BGCMA official (case officer) who will assess the document.
- Once the application is complete and has been assessed, the case officer will write a letter of recommendation which is presented to the regional and national Water Use Authorisation Application Assessment Committee. These committees consist of people with the varied expertise required to make a decision on issuance of a water licence. Should they require additional information; the case officer will contact the applicant (farmer) and get the required information. It is important that the letter of recommendation is understandable to the whole committee, as issuance or decline of the water licence is based on it.

The BGCMA indicated that their officials provide all the assistance needed by emerging farmers during this period. In their 2014/15 annual report, the BGCMA indicated that all resource poor farmers who needed help were assisted to apply for a water licence.

The water licence application process takes a long time to be approved or declined, and this is a concern for the CMA. A number of reasons can be given to explain the delay. The most important factor is the determination of a Reserve which is required prior to approval of any process. The process takes a long time. The Reserve is determined by the Resource Director in the national office of DWS. In the past, it took up to three years to determine the Reserve, and for this period, the water licence application is put on hold. Secondly, arranging to meet with the different committees that are involved in the issuing of the application sometimes takes a long time, thus prolonging the issuance of a licence. During the waiting period, the BGCMA must respond to the enquiries of emerging farmers who often get frustrated by the wait. This complicates relations between the farmers and the CMA that has to keep advising farmers to wait. The law prohibits the CMA from informing emerging farmers about the actual status of their application, except that it is being processed. The BGCMA believes that the process would be much quicker if they had the authority to issue water licences, fully implement the online application method, and have sufficient BGCMA officials that exclusively deal with water licences. Once an emerging farmer obtains a water licence, the BGCMA has the responsibility of ensuring that the farmer does get the water and puts it to use. As of January 2015, there has been a revision of the process, which will result in more licensing functions being carried out at CMA level.

In addition to assisting emerging farmers with water licence applications, the CMA also gives farming advice to emerging farmers by organising relevant experts to speak to the farmers. The

BGCMA also assists emerging farmers to apply for subsidies from DWS which they can use to cover the WUA water bills.

2.4.4 Relationship with Water User Associations

The BGCMA coordinates the transformation of irrigation boards into WUAs (BOCMA, 2013) as part of institutional arrangements. This includes processing proposed new WUA applications. In this process, the representation of different water users, especially the participation of emerging farmers and HDIs, is addressed. This aspect is very crucial for the transformation process to be successful. The CMA also assists proposed WUAs with the development of business plans. Once the WUAs are functioning, the BGCMA ensures that emerging farmers have access to water. The representative of the BGCMA in the WUA has the responsibility to identify any issues of participation and any other issues that might prohibit emerging farmers from accessing water.

In addition to the WUA board meeting, the BGCMA has initiated a “meet and greet” campaign. This campaign is meant to help the CMA understand the factors that are likely to hinder emerging farmers and HDIs from accessing water and also to understand their dynamics. The campaigns are also meant to help the farmers understand their water needs in order for the BGCMA to adequately assist them. The intention is to try and capture information that will fit into BGCMA’s work. In 2015, BGCMA plans to hold a seminar for emerging farmers with the aim of developing policy recommendations on how to assist emerging farmers to operate within the water sector. The BGCMA plans to work towards integrated development for farmers and believes that a policy paper would be the right step.

The success of WUAs as a platform for water management at the ground level is evident in the BGCMA. The CMA believes that information is disseminated faster and more easily through WUAs compared to other channels. However, emerging farmers might need to establish their own platforms in addition to the WUA where they can discuss issues that concern them. Currently the general perception about emerging farmers is challenge. For instance, the well-established commercial farmers often have the perception that HDIs are benefitting from the systems put up by old irrigation boards without making any financial or material contribution. Another challenge in the WUAs is that whoever holds money holds power, and, in this case, it is commercial farmers. Therefore, emerging farmers still find it hard to have their concerns prioritised. To improve the situation for emerging farmers, the BGCMA strongly believes that emerging farmers should have

a strong lobby group that represents them in any WUA board and also pay a subsidised water fee.

Some areas under the management of the BGCMA have not established WUAs. Barrydale is one of the areas where emerging farmers do not participate in water resource management through a WUA. The farmers are leasing commonage land that belongs to the municipality. Most farmers hold long-term leases of more than five years and some have been on the land all their lives after inheriting the plots from their parents. The farmers currently do not hold individual water licences. They are allocated productive water via a dam under the municipal licence and they are least priority, as the municipality gives priority to metered town residential dwellings. This is a challenge for the farmers as the dam usually dries up during the dry season, sometimes right in the middle of cropping seasons. The BGCMA is aware of the situation, and the CMA needs to engage with the municipality. However, the CMA cannot intervene with the water allocation plan of the Barrydale Municipality. There is need to find a lasting solution to the problem by involving all stakeholders and finding alternative sources of water.

2.4.5 Collaboration with Other Institutions

The BGCMA has a close working relationship with the WUAs in its management area, the Department of Agriculture, Department of Rural Development and Land Reform, Cape Nature, non-governmental organisations, and different sections of DWS. Although the BGCMA works with these institutions in ensuring water access by users, especially emerging farmers, they believe that a stronger relationship and a systems thinking approach is required to efficiently deliver services. As a result, the BGCMA is working towards an integrated strategy for assisting emerging farmers that will be developed in conjunction with these institutions.

2.5 Hex Valley Water User Association

2.5.1 Role of Hex Valley in Water Resource Management

WUAs are enacted in Chapter 8 (Sections 91-98) of the Water Act of 1998. The establishment of a WUA follows the same process as that of CMAs; proposal writing and submission in the Government Gazette (NWA, 1998). Amongst other things, the Act aims to promote equitable access to water, redress the results of past racial and gender discrimination, and facilitate social and economic development. In achieving this purpose, the Act should establish suitable institutions that have appropriate community, racial and gender representation. WUAs were

meant to provide these requirements. The Act also enables individual water users who wish to undertake water related activities for their own benefit to form cooperative associations (Masangu, 2009). These provisions in the NWA are important anchors for the empowerment of the poor. The role of the Hex Valley Water Users Association (HVWUA) is to manage the water resources (40% surface and 60% groundwater), supply water to existing lawful users, and monitor unlawful water use.). Currently, it is a great challenge for the association to manage groundwater, thus only surface water is monitored. In addition, the association does not have sufficient capacity to monitor water users with different sources such as private dams, groundwater, and water supplied by the association. These are mostly commercial farmers with riparian water rights.

2.5.2 Role in Assisting HDIs and Emerging Farmers

The HVWUA has assisted emerging farmers since its establishment in 2007 when the five irrigation boards that form the WUA made an agreement to give up some of their water rights to emerging farmers (Saruchera, 2008). In addition to this gesture, the irrigation boards put aside R25 000 which could be used by emerging farmers to plant vegetables. Not only did the emerging farmers benefit from water re-allocation, but they also made use of the bulk water structure, a privilege which was previously enjoyed by members of the irrigation boards.

The HVWUA has prioritised understanding the needs of emerging farmers in order to establish right protocols for assistance. Once they understand their water needs, they are able to effectively plan water allocation to emerging farmers and HDIs. Currently, emerging farmers are the second priority of the HVWUA after the municipality. Although this might imply that all emerging farmers have access to water, this is not necessarily so; only existing emerging farmers have secured water supply for productive use. The HVWUA is struggling to secure water for new emerging farmers especially during dry seasons. To assist the farmers, the association has established a pool system whereby farmers with excess water share it with emerging farmers. Although the pool system has been of great assistance, the management of HVWUA believes that most commercial farmers are not taking part in the initiative as they are not comfortable about giving up a scarce resource which was once in abundance to them. Through the validation and verification process conducted by the BGCMA, the HVWUA hopes that unused water will be identified and some of it will be allocated to emerging farmers.

Besides assisting with access to water, the HVWUA assists emerging farmers to apply for the Assistance to Resource Poor Farmers Grant from DWS. The grant assists emerging farmers to pay for their annual tariffs and membership fees in the association.

2.5.3 Relationship with Water User Associations

The concept of a WUA has allowed emerging farmers and HDIs to partake in water resources management and have access to water. Nevertheless, there have been some concerns over the way in which the HVWUA functions. The management is mostly concerned about the lack of interest amongst the general members. Farmers, emerging and commercial, do not attend general meetings. This is a huge concern for the management of HVWUA as they cannot disseminate information effectively. For instance, every year emerging farmers miss out on opportunities to apply for grants to pay water fees. A study by Saruchera (2008) showed that emerging farmers were aware of who their representatives on the board were, but they were not aware of what was going on in such meetings as they did not meet with their representatives.

The study conducted by Saruchera (2008) also indicated that members of the HVWUA had negative perceptions about other members which hindered progress in the association. The suspicions between previously disadvantaged individuals/farmers and commercial farmers seemed to be the most apparent. Emerging farmers were of the view that the management of the association was exclusively for commercial farmers. Such perceptions leave little room for collaboration between the different water users. The HVWUA would like to reach out to a larger number of emerging farmers to join the association. However, they are struggling to get hold of these farmers.

The HVWUA has been functioning for seven years, and over the years issues of concern have emerged. The WUA has identified loop holes in water allocation processes that can be corrected to allow the association to effectively assist emerging farmers. The HVWUA identified the need to implement the following processes:

- The WUA would function better if it had decision-making power in water resource management: The HVWUA believes that it would be more effective in assisting emerging farmers if it held more power. As an institution it would be in a better position to plan for efficient and sustainable water use.
- The water licensing process would run more efficiently if it were left to the association.

- An exclusive group for emerging farmers should be set up. Emerging farmers could meet and discuss their issues of concern, which could then be communicated to the WUA board to find solutions.
- The HVWUA would be in a better position to assist emerging farmers if there was more integration and collaboration with departments such as DRDLR and DoA. As one of the board members of HVWUA stated, “New farms are worthless without the WUA”.

2.6 Role of Other Supporting Institutions

Interviews were also conducted with support institutions that are not directly linked to the water resources management process, although they play a significant role in decision-making. The DoA and DRDLR are interested parties in water resources management, particularly in licence application processes and water rights. Table 4 outlines the mandates for these institutions, their roles in assisting emerging farmers and their concerns in relation to the processes of WUAs.

Table 4: Mandate, roles and concerns of supporting government institutions

Organisation	Mandate of institution	Role in assisting HDIs	Concerns
Department of Agriculture	Assist farmers in agricultural production Assist farmers in accessing inputs and subsidies Facilitate market access for farm produce Assist in land distribution (part of the DLRD Land Committee) Assist in selecting farmers to get access to land Training and extension	Assistance in agricultural activities, improving and boosting production of emerging farmers. DoA facilitates the process of getting a water licence for a farmer by contacting the BGCMA which is responsible for water licence applications. Assists farmers by sending them to relevant departments such as DRLD, Land Bank, etc and in completing the required forms. Carries out skills audits for farmers where they look at strengths and weaknesses of farmers and their potential to be productive. Provides support grants consists of inputs, infrastructure, training, advisory services.	Political background/history makes it difficult for the department to build a relationship with the WUA; however WUA are of good interest WUAs are too expensive for emerging farmers and this repels HDIs from participating Water price is too high for emerging farmers Electricity costs inhibit farmers Access to loans and markets still difficult for HDIs. Limited availability of water in the CMA
Department of Rural Development and Land Reform	Rural development Land reform and land redistribution Rural infrastructure development Recapitalisation and development Rural enterprise and industrial development (REID) Increase agricultural production through the optimal and sustainable use of natural resources and appropriate technologies to ensure food security, dignity and improved rural livelihoods	Land acquisition for previously disadvantaged groups Long-term lease agreements for emerging farmers Water rights application on behalf of emerging farmers Recapitalisation for emerging farmers (2011)	Farms are not performing well, success rates are low Difficult to acquire land Land is expensive

2.7 Role of Commercial Farmers

Commercial farmers are important water stakeholders. Interviews were conducted with representatives of the Buffeljags Irrigation Board and the Barrydale Commercial Farmers Association. Most commercial farms are private businesses and enterprises. They manage water captured in their dams and use it according to their needs on their farms.

Some commercial farmers assist by allowing emerging farmers to use part of their water allocation, but this is usually done at an individual level. Mentorship and advice to emerging farmers is another way that commercial farmers contribute towards the uplifting of emerging farmers.

There were however issues of concern expressed by commercial farmers. Some commercial farmers think small-scale agriculture is doomed due to the high production costs. However, they think cooperatives may be a viable alternative if properly set up and supported.

Other concerns expressed by commercial farmers included the water licensing process that takes too long, up to 11 years in some instances. Some farmers also believe private dam ownership will be beneficial for them. Commercial farmers do not see the benefits of joining WUAs; they see irrigation boards as still beneficial and meeting their needs.

2.8 Emerging Issues in Water Resource Management

The NWA (1998) promotes the decentralisation of water resource management through institutions such as CMAs at a catchment level and WUAs at a local level. The establishment of WUAs is meant to foster participation in water resource management at grassroots level, hence allowing for inclusion of all water users.

Some of the expected outcomes of the project were the facilitation of effective communication between water institutions and emerging farmers which will result in a reduction in conflicts over water. The project also aimed to create conditions for open dialogue which will create trust between emerging farmers and government institutions. As Mollinga (1998) puts it, water control and management can neither be exclusively technical nor social in nature. Government institutions are supposed to play a major role through implementing policies, alignment issues, financial assistance and technical support, while CMAs are the overall governing bodies of water

management. An analysis of these issues during the research produced a mixed bag of challenges. Three areas were analysed: governance and management, physical and technological conditions, and socio-economic conditions.

2.8.1 Governance and Management

The WUA is the lowest unit of governance in water resource management where HDIs and emerging farmers can participate. The interviewed WUA sees itself as the most appropriate institution to govern water issues at the lowest level, and the CMA concurs with this. From an analysis of relationships between the WUA and the BGCMA, emerging farmers also seems to support this view. Table 5 shows supportive conditions and constraints which affect the WUA's ability to govern and manage in a way that supports emerging farmers.

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Table 5: Impacts of governance and management processes on emerging farmers

Process	Supportive conditions	Constraining conditions
Constitution of WUA	• Constitution allows for the representation of emerging farmers in the board of management • Participation of emerging farmers and historically disadvantaged individuals is recognised	• Poor relationships with other departments (DRDLR) • The institution does not have sufficient power to assist emerging farmers. Most of the power sits with the BGCMA and DWS
Water rights	• Commercial farmers are willing to give away some of their water to emerging farmers • The HVWUA has made emerging farmers are a second priority in the WUA to have access to available	• Not all commercial farmers are willing to give up excess water • There is little available water. A large quantity of the water is allocated to commercial farmers who have riparian water rights
Water licences	DWS, BGCMA administer the water licensing process. DoA and DRDLR support emerging farmers with the water licence application	• BGCMA does not have sufficient human resources to administer the process • The water licence is issued by the DWS national office and thus the process takes long (changes anticipated) • HVWUA believes that they are better suited to administrate the water licence application procedure; however, they do not have the power
Participation	• Emerging farmers have three representatives in the board of management of HVWUA • BGCMA has a representative in the board of management of HVWUA to ensure that emerging farmers take part in water resource management	• The representatives of emerging farmers might not hold sufficient power in the board to address the needs and concerns of emerging farmers • Emerging farmers to do not liaise with their representatives, and they also do not attend meetings • Emerging farmers do not have their own forum where they can discuss their concerns • The CEO of BGCMA initiated a meet and greet process with emerging farmers and other water users; however, the platform is not appropriate for discussing real issues that concern emerging farmers • There is no interaction between the representatives of emerging farmers in the HVWUA board and the BGCMA • BGCMA does not have sufficient human capital to pay more attention to the needs of emerging farmers
Membership fees and annual tariffs	• HVWUA assists emerging farmers to apply for the Assistance to Resource Poor Farmers Grant which enables the latter to pay the joining fee of R250 000 • The Resource Poor Farmers grant assists emerging framers to pay for their tariffs.	• It takes a long period to have the grants approved by DWS at national level • Once the farmers become members of the HVWUA, it is not guaranteed that they will have access to water. This depends entirely on water availability • The HVWUA does not have enough dams to meet the demands of its water users • Riparian water rights to commercial farmers prohibit re-allocation of water

There is representation of emerging farmers within both the WUA and CMA governing boards. The effectiveness of this representation is not very clear because the current emerging farmers who are members of the boards are actually commercial farmers, who are better off compared to an average emerging farmer. It remains unclear how effective this representation is and also how the presence of a BGCMA official on the HVWUA board assists emerging farmers. There is need for clarity in arrangements that are meant to benefit emerging farmers, for example:

- Does the BGCMA management get feedback about issues relating to emerging farmers?
- What powers does the CMA have to intervene on behalf of the emerging farmers?

On the other hand, emerging farmers who are part of WUAs expressed disappointment in the lack of participation in meetings by the other emerging farmers and HDIs. They feel that farmers are missing out on essential information. The CEO of the BGCMA has carried out campaigns to encourage HDIs to participate in water resources management. It is yet to be seen if this is an effective strategy.

Emerging farmers who are not part of a WUA have faced huge challenges in accessing water. Water is either governed by the municipality or by irrigation boards that have no interest in HDIs. These institutions pay for water and they do not see why emerging farmers should get the water at low tariffs. There was no relationship between the emerging farmers and commercial farmers in these areas. As a result, there is resentment from both sides.

The water licence application process was the biggest challenge for the WUA. The process has to go through an overloaded CMA. It has not helped that the process has all along been centralised in the DWS national office. It has taken between 8 and 11 years for some farmers to receive approval for water licence applications. The WUA felt they needed to be given more powers to manage the process since they are on the ground, while the CMA feels it is mandated to do so because they are the governing institution.

