SMALLHOLDER FARMERS AND ORGANIC AGRICULTURE IN SOUTH AFRICA

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On behalf of SI Projects, Sustainability Institute
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KEY FINDINGS

1. According to grey literature and personal communication with retailers and industry actors, demand for organic products in South Africa appears to be growing (see section 6.2).

2. Inadequate supply of organic produce is reported as the main constraint to more rapid market development (see sections 6.1 and 6.2). Key reasons for the lack of uptake among farmers were not prominent in the literature, but those mentioned include: lack of government support, lack of information, perceived risks and higher costs (see section 6.2).

3. South Africa suffers from the lack of an active organic policy and legislated organic standards (see sections 5 and 8.1).

4. Statistical records on organics in the public domain appear methodologically unreliable for South Africa (see section 6). Lack of transparency from certifiers contributes to this lack of data.

5. While smallholder organic agriculture is successfully expanding in other African countries, most notably Uganda, Tanzania and Egypt, in South Africa very few documented success stories exist (see sections 6.1 and 7).

6. Barriers to organic certification continue to be high fees, language and literacy issues (see section 8.1). Participatory Guarantee Systems, a fairly new form of group certification method that relies on consumers and farmers to set their own standards without third party inspection agencies, seem a promising way to overcome some of these barriers for local consumption.

7. Small farmers can adapt to this highly regulated form of agriculture, and access markets, through the formation of group structures and third party group certification for local or export markets as well as Participatory Guarantee Systems for local markets (see sections 7, 8.1, 8.2 and 8.3).

8. Small organic farmers struggling to comply with stringent criteria and pricing expectations in formal retail could seek simpler and more profitable marketing channels in informal or direct market sectors (see section 8.2).

9. Smallholder farmers require long-term intensive support to succeed, notably organic farming training, business and managerial training, and institution building support (see section 8.4)

10. It is unclear whether the failure of smallholder organic projects in South Africa is due to their organic nature, or whether the reasons are common to both conventional and organic projects (see section 9).

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ACRONYMS AND ABBREVIATIONS

<table>
<thead>
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<th>Full Form</th>
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<tr>
<td>Agri-SCIP</td>
<td>Agricultural Sustainable Community Investment Programme</td>
</tr>
<tr>
<td>ABCD</td>
<td>Asset Based Community Development</td>
</tr>
<tr>
<td>CIP</td>
<td>Community Investment Programme</td>
</tr>
<tr>
<td>DAFF</td>
<td>Department of Agriculture, Forestry and Fisheries</td>
</tr>
<tr>
<td>DTI</td>
<td>Department of Trade and Industry</td>
</tr>
<tr>
<td>FiBL</td>
<td>Research Institute of Organic Agriculture</td>
</tr>
<tr>
<td>EFO</td>
<td>Ezemvelo Farmers’ Organisation</td>
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<tr>
<td>EMG</td>
<td>Environmental Monitoring Group</td>
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<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>GIZ</td>
<td>German Federal Enterprise for International Cooperation</td>
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<tr>
<td>IAASTD</td>
<td>International Assessment of Agricultural Knowledge, Science and Technology for Development</td>
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<tr>
<td>ICS</td>
<td>Internal Control System</td>
</tr>
<tr>
<td>IFOAM</td>
<td>International Federation of Organic Agriculture Movements</td>
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<tr>
<td>KZN</td>
<td>KwaZulu-Natal</td>
</tr>
<tr>
<td>NAMC</td>
<td>National Agricultural Marketing Council</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental Organisation</td>
</tr>
<tr>
<td>NPO</td>
<td>Not for Profit Organisation/Company</td>
</tr>
<tr>
<td>PGS</td>
<td>Participatory Guarantee System</td>
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<tr>
<td>SABS</td>
<td>South African Bureau of Standards</td>
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<tr>
<td>SANAS</td>
<td>South African National Accreditation System</td>
</tr>
<tr>
<td>SAOSO</td>
<td>South African Organic Sector Organisation</td>
</tr>
<tr>
<td>UKZN</td>
<td>University of KwaZulu-Natal</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
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<td>UNEP</td>
<td>United Nations Environment Programme</td>
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1. INTRODUCTION

This paper is a systematic review of published literature pertaining to organic agriculture in South Africa. It represents the first step of a GIZ funded project led by the Southern African Food Lab, under the auspices of Stellenbosch University, on the future of smallholder organic agriculture in South Africa.