2.8.2 Physical and Technological Factors

Physical and technical management of water allows emerging farmers to benefit from the captured water. This cost emerging farmers a joining fee of R250 000 which is paid through the Assistance to Resource Poor Farmer Grant from the DWS national office. Emerging farmers pay this joining fee in order to enjoy the benefits brought by the well-established water infrastructure that was constructed by the previous irrigation boards. However, becoming a

member does not necessarily ensure that emerging farmers will have access to water. Consequently, emerging farmers are under the impression that they are denied water as commercial farmers do not want to share the resource with them (Saruchera, 2008) Table 6 shows some of the conducive and challenging issues around technological issues.

Table 6: Physical and technical factors impacting water access for emerging farmers

Factors	Supportive conditions	Constraining conditions
Water scarcity	• Water users can join the HVWUA which plans for water distribution to its members	• The captured water is not sufficient for all the members
	• The HVWUA has initiated the pool system which allows excess water from commercial farmers to be distributed to emerging farmers	• Not all commercial farmers give up excess water to the pool system • The HVWUA does not have sufficient capital and human resources to administrate the water use of commercial farmers • The constitution of the HVWUA does not give the management power to enforce commercial farmers with excess water to give it up
	• The HVWUA can allocate ground water to emerging farmers if the surface water is not sufficient for all its water users	• Commercial farmers have more than one water source (surface and groundwater). The HVWUA does not have sufficient human and financial resources to administrate ground water abstraction by commercial farmers.
	• The BGCMA has initiated a verification and validation process to check for lawful water use • Removal of alien vegetation was initiated by the BGCMA	
Infrastructure	• The five irrigation boards which form part of HVWUA have established infrastructure	• The system cannot provide water to all HVWUA new members • The HVWUA is accepting more members (especially emerging farmers) with a joining fee of R250 000, therefore increasing water demand without proper planning
	• Development of groundwater abstraction infrastructure by the BGCMA to benefit emerging farmers • Securing additional surface yields by BGCMA to benefit emerging farmers	• Still in the planning process

As the Breede-Gouritz CMA is classified as a water stressed region, the BGCMA plans to develop new water resources. In its business plan (DWAS, 2012), the BGCMA estimates that there is in excess of 300 million m^3/annum of additional groundwater that could be abstracted. In addition to that amount, between 90 and 140 million m^3/annum of surface water yield can

be developed in an economically viable way. As emerging farmers are a priority in the catchment, it is envisaged that their water needs could be addressed by the new available water.

In HVWUA, access to water for emerging farmers is mostly influenced by the availability of the resource. Emerging farmers are a second priority of HVWUA, after the municipality, in accessing water. However, the HVWUA has to honour the riparian water rights of commercial farmers. The association does not have laws which foster redistribution of water amongst its members; instead, emerging famers rely on hand-outs from commercial farmers, through the pool system, in times of water scarcity. The manner in which the HVWUA distributes water to its members might disadvantageous towards emerging farmers as they have contributed a joining fee and should also benefit equally from the services offered by the HVWUA. A fair solution might include the construction of new water sources. The WUA has identified potential sites that could increase the amount of water available to emerging farmers.

2.8.3 Socio-economic Factors

There is still a lot of mistrust in the water resources management playing field. There are certain characteristic perceptions and power relations among the farmers that will take a long time to change. The role of incentives seems to be a bone of contention among existing farmers as they feel that new farmers are having it easy. Table 7 summaries some of the pertinent issues identified during the research phase.

Table 7: Socio-economic conditions impacting water access for emerging farmers

Factors	Conducive conditions	Constraints
Perceptions	• Commercial farmers are willing to mentor emerging farmers, and, where this is established, emerging farmers have benefited a lot	• Within the HVWUA, commercial farmers are under the impression that emerging farmers are free riders • Within the HVWUA, emerging farmers are under the impression that commercial farmers do not want to share water
Power relations	• Democratic policies of HVWUA are in line with the government's policies • Democratic political environment of the BGCMA is in line with the government's policies	• There is social and economic heterogeneity among HVWUA board members, which increases the potential for disputes and 'capture' of leadership positions by the elite
Farmer incentives	• All water users need water	• There is no form of communication between emerging farmers and their HVWUA board representatives • Commercial farmers might not see value in the new WUA and cling on to old structures (irrigation boards).

WUAs in South Africa were established partly to transform irrigation boards and include previously disadvantaged groups. Hence, a typical WUA will exhibit economic and social heterogeneity. Emerging farmers often have the characteristics of a resource poor farmer that requires capacity building and farm management skills, while commercial farmers on the other hand are well-established farmers with farm management skills. Such differences tend to increase the potential for disputes and misunderstandings among the farmers, and they mask the potential presented by mentorship programmes.

The farmer groups also hold different perceptions about each other. Emerging farmers are under the impression that commercial farmers are holding on to their water rights and are not willing to share. Another perception that emerging farmers have is that the WUA serves the interest of commercial farmers. Commercial farmers, on the other hand, are under the impression that emerging farmers are taking advantage of the water systems which were implemented by irrigation boards. Such perceptions have the potential to undermine the purpose of a WUA. The lack of interest in attending meetings is probably linked to such perceptions.

3 EMERGING FARMER CHALLENGES IN ACCESSING WATER

3.1 Characteristics and Roles of Emerging Farmers

3.1.1 Barrydale Small Scale Farmers

The Barrydale Small Scale Farmers (BSSF) group was formed in 1993. Most of the farmers were born in Barrydale and they inherited the land from their parents, while a few originated from other areas. The group was originally made up of 34 members, 17 of which are black males and 17 are black females. Some members have withdrawn and only 20 members of this group are actively involved in an attempt to farm sustainably. The group has an executive committee and a constitution in place. Members pay a fee of R120 per annum.

The farms were, and are still, rented by farmers from the municipality, commonly referred to as commonage land. The group is not under a WUA, but they fall under the Swellendam Municipality and they are under the jurisdiction of this municipality. Figure 3 shows the location of Barrydale in relation to surrounding farms.

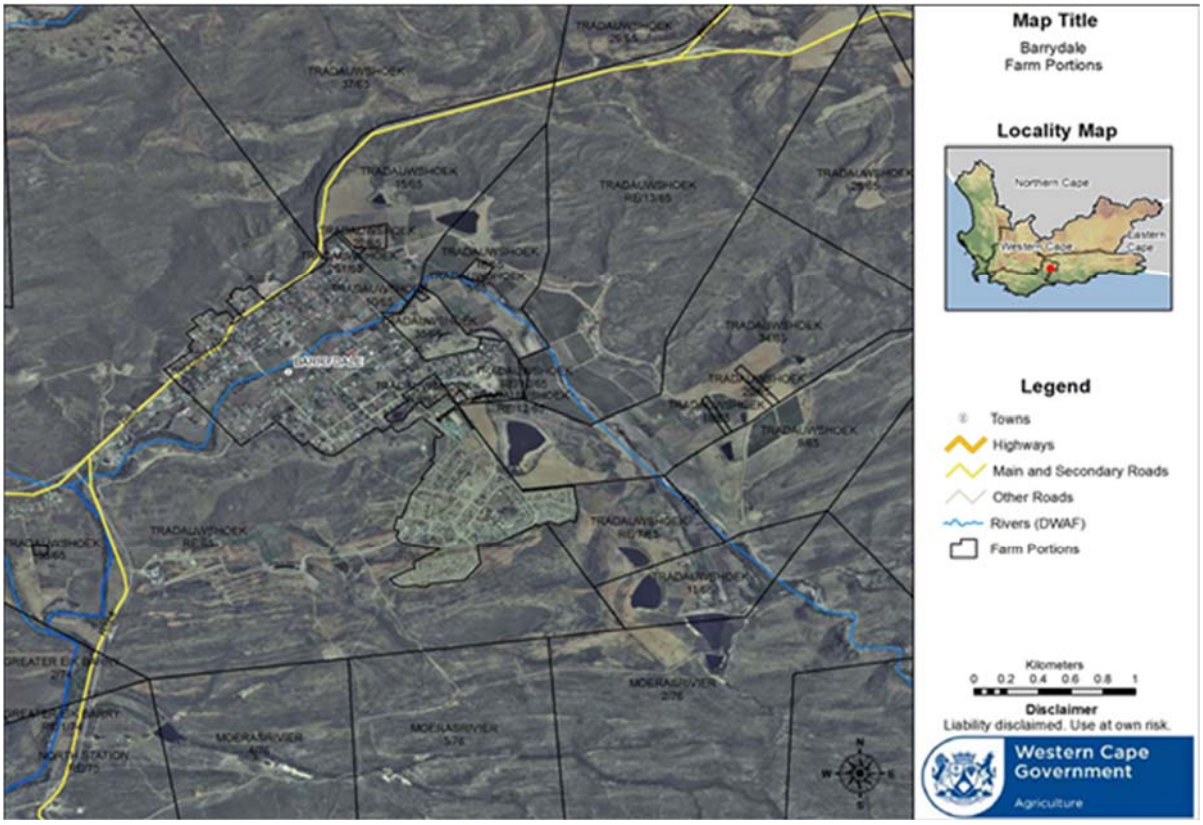


Figure 3: Barrydale Municipality, showing small-scale farms surrounding the town

The farmers came together due to their common interest in farming activities and having common needs. The farmers use water for vegetable gardens and livestock (sheep, pigs, goats, cattle), but they are not priority users. The group gets water on condition that the municipality first meets its priority requirements. Some farmers used to plant crops such as maize but had to stop due to constant water shortages. The current major water use is livestock and vegetable farming. The Barrydale farmers refer to themselves as disadvantaged commercial farmers. The group said they refer to themselves as such because if they had resources such as water and land they would be able to expand and become commercial farmers.

The major challenge facing the Barrydale Small Scale Farmers is lack of water, which hinders their farming activities. There is a dam situated near the municipality dam through which water is given to the farmers situated on the east side of the town on Mondays, after the requirements of the town residents have been met. Some of the farms are situated close to the Huis River but the farmers cannot abstract water from the river because they do not have water rights to do so. One of the members was assisted by the Department of Agriculture with an electrical pump to get access to river water, but he stopped because of a large electricity bill which he could not afford to pay. There is a potential to use groundwater, but the farmers do not have drilling structures.

The famers do not have water licences and the have never applied for any water. Studies by the BGCMA suggest that the farmers could use borehole water, but they cannot apply for water licences because they do not own the land. The farmers tried to get permission to use water from the river, but they were referred to the commercial farmers who hold the rights to the river water to ask their permission. The BSSF claims that the commercial farmers use about 75% of the available water in the area. They have written many letters to the municipality asking for assistance to access water, but the municipality seldom replies to them. Some farmers use household water for farming but this results in huge water bills. Some of the farmers even have unsettled huge water bills.

The group has tried negotiating and collaborating with various institutions to try and get assistance for water allocation. This has been unsuccessful because the group is

not under any WUA. The group tried to associate with commercial farmers in the area, but the commercial farmers were not interested; instead they offered to give the group monthly incentives. The group is also involved with Mawubuye, but not in water allocation processes.

3.1.2 Hex Valley Water User Association

The HVWUA was established on 9 March, 2007, after an extensive public participation process with all stakeholders. The group is situated in the Breede Water Management Agency in the Western Cape Province of South Africa. It falls under the jurisdiction of the Breede River Valley Municipality (Saruchera, 2008; DWA, 2011). The HVWUA was formed from the transformation of the Hex Valley Irrigation Board, the Matroosberg Irrigation Board, the Groothoek Irrigation Board, the Bovenstewater Irrigation Board and the Rrie Riviere Irrigation Board into one WUA, which is HVWUA. The water resources under control of the HVWUA include the Valschatkloof, Spek, Sandriftkloof, Amandel, Bulshoek and Hex rivers. The area of operation consists of H20A, H20B, H20C, H20D, H20E, and H20F quaternary drainage areas (DWAF, 2007). Figure 4 shows the location of the area under the jurisdiction of HVWUA.

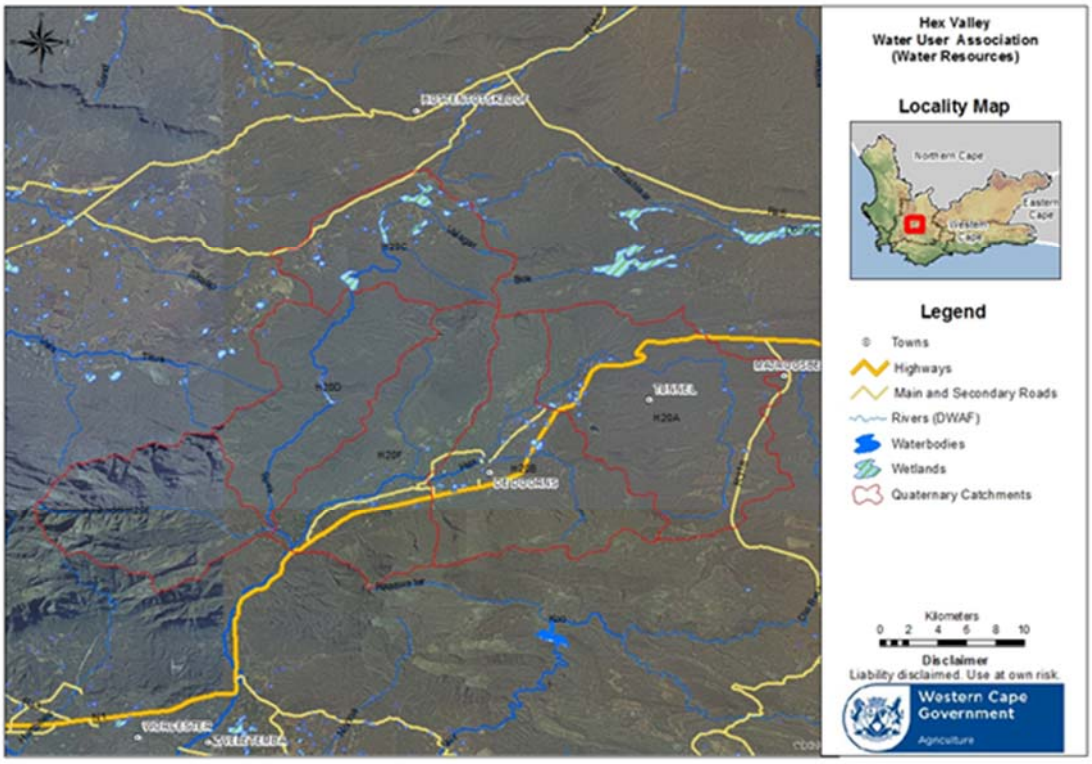


Figure 4: Area under the jurisdiction of Hex Valley Water User Association

Structure of the WUA

The HVWUA board members were elected in such a way that there was representation of all the former irrigation boards. Other three members from the IBs were elected for their seniority. There are three emerging farmers, two males and one female. There are also three individual water users, which represent farm workers. One member represents the Worcester-East WUA and one member represents the Breede Valley Municipality. The members who are not from the five IBs were included in the group because of their location downstream of the Hex River; they need to be included in water allocation decision making. The whole group comprises ten white male farmers, four black male farmers and two black female farmers.

Functions of the WUA

The Hex Valley Water User (HVWUA) Association takes responsibility for the regulation of water in the Spek, Volschgat and Sandrift Rivers, and also the Roode Elsberg and Laakenvallei Dams. The WUA is also building the Osplaas Dam, a 2,7 million m^3 new water works that will deliver seven million m^3 of water per year (DWAF, 2007). The HVWUA manages, operates and controls water use from its resources, as stated in its constitution, Saruchera (2008). The HVWUA was delegated water management duties by the minister according to Section 63 of the Act, because the CMA was not functional at the time of the formation of the WUA (Saruchera, 2008). However, the HVWUA is currently under the BGCMA, which is responsible for the water management duties (DWA, 2011).

Hex Valley WUA has taken considerable steps to help emerging farmers. Some IBs have given up some water rights to be allocated to emerging farmers. And the WUA also made R25 000 available for vegetable farming to emerging farmers and assisted the Sandrift New Farmers by advancing them R90 000 to prepare 1,5 hectares for table grapes (Saruchera, 2008).

The HVWUA is faced with a major problem of over allocation of water in the Sanddrift Irrigation Scheme. This has resulted in intense competition for available water and relatively low assurance of supply. There is potential for abstracting water from Roode Elsberg Dam to compensate for this. However, there are disputes between the water users in the Upper and Lower Hex River Valley.

3.2 Major Challenges of Supporting Emerging Farmers

The session also gave an opportunity to participants to probe further and discuss the challenges that the institutions face in supporting emerging farmers. The participants were broadly in agreement with the findings as to the institutions on their roles. They discussed the challenges at length. Three major challenges emerged as the most important:

- The WUA as the platform for emerging farmers to access water
- Access to land without a guarantee to access to water
- Lack of integration amongst departments.

3.2.1 Water User Association as a Platform for Accessing Water

The WUA seem to have an old culture of operation. Although WUAs are supposed to be an entity of water users and the community at large, the former irrigation boards simply transformed from an irrigation board to a WUA and it seems that hardly any changes have been made to accommodate new members, especially those previously disadvantaged. This is one of the biggest challenges for members of the WUA that has made it difficult to accommodate the interests of the new stakeholders in the WUA, especially black emerging farmers who do not have resources.

The lack of a clear definition of “transformation” remains the biggest challenge in working with a WUA to assist emerging farmers in the BGCMA. Different people and groups interpret the word differently. Currently, there is no clear definition and guide as to what actually transformation of the WUA is. Black people might feel transformation is 80% black representation in a WUA while white people might feel that transformation is 80% white because they own the land, water, and infrastructure. These are the sentiments of the people that the BGCMA deals with. Therefore, the national office of the DWS needs to relook at what exactly transformation means and how can it be achieved. This would make it easier for the local departments to do their work and assist emerging farmers gain access to water. The lack of this definition has allowed for misinterpretation of how much water should go to emerging farmers. An amount of 2% of water is allocated to black farmers or previously disadvantaged farmers by WUAs. The Water Allocation Reform Strategy (2008) states that by 2014, 30% of the water should be in the hands of black people. It is not clear how this will be possible with the current allocations of the WUA. Additionally, when one looks deeper, the 2% of water goes to white commercial farmers that have black beneficiaries through the equity scheme. In the end, one could argue that the water is benefitting the white commercial farmer as water rights remain in the farm when the black beneficiaries are no longer in farming. This is something

that the BGCMA has no control over. There needs to be certain measures put in place to ensure that that the 2% allocation benefits the rights people.

The BGCMA also raised concerns over the plans to restructure WUAs that are to be carried out by DWS to speed up transformation. So far, the national DWS office has not communicated clearly what exactly it wants to do and how regional offices, especially the DWS and CMA, will contribute towards restructuring of WUAs. The BGCMA is not certain whether DWS wants to restructure representation or water rights. Currently, it also appears as if the national office of DWS is not clear as what challenges are faced by WUAs and other institutions working with them to achieve transformation.

DWS added that decision makers needed to understand challenges faced at local level since those that experience these challenges do not have power to make any changes. The policy position held by DWS national where on the issue of restructuring WUAs is being discussed showed a lack of common understanding as to what will be restructured in WUAs and how that change will be achieved. DWS Western Cape believes that attention should be paid to current challenges and not simply changing names as happened with the irrigation boards. Transformation needs to take place within WUAs, not simply restructuring.

3.2.2 Representation of Emerging Farmers in a WUA

Most irrigation boards in the country have not been transformed into WUAs. The reasons for this lack of transformation include challenges with finding representatives of black people to sit on the WUA board, especially females. Some irrigation boards have applied to be converted into a WUA but these applications have been rejected by DWS national because the proposed management structure of the new WUA does not have 50% of seats allocated to black people.

The BGCMA also identifies representation of black people in WUAs as a challenge that limits their access to water**.** In most WUAs, the decision-making power still lies in the hands of commercial farmers because they own land and have water rights; thus, it was only the name of the institution that changed but not the rules. The new representatives of black people in the WUA do not have power. Most representatives of previously disadvantaged people/farmers were simply placed on the WUA board to balance the number of representatives and to meet certain criteria. As a result, there are black representatives who attend WUA board meetings but do not contribute towards decision making. Often, these representatives eventually stop attending meetings as they realise that it is a waste of their time. Most representatives of previously disadvantaged farmers do not have land and water

rights and thus there is little interest in make meaningful decisions. The rules and guidelines developed by the DWS national office for establishing a WUA are largely to blame for the failure of this institution as a platform for equitable water access. DWS national expects white commercial farmers to fund, build capacity, and perform activities that they initially did not engage in with the establishment of the WUA. The inclusion of other stakeholders on the board requires a long period of capacity building. The white commercial farmers should not be expected to take all the responsibility for that. These are some of the reasons the water sector is questioning the appropriateness of WUAs as a platform for access to water for black people. The BGCMA recognised that they have not played a role in capacitating the members of the WUA, especially black farmers.

DWS acknowledged that finding black people to sit on the board of a WUA is not an easy task. Such a person needs to hold a certain understanding of water laws and institutions. DWS has funding for capacitating emerging farmers who sit on the board of a WUA. However, it becomes difficult to train people to sit on a WUA board while they do not have access to land and water or do not even practise farming. There is often a lack of incentive to take up such positions. The DWS cannot empower people that are not interested or are experiencing challenges in starting up their farming ventures. The department also acknowledges that it is rather impossible to find black people to take up 50% of the seats on WUA boards.

3.2.3 Access to Land Without Guarantee to Water

Access to farming land without access and rights to water is one of the biggest challenges facing emerging farmers. The connection between land and water in accessing water has been largely ignored. DWS national needs to explore ways of securing land sustainable for emerging farmers and not narrowly focus on water. This might call for greater collaboration between different government departments.

The Department of Rural Development and Land Reform (DRDLR) also needs to improve its decision-making processes in allocating land by engaging with other relevant departments. The handing over of farming land without access to water to emerging farmers has caused a lot of challenges for the BGCMA and WUAs.

3.2.4 Lack of Integration Amongst Departments

Lack of integration between the institutions assisting emerging farmers was identified as one of the biggest challenges. The Department of Agriculture in the Western Cape has different categories of black farmers: subsistence, smallholder, and commercial. These farmers have

different needs which the department addresses separately. They especially want to develop subsistence and emerging farmer production into commercial. However, this process takes time. Other institutions have their own strategies for assisting emerging farmers which are not aligned with the DoA. The DoA works very closely with DRDLR although the latter still makes its own decisions. There is an existing level of integration in terms of sharing expected challenges even though in most cases the DoA does not have control over the land acquired by the DRDLF.

The participants agreed that the policies of the different institutions engaging and assisting emerging farmers do not speak to one another. There needs to be an alignment of the different policies, starting with defining terms such as “previously disadvantaged people” and “transformation”. These terms are interpreted differently by the different institutions

4 OPPORTUNITIES FOR ENGAGING EMERGING FARMERS

4.1 Institutional Engagement

A workshop with all the institutions that had been consulted was arranged to share the initial findings of the research. During the workshop, challenges faced by emerging farmers in Barrydale and Hex Valley were presented. After the presentation. the participants were given the opportunity to reflect on the identified challenges as a group. The plenary discussion focused on three main challenges that face emerging farmers:

- Lack of information sharing
- Lack of land rights (and long-term leases)
- Lack of proper business plans when applying for water

Lack of Information Sharing

Emerging farmers from both case study areas highlighted lack of information sharing as a limiting factor in accessing resources. The institutions agreed that emerging farmers are not aware of supporting structures; for example, the DoA in the Western Cape has put programmes in place to assist emerging farmers to develop business plans and make a success of farming. However, emerging farmers do not make use of this support. Emerging farmers also have different sets of problems. A farmer who owns land has different challenges compared with one that who is farming on commonage or leased land. Therefore, the approach used to communicate assistance programmes to these different farmers varies.

DWS acknowledged that information sharing is also hindered by the institutions. Sometimes the representatives of emerging farmers invited to workshops are not the right people to share information. This might be due to low levels of literacy or lack of time. However, the institutions overlook such issues and keep inviting the same representatives. Information is lost in meetings and workshops. There needs to be other ways of sharing information with farmers as this aspect is vital for farmers and institutions in assisting each other.

There was a suggestion that an easier way for emerging farmers to access information would be the consolidation of all the support programmes offered by the different institutions into one package. Farmers can therefore go to one institution for all their enquiries instead of being sent to different offices. Currently, the DoA is trying to achieve this, but they need to work with other institutions that assist emerging farmers to be successful.

Some emerging farmers are aware of support structures put up by the different institutions for them. However, some emerging farmers have a tendency to handpick assistance that they

think is good for them. DWS indicated that they often come across farmers that are not interested in being mentored to become business people, although the department communicated the importance of this skill. This behaviour is also common amongst emerging farmers guided by DoA extension officers. Sometimes emerging farmers do not accept the facts; they know that the government does support them but they simply disregard that knowledge.

Land Rights/Long-Term Leases

The institutions agreed that land ownership and long-term leases play a big part in determining whether an emerging farmer is eligible to receive support from institutions. DWS is limited by their policy to offer support to emerging farmers that own land or have long-term leases. The WUAs overlook this policy and they provide water to emerging farmers that are struggling to lease or own land. However, this is not a long-term arrangement.

Business Plans

All farmers are required to have a business plan prior to receiving assistance from government institutions. DWS indicated that farmers must have a business plan. The business plan allows the department to check if the farmer has met certain criteria. There are cases where farmers have farming skills but do not have a business plan. This is usually the case and the department is not able to fully assist these farmers.

The BGCMA highlighted that a business plan is not the only factor that should be looked at when deciding whether to give assistance to an emerging farmer. A passion for farming is something that successful farmers share. However, this aspect is simply overlooked while much focus is given to a business plan. Most emerging farmers who had access to institutional support failed simply because they lacked a passion for farming.

4.2 Proposals for Support to Emerging Farmers

After the presentations and discussions about challenges faced by institutions and emerging farmers, participants were split into two groups and asked to briefly discuss two questions:

- What are the best ways for institutions to engage with emerging farmers?
- What are the best ways of supporting emerging farmers?

A short plenary was provided for the groups to summarise their discussions. Table 8 gives a summary of the report back comments from the two groups.

Table 8: Summary of group discussions

Questions	Group 1	Group 2
What are the best ways of supporting emerging farmers?	• Do not just inform, empower • All spheres of government must be involved • Coordination of all grants, i.e. alignment of policies and processes • Innovative thinking and engagement by the institutions • A unit to monitor equity allocation in water use entitlement • Legal mechanism/vehicle that links DWS, institutions such as CMAs, Department of Environmental Affairs and Development Planning, DRDLR, DoA etc.	• The WC Department of Agriculture is following the "commodity approach" (CPACs) • Knowledge sharing: awareness-raising and training • This approach includes: mentoring, financial support, training, awareness-raising; business development support (resource planning, business plan development) • Integration of all support services targeted towards agriculture and upskilling of emerging farmers and resource poor farmers.
What are the best ways for institutions to engage with emerging farmers?	• Hands on approach from both parties - will/drive • Analysis of skills will help in knowing in which areas people lack skills in order to strengthen the group • Gap analysis- Who are the disadvantaged farmers and what are their needs? • Environmental impact assessments, already done for areas in framework, should be used when assisting farmers • Simplification of application forms for grants • Assistance with applications	• Using technology for communication- AIMS (Agriculture Information management system) • Individual communication with farmers/landowners • Cultural context: tailored messaging and mentors • Location-based, small commodity groups • Agricultural unions engaging with members • Awareness campaigns must include role plays • Monitoring and evaluation of awareness campaign objectives.

There was a general feeling and agreement that there was not enough time to thrash out these questions in a short session. The participants therefore suggested that the issues should be discussed in a more focused forum that would include all institutions, and other colleagues who were not part of the meeting.

The last session of the workshop looked at the way forward and initial recommendations which could be taken up by the BGCMA. The institutions were asked which one of the represented institutions was the right institution for championing emerging farmer issues and to bring all the institutions together for a dialogue. The participants discussed and agreed on the following:

- The BGCMA will take the initiative and organise the dialogue between institutions. It can be called a committee or a forum to enable coordination.
- The DWS, through such a platform, would also bring field officers from the Breede area to sit together with the BGCMA officers and work to try to find out what services are being offered to the farmers, what is duplicated and what the challenges are. This platform would

make the work of the BGCMA easier because at that time they were not aware of all the field officers in the different parts of the Breede-Gouritz catchment area.

4.3 Water Institutions Brainstorm Session

As previously planned, a follow-up workshop of water institutions was held on 29 January, 2016, at the BGCMA offices (Figure 5).

Figure 5: Water institutions dialogue, Worcester, 29 January, 2016

The workshop was a follow-up on the project workshop which took place at Cape Peninsula University of Technology in October 2015, where various institutions discussed challenges of supporting emerging farmers. The participants had all agreed that the main issue preventing institutions from effectively supporting emerging farmers was lack of coordination and integration among the institutions. The October meeting participants had therefore decided to hold a further discussion on the issue. It was highlighted that the purpose of the meeting was not to take away institutionally mandated roles, but rather to collectively find ways of supporting farmers in a coordinated and more effective way. Three questions were used to guide the workshop.

- What is the problem with the current support systems?

- Do we need to develop a process for engaging emerging farmers?
- Do we need a coordination institute or forum?

2.1.1 What is the Problem with the Current Support Systems?

Participants explained some of the challenges they face with the current farmer support systems. The BGCMA explained that they did not have funding to assist resource poor farmers. The DWS has funding for resource poor farmers which the BGCMA can only access through assisting farmers with the application process. The whole process is complex, time consuming, and BGCMA staff do not have the expertise to properly assist emerging farmers. Most emerging farmers are located far from the BGCMA's offices. It is rather hard for farmers to get hold of documentation which is required for water licence or funding applications. It is mostly emerging farmers that do not belong to WUAs that suffer the most.

The DWS explained that their biggest challenge is water scarcity. The institution also lacks proper expertise for implementing the Water Act. DWS faces challenges with the mechanisms and processes for supporting emerging farmers. The issues of delimitation of roles, capacity and, most importantly, funding hamper effective assistance to emerging farmers. The different institutions that the DWS works with in supporting emerging farmers have different mandates which make it hard to work together; ultimately, there is lack of communication between the departments. Even where there is communication there are confusing systems of support. There is, therefore, need to have a clear understanding of the roles played by each institution in assisting resource poor farmers to gain access to water or financial assistance. It appeared as if the institutions were not certain of their roles.

The DoA indicated that they shared the same challenge as DWS, that of water scarcity. The DoA is the custodian of resource poor farmers; however, water sits with other institutions. This is challenging in assisting farmers and there is an urgent need to ensure that resource poor farmers will have access to water once they have gone through all the right channels.

The absence of a WUA in many places has hampered progress in supporting emerging farmers. There is still a lot of resistance to converting irrigation boards in many places. The BGCMA should bank surplus water obtained via the verification and validation process and make it available for emerging farmers. Water from alien clearing should be stored; therefore, there is need for storage infrastructure

Emerging farmers are expected to develop business plans in order to access support. The business plan is too complicated for many farmers; as a result, many farmers just do not bother to apply. The process also takes a very long time to complete, making it quite expensive for farmers who have to travel to the offices.

2.1.2 Do We Need to Develop a Process for Engaging Emerging Farmers?

Participants debated on the issue at length, whether there was a need to develop a process for engaging with emerging farmers. The institutions agreed that there was a need to coordinate their support to emerging farmers. This would shorten the time it takes to process applications for water user licences, funding, and possibly land applications. There was a suggestion for developing a flowchart to show the process that farmers could follow to obtain support from the institutions. The flowchart could assist both the emerging farmers and the institutions in understanding the roles of the different institutions. The flow chart could address the following aspects:

Integrated Water Resource Management Approach

- Requests to be sent to the office in a categorised manner:
    - Farmers with land but no water
    - Farmers with water but no land
    - Farmers who have no access to either land or water.
- Show the structure of how the different institutions support emerging farmers. That way a farmer will be able to choose which department to go to.
- The flow chart can also include the names of the WUAs in the Western Cape, people responsible for assisting emerging farmers and their profiles. The people assisting must be people trained to guide and assist emerging farmers in the water licensing application process.
- The flowchart must enable the farmers to get a quick and accurate response regarding support required.
- A user-friendly, integrated approach that allows farmers to access support would be much easier and quicker. The support should be at individual level.
- The flow chart should have staff that hold technical, administrative, and local context knowledge.

It was also discussed that one of the major problems that farmers faced was lack of information and knowledge about each of the institutions that could support them. Participants agreed that

there was need to have an information roadshow involving all institutions that work with emerging farmers. It was suggested that the roadshow could include the following aspects:

- All institutions that offer support to emerging farmers should participate
- The roadshow should be done in the areas where emerging farmers are
- The roadshow should inform emerging farmers about the different services from the different institutions, how they can access those services, and who they can speak to
- The different institutions involved should do extensive planning prior to the roadshow.

Participants also raised concerns about the implications of the development of a process for engaging with emerging farmers. The role or route of the WUA should not be neglected as it is the first place where emerging farmers should seek support with water issues. It was observed that emerging farmers who are members of a WUA seem to have sufficient support systems.

2.1.3 Do We Need a Coordination Institute or Forum?

Institutions agreed that there is a need for a forum or unit which will consist of all institutions assisting emerging farmers. The forum should play a number of roles:

- Be logistically located within the BGCMA
- Integrated approach in support to farmers
- The forum should organise, advertise and run information roadshows
- Have representatives of each institution that plays a role supporting emerging farmers
- The forum should have access to experts from other institutions or private sector
- The forum should have a capacity building role, and this should be a joint effort by all institutions
- The forum can streamline information and be able to solve cases of emerging farmers in an integrated manner, within a reasonable period of time
- Categorise farmers according to their needs, e.g.
    - Access to water
    - Authorisation or licence application
    - Funding needs
- The forum should also be an information resource/hub
- The forum should administer or manage the flow chart process
- A model of support to emerging farmers should be developed by the forum.

The participants agreed that the process should start with the establishment of a committee that will work with the BGCMA to start shaping guidelines for an integrated approach in

supporting emerging farmers. The committee will start with suggestions made during the dialogue. The committee should include people who work on the ground with emerging farmers. The committee would share the drafts with the rest of the group to solicit feedback. Participants were asked to volunteer and seven participants agreed to kick-start the process. The meeting also recommended that municipalities and the Department of Lands and Rural Development should be represented in the committee. The committee agreed to develop the guidelines and report back to the main group as soon as possible. The group agreed to reconvene at the annual BGCMA Water Seminar on 17 March, 2016.

4.4 Re-engaging Emerging/Smallholder Farmers

4.4.1 Data Collection Approach

The Sustainable Livelihoods approach (Scoones, 1998) was used to assess the capitals available to Barrydale Small Scale Farmers. It should be noted that some of the information had already been collected during the initial engagements with the famers at the start of the research in 2014. A questionnaire survey was administered to smallholder farmers in Barrydale over one week in February, 2016. One-to-one interviews were conducted with individual farmers. Focus group discussions were also held with the farmers; an initial focus group to map the institutions, followed by three farmers focus group discussions according to location and access to water sources. At the end of the week, a combined focus group discussion was held with the Barrydale Small Scale Farmers and a representative from the HVWUA. The characteristics of HVWUA emerging farmers had already been documented during the initial stages of the research, and part of the results were also published as part of an MSc thesis (Kamphuis, 2015). Detailed results from Barrydale smallholder farmers will also be presented in an MSc thesis to be completed in 2017. Extracts from both theses, and findings from the interviews and focus group discussions are discussed in this section.

The key questions for Barrydale farmers were around water needs, understanding of water costs and willingness to pay, and to assess if farmers could see opportunities in working with other institutions. Table 9 shows the framework of the discussions including questions, methodology and expected outcomes.