The review gives an overview of the status of the organic sector in South Africa, in terms of both agriculture and market trends. The specific focus is on issues surrounding the development of smallholder farmers within the organic sector; we thus concentrate on those organic smallholder farmers who can be regarded as market-oriented. To that end, we have included three case studies of organic smallholder farming projects from around South Africa: the Heiveld Cooperative (Northern Cape), Ezemvelo Farmers’ Organisation (KwaZulu-Natal) and Siyavuna (KwaZulu-Natal).

The paper is structured as follows: preliminary sections detail the research questions that were posed to the reviewers, the methodology used to source and select literature for inclusion, and a clarification of key terms used in the paper. After that, an overview of the organic market in South Africa is provided. This section starts by discussing the issues around the lack of a legislated policy and certification standards in the country. It then moves on to describe the size of and trends within organic production in South Africa and the demand side of the market – including exports and local demand, as well as key organic products in South Africa. The next part of the paper relates specifically to smallholder organic farmers. An overview of the current status of local smallholder organics is provided, followed by three case studies of organic smallholder farming projects. The final section discusses the key themes emerging from the literature and case studies that are relevant to the future of organic smallholder farming in South Africa. This leads to recommendations of areas for further research.

2. RESEARCH QUESTIONS

The research questions that were posed to the reviewers included the following:

What is the current status of organic agriculture in South Africa? What have been the major limitations and drivers of this over the past decade (changes in lifestyle, role of consumer ethics, middle class market, etc.)?

What is the size of the organic market in South Africa? (What data is there on this? The retailers would have certain data, but it is questionable whether they would share competitive information.)

What has been the growth curve in this market? The general perception is that organic sales peaked a number of years ago and has since decreased. What evidence exists to support this perception, or other growth trends?

What are the key products currently produced organically in South Africa, including exports?

All four of these questions are addressed in sections 5 and 6.

What products do organic smallholder farmers in South Africa grow?

What are the smallholder organic success stories? (Such as rooibos tea, Siyavuna on the South Coast of KwaZulu-Natal (KZN), Biowatch working on the North Coast of KZN, initiatives in the Midlands etc.)
Both these questions are addressed in section 7.

What can we learn from the literature on the future for smallholder organic farming in South Africa?

This is answered in section 8.

3. METHODOLOGY

The primary mandate of this research report was to review existing literature, incorporating a wider range of research documents and grey literature than a conventional review (e.g. newspaper articles, unpublished student research). The generation of new data through interview and survey processes was not within the scope: this primary data gathering will be covered in the second phase following on from the findings of this report. As such, the research process for this report was as follows:

i. Extensive academic database and internet scan;
ii. Reference snowballing from initial results;
iii. E-mail and telephonic communication, building on the leads developed in points i and ii. This personal communication served four functions: seeking access to trade sensitive data; clarifying existing data; trying to access more detailed datasets; verifying literature coverage from points i & ii;
iv. Depending on the database, various search terms were used with an approach of starting broad and narrowing the search once the relevance of results was assessed. Examples of search terms used: “organic” AND (“agriculture” OR “farming”) AND Africa {anywhere in record}; “organic agriculture” AND “South Africa”. More examples are included in Appendix A.

Table 1: Thematic search areas and summarised results

<table>
<thead>
<tr>
<th>Scan of:</th>
<th>Including:</th>
<th>Result:</th>
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| Government statistical records | • Statistics South Africa  
• Department of Agriculture, Forestry and Fisheries  
• Department of Trade and Industry | No data on sales or production areas kept on organics. Draft Organic Policy found. |
| Local trade and producer bodies | • National Agricultural Marketing Council (NAMC)  
• South African Organic Sector Organisation  
• Hortgrow | No records on sales or production areas kept. NAMC had a couple of studies on aspects such as food quality turn and impact on smallholders. |
| Certification agencies | • Ecocert (South Africa office)  
• Afrisco  
• Others | Client records are kept. What data they were able to supply was duplication of that compiled for submission to FiBL/IFOAM (see below). |
| International industry bodies | • International Federation of Organic Agriculture Movements (IFOAM)  
• FiBL | Long-term data sets exist for production, based on collation of the one national certification agency’s (Afrisco) data. Contains serious methodological flaws (see section 6.1) |
| Retail industry | • Pick ‘n Pay | Retailers keep detailed records of |
This section defines some of the key terms used in this review.