Table 9: Framework for re-engaging smallholder farmers in Barrydale

Objectives	Questions	Methodology	Key outcomes
Opportunities for engaging emerging farmers to participate in water user resource management and water allocation issues, and related capacity building opportunities.	- What projects do you want to set up using water? - How much are you prepared to pay for water? - What help do you require to set up the projects? - How do you want to access the water? As a group or as individuals? - Which ones are the best sources of water for your purposes?	- Problem analysis - Focus groups - Institutional analysis, role plays, focus group discussions - Water licensing process analysis - Matrices and pair wise comparisons	- Report on farmer water needs. - Understanding of water costs and willingness to pay. - Do farmers see opportunities in working with other institutions? - Presentation of the water licensing process and farmer response to it. - Farmer priorities for accessing water.

The plan was to first map and score the institutions that work with Barrydale Small Scale Farmers to understand which institutions were important, and to assess if the farmers understood the roles of these institutions. The other objectives were to explore the relationships between the emerging farmers in Barrydale and the institutions they work with in terms of the support that emerging farmers receive from the various institutions to access water as well as how accessible these institutions were to the emerging farmers. It was also important to understand how the current working relationship with institutions allows or limits their access to water or other resources. The three main guiding questions used during the combined focus group discussions were:

- Which institutions do you work with?
- Which of these institutions is the most important and why?
- What support do you receive from these institutions?

The farmers were grouped according to their sources of water for agriculture:

- Farmers who obtain water from the dam
- Framers who get water from the river
- Farmers who rely on municipal water

4.4.2 Characteristics and Roles of Emerging Farmers

Table 9 summaries the characteristics and roles of the emerging and smallholder farmers in the two case study areas.

Table 10: Summary of characteristics and roles of emerging farmers

Capital	Hex Valley	Barrydale
Famer characteristics and human capital	• Educated businessmen • Trained in farming skills • Access to mentorship from commercial farmers	• Unemployed, self-employed or retired individuals • Learnt farming from their parents or interest
Social capital and roles	• Belong to a WUA • Access to mentors	• Do not belong to a WUA • Rely on one farmer leader for information
Natural capital (land and water)	• Own 30-50 ha of land • Have access to long leases on land • Access to water through HVWUA • Pooling system ensures reliable water supply	• Do not own land • Short leases to land with no security • Small plots, 1-2 ha for most farms • Last priority to access water through municipality dam • Experience seasonal water shortages
Physical capital	• Access to WUA infrastructure • Can access loans to purchase equipment	• Limited access to infrastructure, one tractor for the whole group • One dam for all farmers
Economic and financial	• Government provides grants and loans • Support from government and catchment management agency	• Rely on own funding for farming • Limited access to grants and loans

Barrydale farmers were disadvantaged in almost all the capitals, proving their initial arguments true. The Barrydale farmers were asked to prioritise what they perceived as the major challenges facing them in farming and what the solutions could be. The farmers prioritised the problems and gave some solutions as shown in Table 10.

Table 11: Emerging farmer challenges and solutions as perceived by BSSF

Challenges	Possible solutions
Shortage of water for agricultural activities due to lack of infrastructure to capture and store water. They experience seasonal shortage of water and the water is also too expensive for certain individuals.	• Create equal access • Build more storage dams • Drill more boreholes • Solar pumps for pumping water from boreholes
Lack of information on water legislation and processes. Suspicions that the municipality and leadership are withholding information. Farmers do not know who is in charge in the council, and there is lack of information sharing within the group. Farmers also lack training in farming	• Government should intervene • Leadership should revive the farmer group • Leadership should be open and the chairs the group should share all relevant information • Farmer training programmes
Lack of funding and no access to grants and loans has resulted in lack of or inappropriate infrastructure. Funding for emerging farmers is also not understood. There are no start-up programmes to support farmers.	• Start programmes e.g. cow/heifer schemes • Apply for funding as a group
Land shortage was an issue as farmers do not have contracts for land, and if there, the contracts are short-term and the rules of using land are not clear. Some plots are too small.	• Farmers want to own land • Since they cannot afford to buy land, it should be given to them for free.

4.4.3 Understanding Water Institution Support to BSSF

The Barrydale emerging farmers indicated that there are not many institutions that they work with. However, after much deliberation, they listed the following as the institutions that they have contact with: Department of Agriculture, Department of Water and Sanitation, Breede-Gouritz Catchment Management Agency, Swellendam Municipality and Trust for Community Outreach & Education. The farmers were then asked to outline the services that they received from the different institutions. Figure 6 shows the list of the institutions and the services rendered to the emerging farmers.

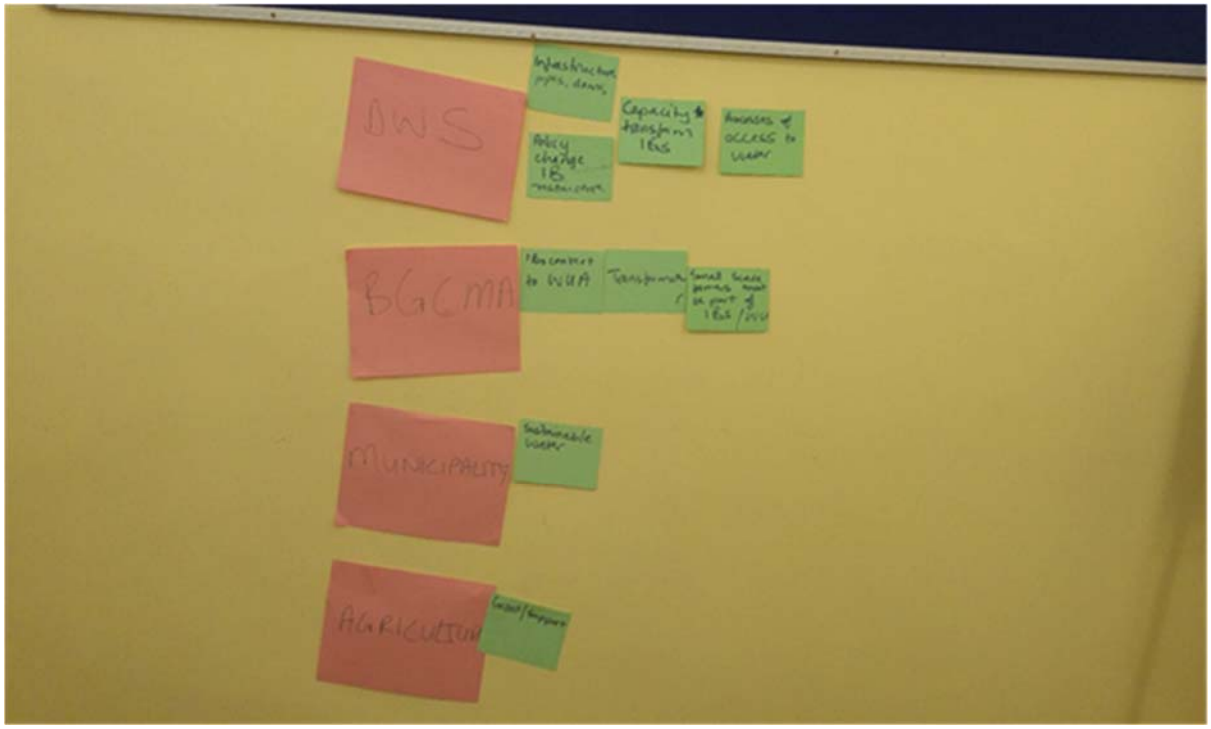


Figure 6: Supporting institutions and their roles

The emerging farmers were asked to describe how each of these institutions was supposed to support them. The farmers were quick to say they did not obtain any support, but after discussing among themselves, a number of support areas were explained. Table 11 shows the institutions and the support given as described by the farmers.

Table 12: Institutional support to emerging farmers

Institutions	**Support to emerging farmers**
Department of Water and Sanitation (DWS)	• Provides water infrastructure • Implements water policies, especially the transformation of irrigation boards into WUAs • Build capacity within the BGCMA in order to enable transformation of irrigation boards into WUAs • Improves the processes of accessing water
BGCMA	• Transforming irrigation boards into WUAs • Once the WUA has been established, the BGCMA should ensure that there is transformation within the association in order to ensure that equity does take place • Facilitate the process of emerging farmers being part of a WUA
Swellendam Municipality	• Ensure sustainable water supply • Build canals and dams to provide water to farmers
Department of Agriculture (DoA)	• Support with grants which farmers use to buy livestock • Supporting farmers with materials such as pumps and pipes • Support in the area of farming knowledge

There was a heated plenary debate on the quality of the support given by the different institutions. The emerging farmers indicated that the BGCMA had visited Barrydale emerging farmers and noted their concerns. Since then, farmers are still waiting to see what changes will come out of their engagements with the CMA. They appreciated that the institution had taken the initiative to engage with them, but they seemed to be growing impatient from the lack of improvement in the challenges they face. Some of the farmers were surprisingly not aware of the institution and how they can get support from it.

The DoA does engage with the emerging farmers in Barrydale and the farmers had seen benefits from their engagement. Through this engagement the DoA offered support to farmers by supplying livestock and materials such as pumps and pipes. In the past, the department had supplied the farmers with electrical pumps which were expensive to operate. In future engagements, emerging farmers hope to specify that they prefer diesel or solar energy pumps which are cost effective. Some of the emerging farmers had applied for assistance and should hear the outcome during the course of 2016.

The Swellendam municipality seemed to engage very little with the emerging farmers and therefore offers minimal support regarding water access. Farmers that receive water from the dam highlighted that the dam dries up every year during the dry season. They had asked the municipality to take this into consideration by increasing the capacity and lining the canals, but nothing had been done to ensure that water is available for these farmers during the dry season. These farmers have to make alternative plans such as carrying domestic water to their farms, which is quite expensive. Farmers who use tap water from the municipality for pig production face water cut-offs if they fail to cover their monthly bills. This happens often as not all the farmers contribute towards the water bill. In general, the farmers seemed to be of the opinion that Swellendam municipality was not interested in offering further support or looking for alternative water sources.

Lastly, emerging farmers in Barrydale have been supported by the Trust for Community Outreach & Education. The trust assisted the farmers in mobilising themselves to share information.

4.4.4 Emerging Farmer Experiences in a WUA

A member of the Hex Valley Water User Association (HVWUA) explained to the Barrydale emerging farmers some of the benefits of belonging to a water association. The main advantage was that commercial farmers assist in developing alternative sources of water to

support emerging farmers who are part of the association. This is done in order to prevent a scenario in which commercial farmers have to share their water allocations with emerging farmers. In HVWUA, for instance, commercial farmers have largely contributed to the construction of a new dam that provides water to emerging farmers. This would have not been possible if the emerging farmers were not part of the HVWAU.

Emerging farmers who are members of the HVWUA are also in a strong position for negotiating water access within and outside the WUA as the institution is recognised in water policies and by other institutions. It is therefore easier for the emerging farmers to engage with the BGCMA, DWS, and any other relevant institution. Emerging farmers in Barrydale therefore need to strive to form a WUA and to become active members. Currently, the Barrydale Smallholder Farmers Association does not provide a strong platform for Barrydale emerging farmers to engage and negotiate for water access, because their case is weak when they go as individuals. Swellendam municipality is currently providing some water to emerging farmers in Barrydale, but, constitutionally, the municipality has no mandate to do so. Their priority is domestic consumers. Therefore, attempts to negotiate water access with the municipality might remain a fruitless exercise if the emerging farmers do not form a legally stronger institution.

Emerging farmers from Barrydale raised concerns over their current position of not being members of a WUA, which has left them with little or no power for negotiating water rights and access. The farmers agreed that there is probably a need to transform the Buffeljagsrivier Irrigation Board in their area into a WUA that they can be part of. The irrigation board is the only one around the Barrydale area and sources water from the Buffeljagsrivier dam with a supply capacity of 5.7 Mm^3 and a yield of 11 Mm^3 per annum (BOCMA, 2010). Following this enlightenment, the BGCMA was seen by the emerging farmers to hold a strong mandate to transform irrigation boards into WUAs. However, some emerging farmers in Barrydale recognised that their local situation is complex and very political. After all, the BGCMA might not have the capacity to establish a WUA in their area. As for the emerging farmers themselves, they do not feel confident enough to negotiate the establishment of a WUA and access to water. Therefore, it was suggested that the DWS should be the one to intervene in assisting the BGCMA to convert the Buffeljagsrivier Irrigation Board into a WUA. The emerging farmers in Barrydale require transformation to urgently materialise in order for them to gain improved access to water.

An emerging farmer from HVWUA however warned the farmers in Barrydale against expecting that WUA membership will automatically enable water access. Rather, the emerging farmers

in Barrydale should be prepared to fight to be in a WUA and for water access and not wait for DWS and the BGCMA to fight their battles. As a way forward on this matter, the member of the HVWUA took it upon himself to arrange a meeting with the BGCMA and see what information exists about Barrydale emerging farmers.

Regarding engagement with institutions, farmers in Barrydale indicated that they do not have official engagement with other institutions. Currently, land and water sits with the minority group, i.e. white commercial farmers, and emerging farmers in Barrydale have very little access to these resources. Emerging farmers have been struggling to gain access to these resources and institutions have done very little to assist. They attribute poor engagement and lack of support to the disintegration of institutions. Additionally, emerging farmers recognise that institutions are located very far from their areas thus contributing to the lack of engagement. According to the emerging farmers, one of the solutions to this challenge could be the integration of the institutions, then informing farmers of their services and support programmes. Emerging farmers need to be aware of what the different institutions can assist them with.

4.5 Solutions to Water Allocation Issues as Perceived by the Farmers

During the focus group discussions, farmers who shared common problems were keen to provide information on how their problems could be solved.

4.5.1 Farmers who Source Water from the Dam

What projects do you want to set up using water?

A focus group discussion (Figure 12) was held with the emerging farmer group members who get water from the controversial municipal dam. The farmers have access to commonage land through municipal land leases. They would like to own the land and have access to bigger plots in order to be more committed to farming as a business. Reliable water will improve their opportunity to plant lucerne to feed livestock. Through such projects, they can increase the number of their livestock. Additionally, the farmers would like to start planting vegetables for commercial purposes. This is not possible without a consistent and sustainable supply of water.

Figure 7: Focus group discussion with farmers who get water from the dam

How much are you prepared to pay for water?

Farmers are currently getting water from the dam for free. Those that have farms up the slope have to bear pumping costs, while the ones on the lower slopes rely on gravity. There was willingness to pay for water, however, the rate would have to be low as the majority of the farmers are pensioners and some have minimally paying jobs. Their current farming ventures are yet to bring sustainable income.

Some farmers cannot access water easily from the dam, therefore it will be difficult for them to pay the same rates for water as others as they have additional expenses such as buying pipes to pump water to farms on high ground. An affordable rate of payment for water per month was estimated to be R100 per farmer. Although the farmers indicated that they are aware that commercial farmers pay a rate of approximately R6000 per year to irrigate for 15 minutes per day, they said they are not able to pay such high rates at the moment.

What help do you require to set up the projects?

The farmers said there is too much loss of water through leakages in the dam and in the canals supplying water to the dam. Water can be saved through proper lining of the dam as well as the canals. Additionally; another dam can be built to capture excess water that is lost through runoff during the rainy season. Infrastructure such as pipes and pumps need to be provided to enable farmers whose land is situated on higher ground.

How do you want to access the water? As a group or as individuals?

The farmers preferred accessing water from the dam as a group. There is a borehole which currently does not yield sufficient water for all farmers. The borehole can also be rehabilitated. The farmers indicated that they were also willing to use the borehole as a group.

Which are the best sources of water for your purposes?

The dam is still the best source of water for these farmers; an increase in the capacity of the dam and construction of another dam will be the best solution to all current water challenges.

4.5.2 Farmers who Get Water from the River

What projects do you want to set up using water?

It is apparent that Barrydale farmers are passionate about farming; if only they could have access to farming resources such as infrastructure their dreams would turn into reality. The farmers interviewed indicated that water and land in their case is not limited as their farms are located close to the river and there is enough land. What they need is infrastructure such as pumps and pipes to draw water from the stream to the farms. Farmers want to expand their farming activities by growing lucerne and oats. However, the famers indicated that it would be impossible to farm with vegetables because of the monkeys near the river that would eat the vegetables.

How much are you prepared to pay for water?

The emerging farmers indicated that they are willing to invest in farming. Of the two farmers interviewed, one indicated that R1000 is the maximum he can pay per annum while the second farmer was willing to pay up to R4000 per annum to finance his farming. The farmers also indicated that pumping costs need to be minimised through the use of diesel or solar energy pumps.

What help do you require to set up the projects?

Both farmers stressed that they need infrastructure to draw water (pipes, petrol or diesel water pumps and money to buy petrol for the pumps). The farmers also said it would be best if the municipality would make a canal from the river to a dam close to the farms so that each farmer can have access to water. There is an old canal that can also be rehabilitated.

How do you want to access the water? As a group or as individuals?

Since the farms are close to each other, one farmer stated that he would be happy to share the infrastructure because he was already sharing grazing land with his neighbour. He was

also willing to share with the other farmer. However, the second farmer stated that he works individually and he would like to keep it that way, therefore he preferred individual assistance.

Which ones are the best sources for water for your purposes?

The river is a better source for both farmers. The farmers indicated that there are many opportunities and initiatives that can be developed to make sure that every farmer has access to water, e.g. drilling boreholes, building dams or rehabilitation of old dams and canals.

4.5.3 Farmers who Get Water from Municipal Taps

What projects do you want to set up using water?

The farmers interviewed are involved in pig production projects. These farmers started the pig projects because the cost of living is very high and they wanted to provide for their families by selling live pigs and pork. The farmers indicated that if water can be made accessible they can expand their farming, and even grow vegetables. The cost of water is preventing them from setting up these projects.

How much are you prepared to pay for water?

The pig farmers have their animals in the same place, they get water from municipal taps and they have to pay a monthly fee of R30 each for water. Some of the farmers had stopped paying the fee which resulted in the remaining few members paying heavily, consequently the municipality shut down the water. Each farmer is now using domestic water from their house and individual modes of transportation to get the water to the pig stall, which is quite far. From the interviews it was apparent that the farmers' views differ even though the objective is the same. Some of the farmers are willing to pay whatever the cost to access water and continue with farming. To some farmers money is a main constraint as they struggled to pay the R30 monthly fee, but because they are passionate about farming they highlighted that if water can be accessible they can pay a maximum of R80 per month.

What help do you require to set up the projects?

Even though they have different views and circumstances the objective to farm and provide for their families is the same. The farmers indicated that they need start-up funds to buy infrastructure for transporting water and better systems for managing water. The farmers said that the municipality should build more dams to store water. One of the farmers interviewed indicated that most farmers within the group are not knowledgeable about farming. He added that training would be a great initiative and a bigger step to enhance the farming knowledge of the farmers and to empower them.

How do you want to access the water? As a group or as individuals?

The farmers indicated that it is better to access assistance as a group because it would be more expensive as individuals. However, there is a lot work that needs to be done in order for the group to work cooperatively; currently the farmers are not working together. As a result, there is no proper organisation because of different goals.

Which are the best sources for water for your purposes?

The pig farmers made it clear that when it is raining there is enough water, what they need is a big dam built nearby the pigsties or the rehabilitation of the nearby dam which currently holds very little water. This would have the potential to attract other farmers who gave up farming due to lack of water. The tap water is too expensive for them.

4.5.4 Emerging Farmers and Institutions Agree

4.5.5 Similar Challenges Identified

There was a startling similarity in the problems identified by institutions and emerging farmers as far as the main challenges hampering effective support to emerging farmers was concerned.

The major issue outlined by the DWS is water scarcity. Most of the water in the BGCMA is allocated and water can only be generated through the verification and validation process which is taking so long to implement. Another source of water could be alien vegetation clearing. Some emerging farmers understand and appreciate this challenge, but there are others who do not understand the process of accessing water at all. This was, however, also surprisingly true of some institutions, especially those who work closely with emerging farmers.

Water institutions identified lack of coordination and integration among themselves as one of the major problems preventing effective and efficient support to emerging farmers. Emerging farmers identified the same problem and confirmed that they did not even understand the roles of some of the institutions that are supposed to assist them, particularly the CMA.

Lack of information was another clear problem. Farmers did not know which offices to approach for assistance to apply for water licences. It was interesting to note that even among themselves the farmers did not share much of the little information that was available. This has potential to continue to fuel the politicisation of access to water which is already a major challenge.

The process of applying for water is complex, confusing and time consuming for farmers. The requirement for documents such as a business plan makes it so difficult for farmers to apply for water. The distances travelled to seek help from institutions are long and the whole exercise becomes so costly for an average emerging farmer. This was also fully recognised by the institutions.

The institutions were also wary of the lack of human resource capacity and expertise in their institutions. This was apparent in Barrydale where the municipality has never engaged directly with the emerging farmers or the CMA to solve the water issue; hence the continued frustration with the municipality, although the municipal mandate is to provide domestic water.

4.5.6 What is the Solution?

At the stage the research took an interesting direction. When the results were shared with institutions there was a spontaneous commitment from the institutions to work towards finding a solution to the emerging farmer water problems. The water dialogue held on 29 January, 2016, was evidence of the need to find a solution by all concerned parties. A committee was set up to chart the way to address most of the challenges that had been identified. The last part of the research was therefore to create a common platform for emerging farmers and institutions to talk about the solutions.

The 2016 BGCMA Water Seminar is was held in mid-March 2016. Both emerging farmers and institutions were invited to attend.

4.6 Combined Institute and Emerging Farmer Dialogue

The Water Institutions Dialogue held on 29 January, 2016, had charted the way forward to solve the problems of emerging farmer support. A committee was set up to find ways of addressing most of the challenges that were identified. The 2016 BGCMA/CPUT (Cape Peninsula University of Technology) Water Seminar provided a platform for both emerging farmers and water institutions to brainstorm further. The dialogue was held during the seminar held on the 17 March, 2016, at, Goudini in Worcester. The dialogue was attended by representatives from CPUT, Department of Water and Sanitation, BGCMA, three representative emerging farmers from Barrydale, the Western Cape Department of Agriculture (DoA), and HVWUA (See also Figure 7). The project principal researcher facilitated the dialogue.

Figure 8: Water dialogue at the Water Seminar, Goudini, Worcester, 17 March, 2016

The aim of the discussion was to continue with the water dialogue held on 29 January, 2016, at the BGCMA offices in Worcester, with the aim of further identifying possible ways to efficiently provide support to emerging farmers. It was explained that a committee consisting of seven members from various institutions was established during that dialogue with a purpose to draft the way forward. Prior to the focus dialogue, some of the committee members shared suggestions on how support could be best offered to emerging farmers. Dr Ncube then asked those committee members who had not circulated their thoughts on the matter to discuss with the rest of the group. A committee member from DWS reported that officials from his department had met and discussed the matter and apologised for not sharing their thoughts prior to the focus group discussion. He outlined the following suggestions on support to emerging farmers:

- Develop a comprehensive package that includes all the support available for emerging farmers
- The comprehensive package should be drafted by all institutions

- The first step will be to hold a seminar with emerging farmers, unions, and all institutions concerned to work on developing this draft.

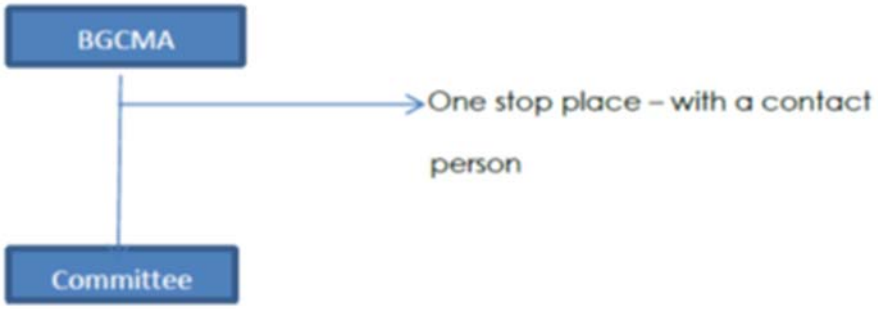
Other committee member also submitted their contributions (Box 1 and 2).

Box 1: Inputs into developing support structures for emerging farmers, from committee members from the BGCMA and DoA

Emerging farmers require a "one stop place" that will assist them with water issues. Perhaps this "one stop place" to be positioned at the BGCMA. The committee needs to decide who can play a role when a farmer's request for assistance is received?

The one stop place to have:
- All information pamphlets/booklets on agricultural or water related matters.
- A contact person that is well acquainted with information on who to contact for what issue.

Examples:
a) Who to phone if the farmer needs help to access water from a certain water scheme, or
b) A farmer wants to drill boreholes.



The committee should consider having an information day for farmers, where they will be given information on different government institutions and programmes, with contacts that can assist them in their agricultural and water related questions.

Box 2: Inputs into developing support structures for emerging farmers, from committee member from the DoA

- DWS and the BGCMA should be represented at the following institutions:
- District Land Reform Committee (DLRC)
- Consultative Committee on Agricultural Water (CCAW)
- Western Cape Department of Agriculture Departmental Project Allocation Committee (WCDoA-DPAC)

Co-funding should also be promoted between different stakeholders (CASP and Re-cap funding to support infrastructure and production on smallholdings). The WCDoA Farmer Support and Development program works directly with smallholder farmers. They have decentralised offices throughout the Western Cape. There should be similar support structures for officials and farmers to get information and support. The proposal is a help desk that functions like UTA and LREAD at CASIDRA. When smallholder farms are to be purchased by DRDLR or funded by WCDoA and DRDLR, technical committees are formed. There should be access to people and information within the BGCMA to support these technical committees

DoA indicated that their department is decentralised with offices at local level which makes them very accessible to emerging farmers. The local offices can be used as a starting point. The BGCMA agreed that the DoA can be a starting place. However, all institutions should first be made aware of the support offered to emerging farmers as it emerged in the previous meetings that this knowledge does not exist. It was then suggested that the institutions should make use of the roadshow to familiarise themselves with the support structures available to emerging farmers. During the previous meeting, it was agreed that the planning of the roadshows will be an exercise for all institutions and thus information sharing would take place. DWS suggested that prior to the roadshow a comprehensive information package should be completed. The institutions were expected to work together in developing the information document. Once completed, the document would be shared with all institutions.

At this point, an emerging farmer painted a picture of some of the main challenges they face in accessing the centralised offices. He indicated that most emerging farmers lack financial means to access these offices. He said it might be more fruitful to develop a system where officials visit emerging farmers once a month or so. Secondly, he expressed his concern over the nature of the commitment from the institutions in assisting emerging farmers. He added that perhaps it might be useful to have a legal agreement that binds the institutions into partaking efficiently in this task. It was explained that the institutions had already committed to support the farmers, and the meeting was proof of the level of interest. On the other hand, the BGCMA indicated that they agreed with the emerging farmer on the need to have a more formal agreement/commitment to this initiative. The DWS also agreed with the emerging farmer's concern over the need to localise information and support to emerging farmers and highlighted that the roadshow is one way of localising packages for emerging farmers. Other innovative and sustainable measures could be implemented as the programme progressed.

The DWS also recognised the need to sort out the issue of commonage land which is closely linked to access to water and affects the forms of support that emerging farmers can access. , and noted that municipal representatives therefore needed to be part of the discussion as they administrate commonage land. An emerging farmer from Barrydale expressed his frustrations over working with the municipality on the commonage land issue. He added that the system is not only frustrating to him but to the rest of the emerging farmers. DoA added that there should be mechanisms to pressurise municipalities to perform better in this area. DWS suggested that the group focuses on the proposed plan of the comprehensive support package which might re-engineer the whole system of engaging with farmers and will also touch on the relationship between emerging farmers and their local municipalities. The BGCMA also added that part of their job is to build relationships with the local municipalities

and they will assist emerging farmers in accessing the municipalities. The BGCMA was also engaging with the emerging farmers through the “meet and greet” campaign which gives the latter an opportunity to express their challenges with the municipalities. DoA added that the comprehensive package would assist all spheres of government, including local municipalities, to achieve effective communication. At that point, the group agreed that the steps towards support to emerging farmers would be:

1. Development of the comprehensive information package
2. A combined workshop for finalising the comprehensive package
3. A pilot information roadshow

The research team was tasked to compile the comprehensive package, with commitment from the group to submit contributions. A combined workshop would then be held to engage and finalise the document.

HVWUA emphasised that there should be more WUAs in the catchment. In terms of access to water, the first point of call is the WUA. CPUT also suggested that there should be provision for emerging farmers that are not part of a WUA. DWS agreed and added that in such cases the extension officers should be capacitated to assist farmers that are not members of a WUA.

HVWUA also lamented that the process of applying for a water licence was very challenging for emerging farmers and wondered if there was any support to emerging farmers as the WUA was not capacitated to offer it and this left emerging farmers vulnerable to consultants. DoA responded that the Consultative Committee on Agricultural Water (CCAW), together with the BGCMA and extension officers, do assist emerging farmers with the process of water applications but that this support needs to be more accessible. DWS suggested that the comprehensive package should include the role of the CCAW and how this committee assists emerging farmers. A question was then raised as to whether consultants that assist emerging farmers with the water user licensing process will be included in the package. The group agreed that consultants should not be included as they usually take advantage of the vulnerability of commercial and emerging farmers and charge them high fees.

4.7 Combined Institutional Dialogue – 19 August 2016

The combined workshop was planned during the Water Seminar Dialogue held in March 2016. The workshop was held at the BGCMA offices in Worcester, on 19 August, 2016. The main objectives of the workshop were to present the information that had been compiled thus far

and discuss ideas for the roadshows. The following institutions attended the dialogue: Cape Peninsula University of Technology (CPUT), Department of Water and Sanitation (DWS), Breede-Gouritz Catchment Management Agency (BGCMA), Western Cape Department of Agriculture (DoA), Hex Valley Water User Association (HVWUA), Department of Rural Development & Land Reform (DRLDR), African Farmers' Association of South Africa (AFASA) and Theewaterskloof Municipality (see also Figure 9).

Figure 9: Water dialogue at the BGCMA offices, Worcester, 19 August, 2016

The workshop started with a brief presentation of the steps that had been taken in the project, and progress. The presentation also covered a summary of the support given to farmers by each organisation as originally collected from the institutions in the early stages of the project. The objectives of the dialogues were to discuss what had been collected to compile the information package, agree how to best package the information and discuss ideas for the roadshows.

4.7.1 Proposal for a Farmer Support Package

The HVWUA representative stressed that it was is not the duty of WUAs to negotiate with members to make land available. However, HVWUA does it because they cannot get water licences to build dams if there are no famers to take that water. It was suggested that the proposed farmer support package should encompass WUAs so that farmers could see the link between WUAs and departments involved in water licensing and allocation. A suggestion to consult as many WUAs as possible was made; and the municipality representative said it

would be also good to look at national guidelines relating to WUAs because they changed often. The BGCMA and DWS were tasked to write the summary of the national WUA guidelines.

The participants agreed that the package should begin with an information table indicating the roles and mandate of each department, and contact details, to make it easy for start-up farmers. It was suggested that real issues facing emerging farmers should be addressed and solutions must be found where possible. The representative from DRDLR was attending for the first time. He was asked what DRDLR could contribute to the farmer support document. The representative said that the department is not involved in the water licensing process but has programmes which focus mainly on land lease and acquisition by HDIs; they also have a recapitalisation programme and implement support. The department also facilitates HDI mentorship and provides assistance for the transfer of knowledge. Mentorship was offered to farmers that had recently bought farms or that are new in the farming business, but only for a year. The DRLDR representative was asked to submit a summary of what the department provides, covering aspects such as:

- What does it mean to apply for land?
- What happens after a famer has applied?
- What type of documentation is needed to apply?

The municipal representative was also attending for the first time. She was asked similar questions. She explained that the municipality did not have the authority to allocate land to farmers. They only assisted with small portions of land (land where one could plant vegetables). The municipal representative stressed that the issues that they deal with on a daily basis included commonage land with no water, or commonage land with water but no boreholes or WUA. She said that each municipality has its own policy document, and she explained that the way they dealt with these issues varied from municipality to municipality. It was agreed that the municipality should not submit a document. Issues relating to municipalities would be addressed case by case during roadshows.

The representative from the African Farmers' Association of South Africa (AFASA) briefly explained the organisation's mandate and how they helped each other as farmers in the association. The representative said that AFASA has a memorandum of understanding with Agri-SA and they help farmers within the association to get through farming difficulties. The meeting agreed that the information was relevant for the package, and the group asked the representative to write a summary of their functions that would be part of the package.

The participants agreed that a roadshow should be piloted after the package was completed. It was agreed that the pilot roadshow would be held in Barrydale where the farmers were already part of the process. Members suggested that rainwater harvesting should be part of the roadshow (CMA to coordinate with DWS about tanks). It was also agreed that the farmer support document should have a flow chart which will demonstrate the start to end steps that needed to be taken by farmers when they sought help regarding farming or access to water. The package was compiled between August and October, 2016. Annex 1 shows the farmer information package, while Figure 10 shows the dashboard of the proposed flow chart.

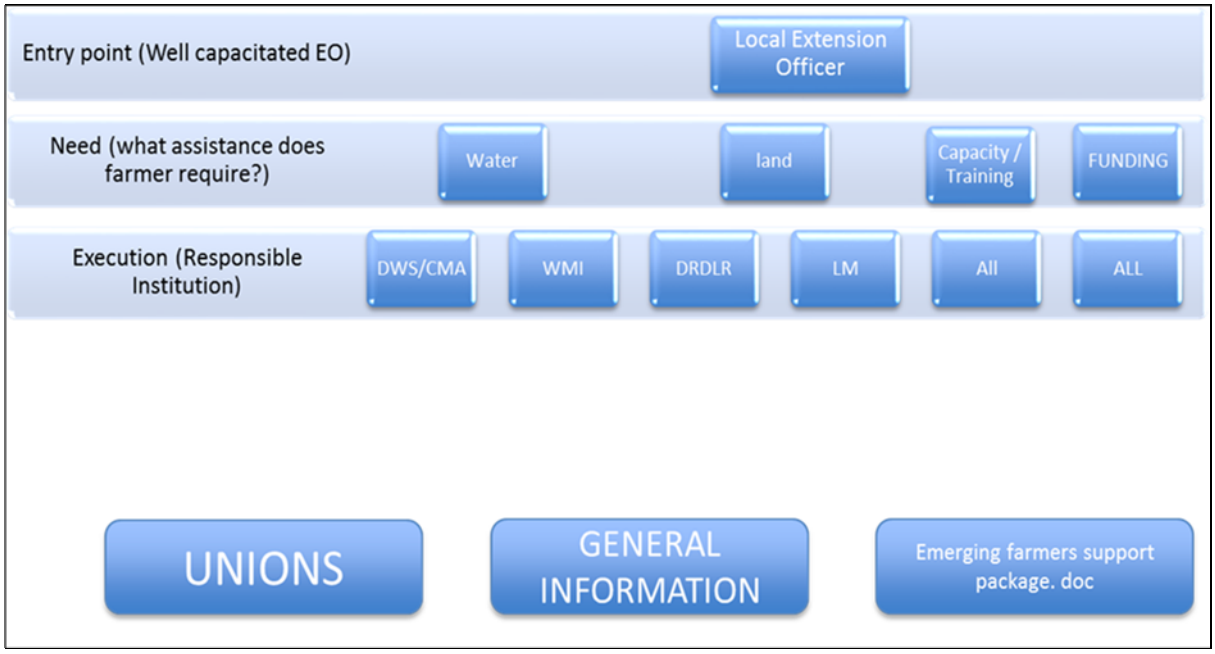


Figure 10: Proposed dashboard of the information flow chart

The flow chart will be web based while the information package will be both hard copy and electronic. The flow chart will be regularly updated by the institutions concerned.