1. **International Federation of Organic Agriculture Movement (IFOAM):** This is the global umbrella industry body for organic agriculture that sets global standards that most certification bodies ascribe to and aims to promote the interests of organic agriculture.

2. **Certified organic:** Organic production or processing that meets certain standards. These standards are the minimum requirements necessary to ensure the production or processing system upholds the definition of organic (Institute of Natural Resources 2008). Different kinds of organic certification exist – see following terms.

3. **Third party certified organic:** This is what is usually referred to when the term ‘certified organic’ is used. It refers to organic production or processing that has been inspected and certified as meeting organic standards by an external and independent third party.

4. **Non-certified organic:** This refers to those who adhere to organic standards, but have not undertaken a certification process.

5. **Organic by default:** This term refers to farmers who are unintentionally adhering to organic standards. It is often used in the context of resource-poor farmers who cannot afford synthetic inputs. Despite widespread use of the term ‘organic by default’ in the literature, one external reviewer warned against its use, and conflating organic and traditional farming. He said: “Some traditional farmers are almost organic, others use substances such as Blue Death, a highly toxic pesticide…. Organic by default is a mis-leading expression; when farmers do not use any inputs, and do not practise soil conservation, this is just bad farming, and cannot be described as organic”.

6. **Group certification:** Most certification bodies offer this to groups of smallholder producers to reduce the costs of certification for individuals. It requires that an Internal Control System (ICS) be in place to allow the group to monitor itself, with the third party certification body now only needing to ensure the ICS is functioning and to conduct periodic checks of small
samples of the group.

7. **Participatory Guarantee System**: “Participatory Guarantee Systems (PGS) are locally focused quality assurance systems. They certify producers based on the active participation of stakeholders and are built on a foundation of trust, social networks, and knowledge exchange” (Willer and Lernoud 2015:134). PGS were created as an alternative certification method whereby consumers and farmers set their own standards and perform their own monitoring. No third party is involved so this is a less expensive form of certification for use in local markets (Willer and Lernoud 2015).

8. **Wild collection**: This refers to collection of products harvested from the wild, i.e. from non-agricultural land. In order for wild collection to be certified, it must take place only within a clearly defined area that has not been contaminated by prohibited substances.

5. ORGANIC POLICY IN SOUTH AFRICA

South Africa has a long history of involvement in organics, with a number of organic producers and associations in existence in the 1970s; in fact, the South African Biodynamic Association was one of the five founders of IFOAM in 1972 (UNEP-UNCTAD 2008). Despite this, South Africa still lacks a fully legislated organic policy and certification standards (Institute for Natural Resources 2008). Over a decade of work to develop a policy by the industry with national government has had two main outcomes: the formation of the South African Organic Sector Organisation (SAOSO) to represent the industry, and an organic policy that remains in draft form (SAOSO 2014). Brodie (2014) attributes the delay in passing the regulations, which include a set of organic standards for the country, to a conflict with existing legislation in the Agricultural Products Standards Act of 1990, which would need to be amended first. However, Brodie ascribes the length of time it took to draft the policy in the first place to internal politics within the organic sector (Brodie 2014).

Chikazunga has the view that government is not supporting organic because officials at the Department of Agriculture, Forestry and Fisheries (DAFF) do not believe it is the best approach given South Africa’s poor agricultural potential; they rather promote genetically modified seeds, fertilisers and pesticides (2009). A number of articles in Farmers’ Weekly seem to support this view. They cite various government ministers over the years, as well as business people and academics, who clearly favour large-scale, conventional agriculture and the use of genetically modified organisms over organic and/or small-scale agriculture. Derek Hanekom, minister of science and technology at the time, said: “without the responsible use of biotechnology, there’s little likelihood that the planet could sustainably feed itself” (Anon 2012). Dr Pieter Mulder, then deputy minister of agriculture, forestry and fisheries, is quoted as follows: “biotechnology plays an important role in agriculture as it offers the opportunity to increase production in a sustainable manner, thereby reducing poverty and food insecurity, while maintaining the natural resource base” (Anon 2013). In the same speech, the deputy minister outlined research showing genetically modified crops are safe to consume, and highlighted their success in South Africa: increasing farm income, and reducing pesticide use (Anon 2013). An opinion piece by a Farmer’s Weekly staff writer rubbishes claims that smallholder farmers can ‘feed the world’; these calls coming, he claims, mainly from those with no real-life farming experience (Bezuidenhout 2014). Bezuidenhout highlights South Africa’s poor agricultural potential as one of the main reasons that larger farms are the only solution for producing sufficient affordable