4.8 Institutional Roadshows

4.8.1 Report on the Barrydale Roadshow

The roadshow was held at the Barrydale Municipal Hall on 3 November, 2016. Present at the roadshow were representatives from Cape Peninsula University of Technology (CPUT), Western Cape Department of Agriculture (WCDoA), Department of Water and Sanitation (DWS), Department of Rural Development and Land Reform (DRDLR), Hex Valley Water User Association (HVWUA), African Farmers' Association of South Africa (AFASA), representatives

from the Netherlands and emerging/smallholder farmers (The total number of people was 61). The roadshow was facilitated by CPUT and the BGCMA.

Figure 11: Barrydale roadshow

The BGCMA called the house to order and welcomed all to the meeting. The principal researcher then welcomed the participants and thanked them for being present. A round of introductions by everyone present then followed. The chairman of Barrydale Small-Scale Farmers (BSSF) acknowledged the presence of all institutions, especially the CEO of the BGCMA whom they had not seen for a while. He added that there was a lack of communication between farmers and the institutions. The farmers had tried to get all the institutions to come to Barrydale so they could discuss farming issues, but they had failed countless times, therefore seeing the institutions all together in one room was like a dream come true to him and the Barrydale farmers at large. He requested the government to produce a document that presents guidelines that will help the farmers overcome the difficult conditions they are farming under. Mr Michaels said they were grateful for the research efforts in their area. He hoped that the relationship they have built with the institutions will not cease at the end of the project.

The CEO of the BGCMA acknowledged the presence of all farmers. He said farmers should not be seen or regarded as emerging, but as builders of the economy, and they should participate in strategy development and shape the transformation agenda. He said farmers need support from the government for this to be realised. The CEO highlighted that, as the CMA, they have not been hiding, as the chairman had put it; they have been working towards getting the farmers involved and so far, they are making progress. The CEO added that the

CMA is currently working on water policy reviews; they are trying to come up with a medium term strategic framework, and to make the strategy practical could take up to five years but they are working very hard on how best to assist farmers. Other recent actions include the establishment of rainwater harvesting tanks and gardens to improve farmer livelihoods. The CEO said that, as the CMA, they had been listening to farmers. The CMA recently signed a memorandum of understanding with two universities, the Cape Peninsula University of Technology and the University of the Western Cape and released funds for research that will assist in answering some of the questions that farmers have. The CMA is also engaging with international partners in the Netherlands and Namibia to learn from their experiences.

Objectives of the roadshow

A short presentation was made on the objectives of the WRC project including how the project had now expanded to include the work that was being done with the BGCMA and other water related institutions in the Western Cape, including the farmers themselves, through AFASA and the Barrydale Small Scale Farmers Association. Each institution then presented their organisational functions and farmers asked questions at the end.

Department of Water and Sanitation – The presenter clarified the legal frameworks and policies that govern water, including the importance of the 1998 NWA. He explained how the Act was meant to support and promote socio-economic development through the use of water. There are also other activities that the DWS funds, such as bulk water distribution infrastructure, operation and maintenance of waterworks, investigation and viability studies for agricultural water use for socio-economic development, financial assistance for the training of management committees of WUAs, and grants for rainwater harvesting. Resource poor farmers are still encouraged to apply through the DWS website and the decision to grant funds is based on recommendations by the regional office.

Breede-Gouritz Catchment Management Agency – The emphasis of the presentation was on understanding the role of the CMA and water use authorisations in terms of the 1998 Water Act.

Department of Rural Development and Land Reform – The DRDLR's programmes focus mainly on land lease and acquisition by HDIs. The department also offers the recapitalisation funding and implementation support. The department offers HDIs mentorship and provides financial management and accounting services. This transfer of knowledge and help is only offered for a year to farmers that have recently bought farms or that are new in the farming business.

Western Cape Department of Agriculture - The presenter spoke about the Farmer Support Development Programme (FSD) which is meant to support resource poor farmers. The programme is divided into two: Farmer Settlement & Development where resource poor farmers are supported to venture into commercial farming, and Extension and Advisory Services that mostly help farmers with information and appoint mentors for resource poor farmers to teach them skills in agricultural activities. The presenter highlighted that they also have grants/financial support for farmers and those who need help should keep in touch with regional extension offices and check the notice boards for updates on available grants.

Hex Valley Water User Association - The presenter briefly shared his experiences as a farmer and the importance of being in a WUA. He encouraged and advised emerging farmers to form WUAs, to work collectively with commercial farmers, and to make use of government offices.

African Farmers' Association of South Africa – The presenter briefly outlined the history and functions of the organisation. He explained that the organisation is also involved in the mentorship programme.

Question and Answer Session

Why commercial farmers are not part of the meeting?

Dr Ncube said they had consulted commercial farmers during the project. This particular information day was dedicated to sharing information with smallholder/emerging farmers where the need for information was urgent. Commercial farmers will still be engaged at a later stage.

The mentorship program has failed farmers so far, how do you intend to solve that?

The objective of having a mentor is to share knowledge. It is apparent that current mentors are not doing that. DRDLR is in the process of revising the methods and criteria for selection for mentorship. AFASA is developing a new mentorship database which will be made available soon.

How can a farmer access extra water, e.g. for an extra 5-20 ha?

If irrigation boards had been transformed, the farmer would obtain water from the WUA in his area. Under the current conditions, the farmer should approach the irrigation board in his area. If that fails, he can approach the BGCMA. If the farmer is still not satisfied, he can approach DWS, after which the farmer can go directly up and present his case to the minister. Farmers

were encouraged to make use of government offices, and, if their complaints are not taken seriously or are not answered, they can write to the minister.

Will the information collected in the project and the meeting be recorded, and will it be documented and be passed on to relevant people?
The uptake of the research results will be elevated to the national level with the relevant government departments which include the Department of Water and Sanitation, Department of Agriculture, Department of Rural Development and Land Reform, etc.

There is need for a radical transformation of irrigation boards. All relevant departments should participate and mentors should be screened properly.
All departments are bound by policies and legislation. The departmental representatives agreed that transformation is needed but someone must make a decision; a decision must be made on the right policy, and this happens at ministerial level. There is need to redesign the WUA process, but it should also be recognised that changing policy might result in failure. Transformation is fundamental; the WUA process is being reviewed and decision making that is related to the policy will be made. The BGCMA is concerned and serious about transformation and there is need for input from all in this process. The land redistribution process was flawed, but the DRDLR is making sure that farmers will participate at grassroots level, and farmers were encouraged to participate.

How can a farmer access water from a river that passes through his farm? The banks of the river are collapsing.
The BGCMA confirmed that assistance was given to some farmers in this area in the past; at times, assistance was given to the group instead of individuals, for example, Elim farmers. The farmer was advised to contact the Department of Agriculture and the case should be reported to the BGCMA.
It was clear that some farmers had received assistance from the CMA and Department of Agriculture, although there were a few individuals who complained that they had submitted their complaints but they never received help. Some individuals were asked to speak with the CEO after the meeting. The CEO emphasised that the Overberg is a big area and so it takes time for them to reach certain places; however, he advised the farmers to make use of available information (contact numbers) and visit the offices often.

How will farmers obtain answers to questions after this process?
The realities of some of the processes were explained to the farmers. Red tape means that all decisions concerning land have to be made at the top, and, at a minimum, it takes three

months. By the time some decisions are granted, land evaluations have already expired and have to be redone. There is need for open communication if a farm has been identified. If farmers raise issues with the minister, it opens doors for process revision. Farmers were encouraged to stand up for their rights. Information discussed in this meeting will be taken up by the relevant organisations. Farmers were encouraged to record the names of officials that they speak to when they seek assistance from offices.

Can a farmer take up unused land?

All land belongs to someone in South Africa; therefore, occupying that land would be unlawful. Farmers were encouraged to report illegal activities, e.g. unlawful dams. There are legal processes to address these issues. Farmers were encouraged to inform relevant offices if they observed any illegal activity.

4.8.2 Caledon Roadshow

The roadshow was held on 15 March, 2017, at the Victoria Hall in Caledon. Present were representatives from Cape Peninsula University of Technology, Department of Agriculture, Department of Water and Sanitation, Theewaterskloof Municipality, the Land Bank, and Hex Valley Water User Association. Farmers came from Riversonderend, Middleton, Genadendal, Bosmanskloof, Voorsterkdrall, Bereaville, Grabow, Botriver, Caledon and Tesselaarsdal. Guest were welcomed followed by a round of introductions of the different representatives and farmers groups. The Theewaterskloof Councillor then welcomed everyone and acknowledged the presence of all institutions. She further said the gathering to them was like a dream come true because the farmers were presented with an opportunity to ask questions which is something they have been longing for. The total number people present at the function was 106. Figure 11 shows the farmers and representatives of the different institutions.

Figure 12: Caledon roadshow

A summary of the WRC project was presented, clarifying where the project started and how it had culminated in an institutional programme. Findings of the project were highlighted, including the challenges that farmers face, and a summary of what had been done to support or to meet the information needs of the farmers.

The CEO of the BGCMA acknowledged the presence of all farmers. He said farmers encouraged farmers to participate in all incentives that can shape the farming sector and contribute in elevating the economy of the country. The CEO said as the CMA they believe in farmers and they believe that with necessary information farmers can make a difference. He said the roadshow was about sharing information. He highlighted that food security is very important and farmers are the best people to take it further. The CEO also stressed that there are three major challenges faced by the industry: water scarcity, unemployment and poverty. He urged the farmers to work together with the institutions to find practical solutions to these issues.

The farmers were then directed to an adjoining hall where institutions had set up information stalls. Farmers moved around the stalls asking questions related to their areas. This process went on for about 3 hours, then a plenary session followed where the identified issues were summarised.

Summary of Plenary Discussion

Department of water and Sanitation

Issues

- Bosmanskloof Dam
- Water purchased by DoA currently used by commercial farmers
- Levies

The DWS explained that they offer financial support, bulk water distribution infrastructure, operate and maintain water works, and carry out investigations and viability studies for agricultural water use. They also give financial assistance for training of management committees of WUAs and grants for rainwater harvesting.

Breede-Gouritz Catchment Management Agency

Issues

- Water licensing
- Conflicts between communities

Department of Agriculture

Issues

- Funding
- Training
- Household gardens

The DoA said they run the FSD programme which is meant to support resource poor farmers. Extension and advisory services mostly help farmers with information and appoint mentors to assist them on agricultural activities. DoA highlighted that they also have grants/financial support for farmers. Farmers need to keep in touch with regional extension offices and check the notice boards for updates on available grants.

Land Bank

The Land Bank representative highlighted that throughout his session the farmers stressed that there was a lack of communication between the farmers and the institutions. He said the audience was diverse in terms of types/groups of farmers; there were commercial, emerging, household and subsistence farmers. During his session, farmers were concerned about the following:

- Land acquisition

- Land tenure and lease agreements
- Access to markets
- Legislation governing agriculture.

The information package that each farmer had received was explained. Attention was drawn to the functions of the institutions and the contact details at the end of each section. Farmers were concerned about the absence of the DRDLR because they said they had questions for the institution.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The objectives of the project were largely met. However, a number of lessons were learnt from the research project.

5.1.1 The Needs of Emerging Farmers are Misunderstood

There were a number of surprising outcomes of the interaction with emerging farmers in the last three years. The emerging farmers in a WUA were economically active business people pursuing farming like commercial farmers. On the other hand, the Barrydale Small Scale Farmers were a diverse group with completely different farming objectives. A few farmers wanted to become commercial and they felt they were hindered by the lack of water. Another group wanted more land to be able to farm productively, while yet another group just wanted cheap water. Unfortunately, all these farmers are classified as smallholder/emerging and they are perceived to requiring the same support. As a result, some farmers were supported with infrastructure which they could hardly sustain.

5.1.2 It was Important to Share Findings Early in the Project

The project allowed for sharing of the results early in the project. When the results were presented to the water institutions, the rest of the research became a truly collaborative process, with phenomenal outcomes for everyone. The water institutions became active participants in the research and activities are continuing beyond the project time frame.

5.1.3 Researchers as Facilitators Rather Than Criticisers

The research team took a facilitative approach throughout the project. It was explained to the farmers at the start of the project that the team was there to collect evidence that would be passed on to relevant institutions and authorities. The team lived up to its promises by bringing the institutions and the farmers under one roof. As much as there were no immediate solutions to the farmers' problems, trust was built between the farmers and the institutions.

5.1.4 Institutional Collaboration Works Better as a Bottom-Up Process

It can be concluded from the experiences in this project that the collaboration worked well because the engagement was bottom up. The team presented the findings to the officers who have day-to-day interaction with the farmers and they could relate to the problems of the

farmers because they experienced them on a daily basis. As a result, it was also easy to collectively discuss and find solutions for both the farmers and the institutions.

5.2 Recommendations

One of the surprising findings of the research project was the diversity of smallholder and emerging farmers in terms of farm size and ownership, resource endowment, farming objectives, etc. The farmer characteristics are not understood by policy makers, and the policies are set up as “one size fits all”, leading to deepening poverty for the emerging and smallholder farmers. Even if the government was to provide water to all the farmers, there is no guarantee that the water will improve the farmers’ lives because their livelihoods are not understood and catered for. There is therefore need to classify and understand farmer characteristics and needs so that relevant strategies can be developed based on farmer livelihoods and capability.

After successful engagement with the farmers, the team did not come up with a clear exit strategy for the Barrydale Small Scale Farmers. There is need to define what can be done to ensure that resource poor farmers can have access to water once they have all the information support they need from institutions. Should the team set up a pilot project that the farmers will implement? There is need to find ways of empowering the communities to set their own interventions, but this requires start-up support. This was articulated by the Barrydale Small Scale Farmers. The BGCMA is currently the institution driving the processes of access to water in collaboration with DWS and other institutions. There is need for the institutions to take the project model up within their institutions for further action so that this does not remain a successful roadshow without tangible further action.

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APPENDIX 1: THE EMERGING FARMER SUPPORT PACKAGE

THE EMERGING FARMER

BREEDE-GOURITZ

Catchment Management Agency
Opvanggebied Bestuursagentskap
I-Arhente yoLawulo lomMandla nokungqongileyo

EMERGING FARMER SUPPORT PACKAGE

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1. THE NATIONAL WATER ACT, 1998 (ACT 36 OF 1998): RESOURCE POOR FARMER FINANCIAL ASSISTANCE

1.1 Introduction

The Department of Water and Sanitation (DWS) with the Breede-Gouritz Catchment Management Agency (BGCMA) recognise that most resource poor farmers, poor rural and poor urban households do not have sufficient capital to fund irrigation development and other household food security initiatives. They are considered by financial markets as high risk clients for capital infrastructure funding.

The National Water Act, 1998 (Act 36 of 1998) (hereafter referred to as "the Act" or "the NWA") has equity and sustainability as central guiding principles to protect, use, develop, conserve, manage and control water resources. It is thus necessary to address the need to promote social and economic development through the use of water in an equitable way, and to provide different forms of assistance, which will promote these objectives through self-sufficiency and sustainability of the different water management institutions.

The Breede-Gouritz CMA is established in line with the NWA. The NWA states that ***"the purpose of establishing these agencies is to delegate water resource management to the regional or catchment level and to involve local communities, within the framework of the national water resource strategy established in terms of Chapter 2 of said Act. Whilst the ultimate aim is to establish catchment management agencies for all water management areas, the minister (through DWS) acts as the catchment management agency where one has not been established."***

1.2 Definition of a Resource Poor Farmer

Resource Poor Farmers (RPF) are by definition provided in the Regulations on Financial Assistance to Resource Poor Farmers, GNR.1036 of 31 October 2007: Regulations on financial assistance to resource poor farmers (Government Gazette No. 30427), which states, "resource poor farmer" means a farmer who is eligible for financial assistance in terms of regulation 3 (1);

Regulation 3(1) stipulates that, Subject to sections 61 (3) and (4) of the Act, a farmer is, for the purpose of agricultural water use development, eligible for financial assistance contemplated in Section 61 (1) of the Act if the farmer—
(a) is a South African citizen;
(b) is a member of any historically disadvantaged population group; and
(c) has—(i) agricultural land or access to agricultural land;
(ii) a water use authorisation, except where financial assistance for acquisition of water entitlement is required; and
(iii) agricultural water use development needs and is unable to raise finance for that purpose.

1.3 Legislative Framework and Policy

Provision of DWS financial assistance is contemplated in Sections 61 and 62 of the National Water Act, 1998 (Act No. 36 of 1998 [the Act]).

"Financial assistance by Minister
61.*(1) The Minister may, subject to a regulation made under Section 62, give financial assistance to any person for the purposes of this Act, including assistance for making*

licence applications, in the form of grants, loans or subsidies, which may be made subject to such conditions as the Minister may determine.

(2) The financial assistance must be from funds -

(a) appropriated by Parliament; or

(b) which may under this Act or otherwise lawfully be used for the purposes in question.

(3) Before giving any financial assistance, the Minister must take into account all relevant considerations, including -

(a) the need for equity;

(b) the need for transparency;

(c)the need for redressing the results of past racial and gender discrimination;

(d) the purpose of the financial assistance;

(e) the financial position of the recipient; and

(f) the need for water resource protection.

(4) A person who wilfully fails to comply with any obligations imposed by this Act is not eligible for financial assistance under this Act.

Regulations on financial assistance

***62.** The Minister may make regulations concerning -*

(a) the eligibility for financial assistance;

(b) the manner in which financial assistance must be applied for; and

*(c) terms and conditions applicable to any financial assistance granted.**"***

1.3.1 Policy Overview

Objectives and general principles

The policy framework on RPF financial assistance endeavours to promote initial access to irrigated agriculture, to enhance sustainable irrigation development for resource poor farmers and improve household food security for poor households by making available to them various types of grants or subsidies.

General Terms and conditions

Financial assistance granted under Section 61 of the Act for the purposes of agricultural water use development is subject to the following terms and conditions:

- Financial assistance may be granted and utilised only for activities that ensure that water is protected, used, developed, conserved, managed, and controlled in a sustainable and equitable manner;
- Financial assistance must be used strictly in accordance with the project proposal or business plan that was submitted with the application for financial assistance and must directly cover the resource poor farmer's proportional share of the cost of the agricultural water use development activities in respect of which the financial assistance was granted;
- Any disbursement of funds in respect of the financial assistance is subject to the availability of funds in DWS's budget for this purpose, and compliance of the completed activities with the specifications as indicated on project proposal approved by DWS;
- Repayment conditions may be imposed by the minister to enforce an agreement entered into with DWS regarding the granting of the financial assistance, and prevent any deviation from or non-compliance with the conditions subject to which the financial assistance was granted; and
- The financial assistance is to be withdrawn by DWS in the event of any deviation from the project proposal or business plan that was submitted with the application for financial assistance, or non-compliance with any term or condition subject to which the financial assistance was granted.

1.3.2 The Framework

This policy framework endeavours to promote initial access to irrigated agriculture and to enhance sustainable irrigation development for resource poor farmers by making available to them various types of grants or subsidies, in terms of Sections 61 and 62 of the National Water Act, 1998, like:

- Government Water Schemes (GWS); or
- Ex-homeland GWS; or
- Water user association (WUA) schemes; or
- Schemes of other approved legal entities.

Applications for these grants or subsidies should be channelled through the provincial Coordinating Committee on Agricultural Water (CCAW) and, when recommended by that body, the relevant regional offices will provide all the necessary information and documentation to Head Office needed to prepare the grant or subsidy application for submission to the minister.

This role played by the regional offices will eventually be taken over by the relevant CMAs, once they have been established. The Directorate: WR Finance and Pricing provides the regional offices with a list of requirements that are needed in order to deal with applications. Comprehensive guidelines in a clear step-by-step format are stipulated for all CCAWs, in order to ensure that every proposed applicant can be advised correctly on the procedures and best practices, and to ensure standardisation of the process that will be followed.

Beneficiaries will qualify for each of these five products once only per specific use. That means that neither would the same user qualify for a second grant or subsidy for the same use, nor would another user qualify for a grant or subsidy for the same use, if somebody else has already been subsidised for the specific use.

1.4 Who qualifies for financial assistance?

Resource poor farmers who are South African citizens and who are regarded as members of historically disadvantaged population group and are also members of a water user association or any legal entity approved by DWS. To qualify they must also have land or access to land, a water use authorisation and must have agricultural water use development needs but be unable to raise finance for this purpose and must be 18 years of age or older.

1.5 What is funded under DWS Financial Support?

Five packages are funded and these are:

a) **Grants for Capital Costs for Bulk Water Distribution Infrastructure**
   - for the construction and/or upgrading of canals, main pipelines, main pump stations, weirs, communal storage dams, take-off points;

b) **Subsidy on Operation and Maintenance of Waterworks, Water Resource Management and Depreciation Charges**, phased out over a six-year period, scaling down by 20% annually (except for depreciation charges) to resource poor farmers who access:
   - Government Water Schemes (GWS) that are managed by DWS;

- GWS that are operated and maintained by WUAs or other approved legal entities; &
- Other WUA or approved legal entities.

Table 1: Phased out process of subsidy

Year	WRM	O&M	Depreciation
0	100%	100%	100%
1	80%	80%	100%
2	60%	60%	100%
3	40%	40%	100%
4	20%	20%	100%
5	0%	0%	100%
6	0%	0%	0%

c) **Grant for Preliminary or Remedial Socio-Economic Viability Studies and Investigations for Agricultural Water Use Development**
- Consultancy services for facilitation, needs assessments, technical planning and design, including the socio-economic feasibility studies;
- The assessment of long-term water availability, existing infrastructure, different options available and development prospects for agricultural water use development;
- The cost of materials, equipment and construction of new bulk-supply water works or the rehabilitation or upgrading of existing infrastructure;
- Water conservation and water management measures on agricultural water use;
- Dealing with the legal and administrative requirements for the development or rehabilitation of infrastructure for agricultural water use.

d) **Grant for Training of Management Committees of a WUA or Other Approved Legal Entities** in:
- Efficient water distribution management in agricultural water use;
- Water use and conservation programmes, techniques and practices;
- Financial management, business plan development, budgeting and legal aspects; and
- Measures on how to ensure scheme sustainability.

e) **Grant for Rain Water Harvesting;**
- for family food production and other productive uses.

1.6 Can one still apply for DWS funding if another government department has already assisted financially?

Yes, DWS financial support to resource poor farmers is supplementing other government funding mechanisms. Those who have benefited from DWS subsidies and grants before are also eligible to apply, however; priority would be given to first time applicants. DWS Regional Office should verify if the applicant has previously received financial assistance from DWS.

1.7 How much money can one receive from DWS financial support and how is it determined?

A formula is used to determine how much money farmers will qualify for in relation to each product they apply for. Variables for the calculation formulas are:
- Total number of hectares scheduled under irrigation,

- Number of hectares scheduled under irrigation for applying resource poor farmer,
- Number of applying resource poor farmers, &
- Total cost of the project.

The grant or subsidy amount will be determined according to the different calculation formulae assigned to each product.

1.8 Does confirmation of a request to be funded automatically mean funding?

No, this means an applicant is eligible and his/her request is going to be considered for funding and that a detailed proposal will be formulated and tabled at the Coordinating Committee on Agricultural Water (CCAW) to assess the viability of the project. The decision to finance your project is made by the DWS based on CCAW recommendations and subject to availability of funds.

1.9 What is the CCAW and what influence does the CCAW have on an application?

CCAW is a Coordinating Committee on Agricultural Water; this is an intergovernmental forum that serves as a provincial clearing house on agricultural water use development issues. CCAW provides technical planning and streamlined liaison between different departments with a broad focus on agricultural water use and wide participation by relevant role players and disciplines.

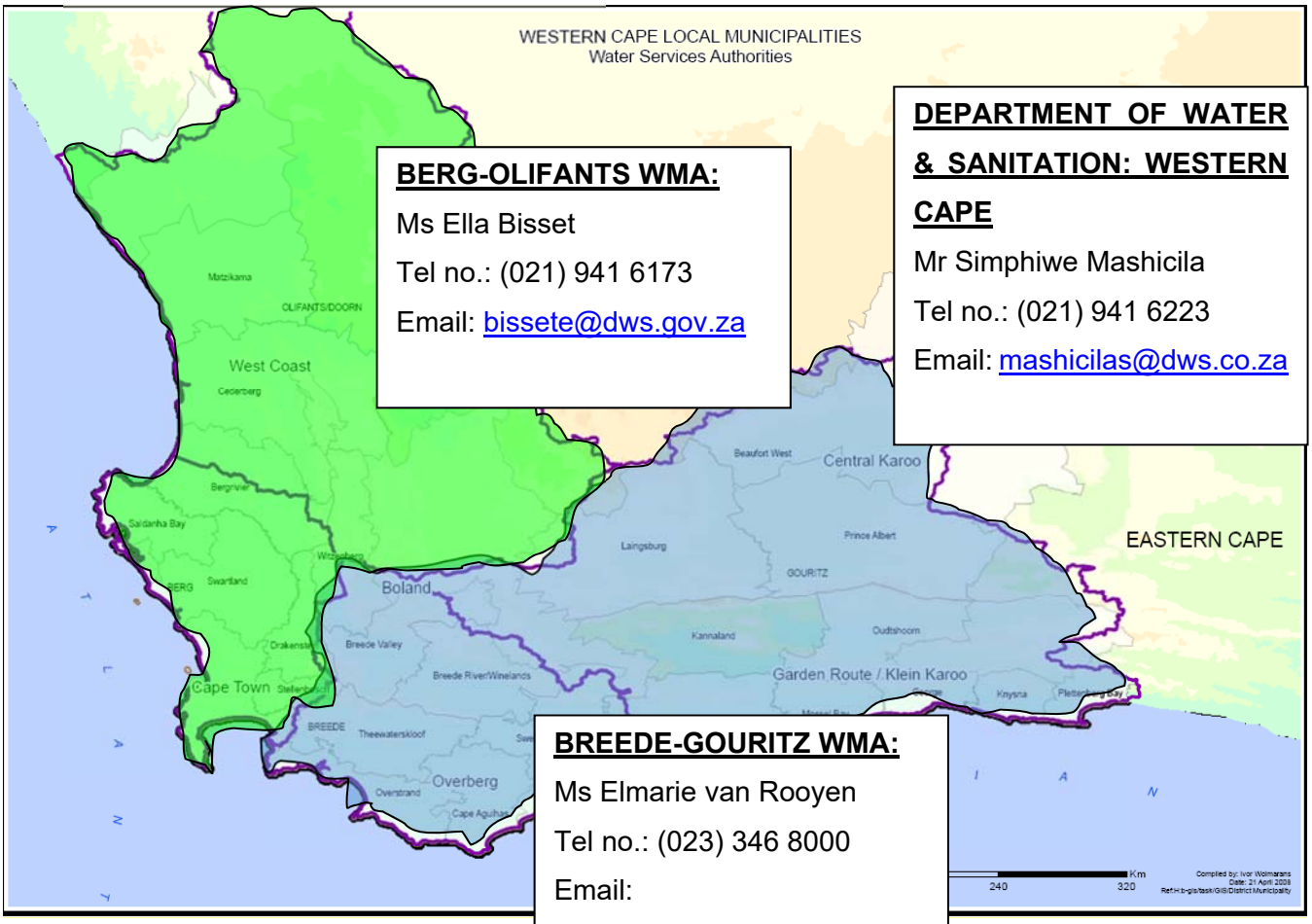
CCAW was established in terms the National Guidelines for Integrated Management of Agricultural Water Use that was approved by the Agricultural MINMEC on the 30th of October, 2003. National and provincial departments of agriculture were mandated to lead integration of initiatives in the agricultural water use sector through this forum. Each province is envisaged to have this forum under the chairmanship of the relevant provincial department of agriculture.

Due to its composition, a CCAW has proficiency in all issues of sustainable irrigation development, therefore, it acts as an advisory committee to DWS hence, it recommends projects that have merits for funding by DWS financial support. It is important to note however, that approval of projects remains the responsibility of DWS.

1.10 How to apply

Application can be made by filling in the application forms which can either be downloaded from the official departmental website (www.dws.gov.za) or by contacting the following officials dealing directly with financial assistance to RPFs and scheduling pre-application meetings at the Bellville Regional office:

CONTACT DETAILS: ASSISTANCE TO RESOURCE POOR FARMERS



1.11 ADDITIONAL SUMMARISED INFORMATION ON LEGISLATIVE REQUIREMENTS FOR BENEFICIARIES AND THOSE WHO PLAN TO ASSIST BENEFICIARIES.

The National Water Act, 1998 (Act 36 of 1998) is founded on the principles of the National Government and therefore has overall responsibility for and authority over water resource management, including the equitable allocation and beneficial use of water in the public interest. According to the national law, a person can only be entitled to use water if the use is permissible under the National Water Act.

Chapter 4 of the NWA defines the general provisions, requirements and conditions for water use: - Section 21 of the NWA, specifically, lists all the “water uses” whilst Section 22 of the NWA defines the permissible water uses.

1.11.1 Water use as defined in Section 21 of the Act

For the purposes of the National Water Act, **water use** includes:

(a) taking water from a water resource;
(b) storing water;
(c) impeding or diverting the flow of water in a watercourse;
(d) engaging in a stream flow reduction activity contemplated in Section 36;
(e) engaging in a controlled activity identified as such in Section 37 (1) or declared under Section 38(1);
(f) discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit;
(g) disposing of waste in a manner which may detrimentally impact on a water resource;
(h) disposing in any manner of water which contains waste from or which has been heated in any industrial or power generation process;
(i) altering the bed, banks course or characteristics of a watercourse;
(j) removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of the activity or for the safety of the people;
(k) using water or recreational purposes.

1.11.2 Permissible water use as per Section 22 of the Act

Section 22 of the NWA defines the permissible water uses which include:

"A person may only use water in terms of Section 22 of the NWA, 1998 -

(a) without a licence -

I. if that water use is permissible under **Schedule 1**(defined below);
II. if that water use is permissible as a continuation of an **existing lawful use** (defined above); or
III. if that water use is permissible in terms of a **General Authorisation** (defined below) issued under Section 39;

(b) If the water use is authorised by a **Water Use Licence** (defined below) under this Act; or

(c) If the responsible authority has dispensed with a licence requirement under sub-section (3)."

NOTE: *The first step in the water use licensing process is the determination of the Reserve for that specific water resource. The Reserve is that quantity and quality of water that are being needed for basic human use and for the environment.*

1.11.3 Defining the above authorisations:

1. Schedule 1 use: In terms of the Act; - a person who lawfully owns/occupies a property may take water for reasonable domestic use, water for small gardening (not commercial) and watering of animals (excluding feedlots) if he/she has lawful access to the resource, if the use is not excessive in relation to the capacity of the water resource and the needs of other lawful water users. No application for a licence needs to be made.

2. General Authorisations: The General Authorisation (GA) merely allows for users / potential water users to do certain limited water related works (i.e. abstraction of water from a water resource (groundwater or surface (river) water) or storage (dam) in certain areas. These areas are all in the GA that can be made available or a person can download it from the DWS website (www.dws.gov.za). Also note that this is applicable if the use is not excessive in relation to the capacity of the water resource and the needs of other lawful water users.
3. Existing Lawful Use (ELU) – this allows water use that was lawfully used before the NWA came into effect to continue until it can be converted into a licence using compulsory licensing. Note that the water use should have been lawful and it must have been exercised two years prior to the promulgation of the NWA.

   Note: The first legal requirement that existing lawful water users were asked to fulfil under the NWA, 1998, was to register their water use (existing). The call for existing lawful water users to register their commercial water use was made in the Government Gazette on 12 November, 1999, in terms of Section 16(1) (c) of the NWA. Existing Lawful Water Users were asked to register their water use as it actually took place, on the day of registration that was lawful in terms of the NWA, 1998. ***Water users should know that registration of water use is not an entitlement and that the water use that was registered should still be verified.***
4. Water Use Licence: All water uses that do not fall under Schedule 1 or GA must be authorised through a Water Use Licence. The first step in the licensing process is the determination of the Reserve for that specific water resource. The Reserve is that quantity and quality of water that are needed for basic human use and for the environment.

   Note: Licences are issued under the NWA, and require approval of an application by the Department of Water and Sanitation or the Catchment Management Agency. ***A licence does not imply a guarantee relating to the statistical probability of supply, the availability of water or the quality of water as in Section 31 of the National Water Act. A licence can furthermore be suspended or withdrawn if the person fails to comply with any condition or entitlement; fails to comply with the NWA or fails to pay a charge which is payable in terms of Chapter 5 (NWA).***

1.11.4 Registration of water use.

Water registration comprises the providing of information that can answer questions, amongst others, about you, where the water is used, how much water is used, what is the source of the water and what the water is used for.
The water uses that have to be registered are:

- The taking of water from a water resource;
- The storing of water;
- Impeding or diverting the flow of water in a water course;
- Engaging in a stream flow reduction activity (commercial forestry);
- Engaging in a controlled activity (irrigation of waste);
- Discharging waste or water containing waste into a water resource;
- Disposing of waste in a manner which may detrimentally impact on a water resource;
- Disposing in any manner of water which contains waste from, or which has been heated in, any industrial or power generating process;
- Altering the bed, banks, course or characteristics of a water course;
- Removing, discharging or disposing of water found underground; &
- Using water for recreational purposes.

Water users were requested, in the period 1999 to 2001, to register water use. Any registration of water use after 2001 is subject to a late registration fee, except if it is a newly authorised water use in terms of a licence or a General Authorisation.

Water use is registered on the WARMS (Water Authorisation and Registration Management System). It is a system of the then Department of Water Affairs & Forestry (now known as DWS). Since the end of 2012, the then BOCMA (now known as BGCMA) has access to the WARMS. The BGCMA is now in a position to register water use and to issue the water registration certificate to the user.

It is important that registered users approach the DWS or BGCMA whenever there is a change in registration details. The DWS or BGCMA can then do the necessary amendment to the water use register to reflect the most recent information. Especially when there is a **change in ownership of a property,** the DWS or BGCMA must be informed by means of a completed form (DW811).

There are cases where properties with registered water use are sold without informing the DWS or BGCMA. This eventually will have financial consequences for the new owner of the property. A potential owner must always ensure that the water registration of a property is in order; it is the responsible thing to do.

At this stage, all water uses, besides a Schedule 1 water use, must be registered.

1.11.5 UNLAWFUL WATER USE:

Section 151

Section 151(1) (j) of the NWA, 1998, clearly stipulates that no person may unlawfully and intentionally or negligently commit any act or omission which detrimentally affects or is likely to affect a water resource. If it is found and it can be proven that a lawful property owner/occupier is not a lawful water user, the department can stop such an

activity with immediate effect. It should be noted that the department can stop any lawful water user who is not using water efficiently or if it's found that the water use is detrimentally impacting on the resource and the Reserve.

Any queries from beneficiaries regarding the legislative requirements around water use can be directed to the DWS: Western Cape Regional Office or to the BGCMA to either:

AREA	INSTITUTION	CONTACT PERSON	CONTACT NUMBER	E-MAIL ADDRESS
Breede-Gouritz WMA	BGCMA	Ms Elmarie van Rooyen	(023) 346 8000	erooyen@bgcma.co.za
Berg-Olifants WMA	DWS	Mr Duke Jephtha	(021) 941 6264	jepthad@dws.gov.za
Berg-Olifants WMA	DWS	Mr Derril Daniels	(021) 941 6189	danielsd@dws.gov.za
Breede-Gouritz WMA	BGCMA	Ms Elkerine Rossou	(023) 346 8000	erossouw@bgcma.co.za

2. VALIDATION AND VERIFICATION OF WATER USE IN THE BREEDE-GOURITZ WATER MANAGEMENT AREA

Answers to some of your verification and validation questions

1. **I haven't yet registered my water use, what must I do?**
   You could apply for registration through the Breede-Gouritz Catchment Management Agency (BGCMA), pay a late registration fee and pay the outstanding water use charge. Remember, if you want to use water but did not actually use it in the qualifying period, then you need to apply for a licence, not registration.
2. **I have not received a letter for verification, but some of my neighbours have. What must I do? How can I find out when verification will be called for my area?**
   Chances are that the letter was sent to a wrong address. Contact the BGCMA office and ask if the letter has been sent to you and verify your contact details. The reason could also be that the verification process has not yet started in your area.