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1 The World Trade Organisation has already accepted these standards in 2010 (Brodie 2014).
2 One reviewer would like it to be noted that organic agriculture has its supporters within DAFF and government more generally.
food and earning foreign exchange (2014). These articles hint at the nature of the ‘anti-organic rhetoric’ in South Africa.

In lieu of formal legislation, the South African Bureau of Standards (SABS) started compiling a list of voluntary standards in 2012, referred to as SABS 1369³ (Brodie 2014). The South African National Accreditation System (SANAS) approved a new regulation in early March 2015 that will accredit certifying bodies and their assessors to assess organic role players according to SABS 1369 (SANAS 2015).

Thamaga-Chitja and Hendricks, like many others, mention the lack of policy and standards as a major issue as these are considered vital for the growth of the organic industry in any country (2008). Auerbach mentions that the development of national organic standards in east Africa (notably Uganda) contributed to huge export growth and improvements in livelihoods for hundreds of thousands of farmers (2013). The FRIDGE⁴ report contains a detailed discussion of the need for an organic policy and local organic standards in South Africa. While they underline the importance of having a set of national organic standards, they are less convinced of the importance thereof in terms of facilitating exports (Institute of Natural Resources 2008). National organic standards are vital to creating a thriving local market for organic produce, but creating standards that would allow direct access to European Union (EU) or North American markets would be extremely difficult, if not impossible (Institute for Natural Resources 2008). As they point out, exports have been growing despite the absence of national standards that meet equivalence criteria of other countries; South African farmers can use a certifier accepted in the EU or North America to access those markets (Institute for Natural Resources 2008).

The FRIDGE report sees national regulations as vital to create demand among domestic consumers and promote and protect suppliers, as well as facilitate greater regional trade (Institute of Natural Resources 2008). They feel that South Africa should have led a regional or Africa-wide attempt to develop African organic standards, which would have given African countries a much stronger bargaining position in trade and equivalence issues, and allowed Africa to define organic standards more relevant to its specific climatic, agroecological and developing country conditions (Institute of Natural Resources 2008). A recent development is the signing of the East African Organic Standard, which had those exact aims, and developed standards for promotion of domestic and regional organics (Institute for Natural Resources 2008). Auerbach feels South Africa has much to learn from this example of progress toward greater regional cooperation in east Africa through the East African Organic Products Standard (Auerbach 2013).

6. STATUS OF THE ORGANIC SECTOR IN SOUTH AFRICA
6.1 Production/Supply
Only a few studies have attempted to quantify and describe the organic industry in South Africa. The two most notable recent examples are the FRIDGE report (commissioned by the South African

³ One reviewer mentioned that Konrad Hauptfleisch (now at IFOAM) spearheaded the move to draw up these new standards.
⁴ The FRIDGE report is an extensive, once-off national survey of organic producers and processors conducted by the Institute for Natural Resources in 2008. It elicited responses from 60 certified producers, with a total area under organic management of 8437ha. An external reviewer of this report pointed out that, despite its reach and importance, the report was patchy and inaccurate in places. It seems this report too should be treated with caution.
Chamber of Trade and Industry) and IFOAM’s annual *World of Organic Agriculture* reports (see Willer and Lernoud 2015). The FRIDGE report was compiled in 2008, which makes the *World of Organic Agriculture* 2015 the most up-to-date data on organic production in South Africa. These annual reports are part of a global effort to track organic agriculture, which the Research Institute of Organic Agriculture (FiBL) conducts on behalf of IFOAM. Methods of data collection vary across countries depending on what records are kept; in South Africa, since government or industry bodies do not collect organic data, a survey of organic certification agencies is conducted to determine area and crops under organic production. The data set reflects only certified organic producers and processors. Despite this, the global nature of the data collection as well as relatively long track record, make it the only consistent reference point in the sector.