You can ask the BGCMA office when the verification process will be conducted in your area.

3. **I have already applied for a licence. Do I still need to be verified?**
   No. Verification is needed only for water use for commercial purposes before October, 1998. Anyone who started using water after that needs to apply for a licence. If that licence has already been issued under the National Water Act, you do not need to apply for verification. Registrations are automatic when new licences are issued.
4. **Do I still need to apply for a licence when my certificate of verification is issued, presenting the volume of water I may lawfully use on my property?**
   You will need to apply for a licence when a call for a licence is made under compulsory licensing. Otherwise you need to apply for a licence if you want to increase your water use above ELU (existing lawful use). In some cases this licence may be refused. You should also make sure exactly what certificate you have. A registration certificate is not a certificate of verification.
5. **If I am actually using less water than the amount I was using in the qualifying period because I have introduced more efficient irrigation methods, will I be granted authority to use this lesser amount, through the verification period and lose the full amount I was using?**
   The verification process will identify those water users who are using water unlawfully. If the verification indicates that the volume of water you were using during the qualifying period was lawful, then this is the extent of your existing lawful water use. You can reduce your registered water use to pay lower water use charges, or expand your irrigation to use the ELU volume per year. You must, however, be able to indicate that you do not exceed the ELU volume.
6. **If the amount of water I am certified to use through verification is less than I registered, will I be refunded the money I have been paying since registration for a larger volume?**
   No. The obligation was on the user to provide the correct information.
7. **I have extended my irrigation since registration. How will this affect my verification certificate?**
   Any additional use of water over and above that which you used in the qualifying period is unlawful. This means you may only expand an irrigation area by improving your water use efficiency.
8. **If I have a licence under the 1998 National Water Act, will my water use need to be verified at any time in the future?**
   No. Verification refers only to ELU and not to licence holders. The certificate you have will state whether it's a registration certificate, certificate of verification or a licence.

9. **If I have a borehole that I use for domestic purposes only (household and garden), do I have to register it, and is it subject to verification and validation?**

   No. Domestic water use is regarded as a lawful water use under Schedule 1 of the National Water Act. It does not have to be registered and it is not subject to verification.

10. **What if I do not agree with your validation figures? What form of evidence will the BGCMA recognise?**

    You can provide any records that show you what volume of water you were using in the qualifying period. This could include documentation proving electricity used where water was pumped, or bills of sales of crops. You may also approach the Water Tribunal.

    Contact: 023 346 8000

    Elkerine Rossouw – erossouw@bgcma.co.za

    Patrick van Coller – pcoller@bgcma.co.za

    Fabion Smith – fsmith@bgcma.co.za

    Carlo Abrahams – cabrahams@bgcma.co.za

2.1 Groundwater

South Africa is a relatively dry country with scarce water resources. This is due to an ever-increasing population which puts pressure on the water resources. This calls for the proper management of our water resources. Water is a scarce commodity which people take for granted. Groundwater is a very important water source which is often ignored and/or over-exploited. Many people in our communities have never heard of groundwater. That is not surprising since it is not visible. Groundwater can be considered one of our hidden and precious resources.

What is Groundwater, and Where Does It Come From?

When rain falls on the ground, the water does not stop moving. Some of it flows along the land surface to streams or lakes, some is used by plants, some evaporates and returns to the atmosphere, and some seeps into the ground. This water provides plants with moisture for growth.

Water not used by plants moves deeper into the ground. The water moves downward through empty spaces or cracks in soil, sand or rocks until it reaches a layer of rock through which water cannot easily move. The water then fills the empty spaces and cracks above that layer. The water on top of the soil, sand, or rocks is called the **water table** and the water that fills the empty spaces and cracks is called **groundwater**.

Water seeping down from the land surface adds to the groundwater and is called **recharge**. Groundwater is recharged from rain water and melted snow or from water that leaks through the bottom of some lakes and rivers. Groundwater can also be recharged when water supply systems (pipelines and canals) leak and when crops are irrigated with more water than the plants can use.

Groundwater can be found almost everywhere. The water table can vary from deep to shallow, depending on the topography. Heavy rains or melting snow may increase recharge and cause the water table to rise. An extended period of dry weather may decrease recharge and cause the water table to fall.

What is an Aquifer?

An aquifer is a body of saturated rock through which water can easily move. Aquifers must be both permeable and porous and include rock types such as sandstone, conglomerate, fractured limestone and unconsolidated sand and gravel. Fractured volcanic rocks such as columnar basalts also make good aquifers.

The rubble zones between volcanic flows are generally both porous and permeable and make excellent aquifers. In order for a well to be productive, it must be drilled into an aquifer. Rocks such as granite and schist are generally poor aquifers because they have a very low porosity. However, if these rocks are highly fractured, they make good aquifers. A well is a hole drilled into the ground to penetrate an aquifer. Normally this water must be pumped to the surface.

Groundwater Monitoring

Groundwater needs to be protected at all times from pollution by human and/or industrial activities. If polluted, it is almost impossible to restore boreholes to their natural state. To ensure that this does not happen, groundwater users must ensure that they have monitoring programmes in place to measure the quantity of water taken from the boreholes and/or stored, by metering the quantity of groundwater abstracted each month. The main purpose for monitoring boreholes is to gather hydro-geological data. The quantity of water in the borehole is measured by means of water levels as indicated in Figure 1 below.

Exploration boreholes are for monitoring purposes, whereas production boreholes are for water uses such as irrigation. It is important for groundwater users to note that their boreholes should be registered with the Department of Water Affairs.

Figure 1: Monitoring of Water Levels

Figure 2: Borehole

Contact:

Geo-Hydrologist - John Sibanyoni: jsibanyoni@bgcma.co.za

Tel: 023 346 8031

3. WESTERN CAPE DEPARTMENT OF AGRICULTURE: FARMER SUPPORT AND DEVELOPMENT PROGRAMME

Information at a Glance

Mr Mogale Sebopetsa
Tel: 021 808 5103
E-mail: MogaleS@elsenburg.com
Fax: 021 808 5251

3.1 About us

Name:
Mr Mogale Sebopetsa
Telephone number:
021 808 5103
E-mail:
MogaleS@elsenburg.com
Fax number:
021 808 5251

The Farmer Support and Development programme (FSD) encompasses the broad development agenda of the Department of Agriculture, therefore the design and implementation is predominantly for supporting smallholder farmers in the Western Cape, but does not exclude the commercial sector. This support is to enhance land reform programmes through institutional capacity building. Given that the predominant need that has been identified is for the development of an equitable and diverse agricultural sector, a large part of the budget will be utilised to build the capacity of historically disadvantaged communities and individuals flowing from the land reform programmes.

3.2 The purpose of the FSD programme is:

To ensure sustainable support mechanisms for new and established farmers (including land reform beneficiaries).

- To measure the impact of interventions as delivered by the programme;
- To leverage investment from the private sector and commodity grouping;
- To ensure quality and standards of service and advice to farmers;
- To integrate our services with those of municipalities and other government departments with the implementation of food gardens for communities and households; &
- To facilitate skills development for qualifying farmers.

The programme is structured into four directorates, namely:

- Farmer Settlement & Development;
- Extension & Advisory Services;
- Food Security; &
- Casidra.

The programme comprises eight regional offices spread across the province, namely: Cape Metropole, Cape Winelands, Swartland, North West Coast, Overberg, Klein Karoo, the Garden Route and Central Karoo.

3.2.1 Farmer Settlement and Development

Information at a Glance

Mr Douglas Chitepo

Tel: 021 808 5100
E-mail: Douglasc@elsenburg.com
Fax: 021 808 7629

The **purpose** of the directorate is to facilitate, coordinate and provide support to black smallholder farmers and commercial farmers through sustainable development within agrarian reform initiatives in the province.

Did you know?

The directorate provides the following services:

- Farm Assessment report for land reform purposes;
- Farm Plans to enable the sustainable use of natural resources; &
- Support to smallholder and commercial farmers.

3.2.2 Extension & Advisory Services

Information at a Glance	
Ms Carol Levendal	
Tel:	(021) 808 5199
E-mail:	CarolL@elsenburg.com
Fax:	(021) 808 7629

The **purpose** of the Directorate is to provide extension and advisory services to farmers.

The directorate has employed the digital smart pen to assist in monitoring the quality of services rendered to farmers.

Did you know?

The directorate facilitates the delivery of:

- Farmers' days;
- Information days;
- Conducts skills audits, and
- Facilitates the appointment of mentors to assist smallholder farmers through the commodity approach.

3.2.3 Food Security

Information at a Glance

Mr Adriaan Conradie
Tel: (021) 808 7674
E-mail: AdriaanC@elsenburg.com
Fax: (021) 808 7756

The **purpose** of the directorate is to support, advise and coordinate the implementation of pillar one of the Integrated Food Security Strategy of South Africa (IFSS).

The directorate contributes directly to alleviation of food insecurity through the delivery of household and community gardens.

Did you know?

- This directorate supports household food production in communities through the suitcase programme (household food production programme);
- Supports community and school gardens; &
- Conducts food security awareness campaigns.

3.2.4 Casidra

The purpose of the Directorate is to support the Department with project implementation and state farm management.

Did you know?

Casidra is responsible for project implementation for the Provincial Department of Agriculture in the Western Cape.

3.2.5 Contact Details for Regional Offices

Regional Office	Contact Name	Telephone No.	Address	E-mail
Cape Metropole	Phumlani Mentani	021 483 7778	Goulburn Centre, c/o Goulburn & Voortrekker Road, Goodwood, 7460	PhumlaniM@elsenburg.com
Cape Winelands	Dikeledi Kunene	021 808 7050	ABSA Building, 4th Floor, Plein Street, Stellenbosch, 7600	DikelediK@elsenburg.com
Swartland	Rose Horne	022 433 2330	Land Street 42, Moorreesburg,7310	RoseH@elsenburg.com
North West Coast	Marius Du Randt	027 213 2000	c/o Matzikama & Noordweg Street, Vredendal, 8160	MariusD@elsenburg.com
Overberg	Hennis Germishuys	028 425 4807	Albert Myberg Hostel,Golf Street, Bredasdorp, 7280	HennisG@elsenburg.com
Klein Karoo	Willem Burger	044 272 6077	Oudshoorn Research Farm, Old Kammanasie Road, Oudtshoorn, 6620	WillemB@elsenburg.com
Garden Route	Clyde Lamberts	044 803 3709	York Buiding, 2nd Floor, York Street, George, 6530	ClydeL@elsenburg.com
Central Karoo	Frederick Mpona	023 414 2126	104 Peter Jacobs Avenue, Beaufort West, 6970	FrederickM@elsenburg.com

Website

http://www.elsenburg.com

4. DEPARTMENT OF RURAL DEVELOPMENT AND LAND REFORM

4.1 Land Acquisition and Recapitalisation

- Provide land to previously disadvantaged emerging farmers;
- Provide financial management and accounting services;
- Provide financial grant to previously disadvantaged emerging farmers;
- Provide strategic support on land reform farms' value chain.

Contact person

Chief Director PSSC: Ms Juanita Fortuin,

E-mail: Juanita.Fortuin@drdlr.gov.za,

Tel: (021) 409 0330/331

4.2 Rural Enterprise and Industrial Development

- Organise primary co-ops into secondary co-ops.
- Provide support to existing and new co-ops (registration, constitution, build administrative capacity (compliance), facilitate training and monitoring).
- Build capacity (including logistics) for market access.
- Coordinate establishment of infrastructure (wholesale facilities, storage and packaging).
- Facilitate improved bargaining and bulk buying power, broadened market opportunities, access to Cooperatives Incentive Schemes.
- Agro-processing (Agri-Parks).
- Village markets.
- Credit finance and investment facilities.

Contact person

Director REID: Ms Nina Brito- Navara,

E-mail: Nina.Brito@drdlr.gov.za,

Tel: (021) 409 0461

5. LOCAL GOVERNMENT (LOCAL MUNICIPALITIES)

5.1 Mandate

A municipality is mandated to create an enabling environment for emerging farmers in conjunction with other government departments such as the Department of Agriculture and the Department of Rural Development and Land Reform. As a facilitator with regards to small farming initiatives, municipalities aim to focus on red tape reduction, introducing and exercising appropriate regulations and management systems and linking organised groups to resources.

A dual approach is followed focusing on achieving household food security (poverty alleviation and improved nutrition) on the one hand, and on the other hand the creation of income (economic development).

At a secondary level, the municipality also acts as a catalyst which includes, inter alia, the provision of commonage land/outspans, and leveraging support for construction of infrastructure.

5.2 Legislation & General Information

Whilst the constitution does not oblige municipalities to undertake land reform, municipalities are obliged to participate in national land reform programmes to achieve municipal developmental objectives.

Research indicates that municipalities have largely opted to deal with the issue of municipal **commonage** through their existing supply chain management policies relating to the management and disposal of assets. In terms of this process, the key legislation applicable is:

- Local Government: Municipal Finance Management Act (No 56 of 2003), Section 14;
- Local Government: Municipal Finance Management Act – Asset Regulations.

The conditions in the title deed of the land in question also need to be taken into account, as commonage land has often been donated to the municipalities in trust for the community by churches, and may have specific conditions attached.

5.3 Programmes

Adopt a Public Open Space Guideline:

Public Open Space means land which is under, or will be under, the ownership of a local authority, which is not leased nor will be leased on a long-term basis, and which is utilized, or will be utilized, as an open space or a park, garden, picnic area, playground or square and includes a public place.

"Adopt a Public Open Space" is an initiative by Council to enable members of the public, industries or companies to adopt an open space area at no cost to the applicant. The "adoptee" would be responsible for clearing the area of alien vegetation and rubble as well as maintaining or landscaping the area with indigenous vegetation or by engaging in sustainable livelihood projects such as communal or home food gardens. The adoptee may advertise its involvement in this initiative on site, subject to certain conditions.

The main reasons for this initiative are to encourage the public to take care of the environment by:

1. Combating alien vegetation which in some communities has posed a danger (rape and murder).
2. Combating illegal dumping which has a financial implication for the municipality and isa health risk to the community.

Note that municipalities also refer emerging farmers to other departments with programmes that will be able to assist.

Funding Model and How Farmers Can Access Funds

No funding is available from the municipality. We only facilitate and refer emerging farmers to departments like Agriculture, Casidra etc.

Contact details (if there is a general contact for the Western Cape)

No general Western Cape contact. Each municipality deals with the issues differently.

Note: The above information is general and not necessary applicable to all municipalities. Each municipality deals with emerging farmers in a unique way to ensure effective service delivery. For more information on local municipal assistance to your need, feel free to contact your local municipality.

6. AFRICAN FARMERS' ASSOCIATION OF SOUTH AFRICA (AFASA)

6.1 History

The African Farmers Association of South Africa (AFASA) was launched on 12 April, 2011, by 3000 founding members, from all nine provinces of South Africa, who were formerly NAFU-SA members.

The launch of AFASA was the culmination of a year-long consultation process with developing farmers countrywide to determine their need for an official structure that represents their interests. As part of the consultative process, a national convention of African farmers, held in Bloemfontein in December, 2010, adopted a new constitution, a structure and a five-year-strategic plan. After the convention, district and provincial structures were launched between 18 January and 5 April, 2011.

Leadership was democratically elected in the provinces using the constitutional guidelines adopted by the convention. The final stage was the founding conference of AFASA which was held in Boksburg, Gauteng, on 10-12 April, 2011, during which the farmers formally adopted the name African Farmers' Association of South Africa (AFASA) and the founding constitution, and elected and appointed national leadership.

AFASA aims to commercialise the developing agricultural sector and ensure meaningful participation of black individuals within the mainstream commercial agribusiness sector, hence ensuring the long-term sustainability of the agricultural sector in South Africa.

Vision

To have competent and successful commercial African farmers of South Africa.

Mission

To facilitate the development of African farmers in order to increase their meaningful participation in the agricultural sector.

6.2 Objectives

- To create a sustainable united body of African farmers with capacity to influence policies through lobbying and advocacy in favour of African farmers;
- To facilitate development of the competencies of African farmers in order for them to participate meaningfully in formal and informal markets;
- To mobilise resources for the benefit of African farmers.

6.3 Values

AFASA like any other organisation is a collection of individuals who come together for a common purpose. It is therefore crucial that AFASA espouses what it stands for in order to attract those similar values. AFASA commits itself to the following values:

- To be led by people of high integrity in order to create trust, loyalty and confidence amongst its members, employees and the public;
- To be transparent and accountable at all times;
- To maintain high levels of professionalism at all times;
- To respect the rights, culture and dignity of its members, employees, and the public, regardless of gender, race, class, tribe, political and religious affiliation or belief;
- To be a farmer-centred organization;
- To ensure that the organisation remains true to its mission and objectives;
- To strive for excellence including efficient and effective service provision at all levels.

6.4 Contact Details

Contact Peron: Mr Ismail Motala,

E-mail: afasawcape@gmail.com


BREEDE-GOURITZ
Catchment Management Agency
Opvanggebied Bestuursagentskap
I-Arhente yoLawulo lomMandla nokungqongileyo


WATER
RESEARCH
COMMISSION


rural development
& land reform
Department:
Rural Development and Land Reform
REPUBLIC OF SOUTH AFRICA


Cape Peninsula
University of Technology


AFASA


water & sanitation
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Water and Sanitation
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Western Cape
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Agriculture