**Figure 1: African countries with the largest areas certified organic (in hectares)**

![Figure 1: African countries with the largest areas certified organic (in hectares)](image)

Source: Willer and Lernoud 2015

While South Africa has historically been one of the leading consumers of certified organic produce in Africa (Willer & Yussefi 2008), in terms of production South Africa is a relatively small player (Willer & Lernoud 2015). When considered on a per hectare basis South Africa has moved down from 4th position in 2005 (Willer & Yussefi 2005) to 8th in Africa in 2013 (see Figure 1). When certified organic farms are considered as a percentage of total farm land however, South Africa ranks 21st on the continent with only 0.04% of total land under certified organic management (Willer & Lernoud 2015).

While the area of agricultural land under organic is still growing in Africa and grew 7% between 2011 and 2012 (Willer & Lernoud 2014), and a further 7% the following year (Willer & Lernoud 2015), the FiBL data reflects an overall decline in the total farm land under certified organic management in South Africa. As reflected in Figure 2, certified land appears to have declined from 50,000ha at the first FiBL assessment in 2005, to just 37,466ha in 2013 (Willer & Lernoud 2015). Reasons for this are not provided and no response was received from the publishers (FiBL or IFOAM) when we queried this via email.
Since 2014, FiBL and IFOAM have begun to publish a list of the certifiers who provided input to their annual survey for each country. In 2014, four certifying agencies contributed, whereas in 2015 only one certification agency, Ecocert, contributed. When this decline in certifier survey response rate is considered in conjunction with the volatile changes in area under certified production over the same two years (see Figure 2), it suggests serious data reliability issues\(^5\). This may mean very little can be deduced on the overall trends in the sector from the FiBL data. So, while the FiBL datasets are lauded as the most comprehensive global effort to consolidate reliable statistics, there are clearly serious limitations on the reliability of their data as a clear reflection of the state of organics in South Africa. The same presumably holds true elsewhere on the continent.

Certified wild collection in South Africa seems to have undergone a period of growth from a low base around 1 409ha in 2006 to somewhere around 156 608ha in 2012\(^6\) (Willer & Lernoud 2014). There is no explanation for this growth in the FiBL/IFOAM report. Products collected from the wild in South Africa include marula fruit\(^7\), teas, and medicinal and aromatic wild plants. As FiBL and IFOAM only track certified organic production and collection, it is not clear whether growth in the wild collection segment is due to real growth in the area under organic production, or more certification of existing areas that were organic by default.

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\(^5\) One external reviewer commented that lack of transparency from certifiers is regarded as a restrictive trade practice under South African Bureau of Standards (SABS) 1369 and will become illegal when the standard is launched (due for week of 24 March 2015). Another reviewer was not clear how voluntary standards such as SABS 1369 could make practices illegal. Hopefully these issues can be cleared up in the next phase of this research project.

\(^6\) It is assumed that this high point is a truer reflection of the real volume than the lower 2013 value, which as discussed earlier is likely a result of the low certifier response rate in that year.

\(^7\) *Scelerocarya birrea.* an indigenous tree fruit used in alcoholic beverages (Amarula is the top seller), fruit juice and beauty products.
According to FiBL, Uganda has the highest number of organic producers in Africa, with almost 190,000 organic producers (Willer & Lernoud 2015). South Africa reports only 250 certified producers (Willer & Lernoud 2015). Since group certification schemes usually report to certifiers as a single entity, the actual number of organic producers might be somewhat higher. Case study research on farmers’ cooperatives seems to support this: Heiveld Co-operative has a reported group certification membership of 49 (Orlando 2013) and Ezemvelo Farmers’ Organisation (KwaZulu-Natal) also has a group certification with membership of 146 (Gadzikwa, Lyne & Hendriks 2006). While PGS schemes do not report to certifiers, IFOAM estimates there were 70 active PGS across all continents in 2014, with 70 more in development. They put the number of producers involved in these systems at about 46,000, with 17,000 being certified; not all are certified yet due to the rapid growth in PGS and farmers may still be ‘in conversion’ or still establishing their PGS (Willer and Lernoud 2015). South Africa is second only to Uganda in Africa with over 3000 individuals involved in PGS to Uganda’s 6436 (Willer and Lernoud 2015). What is interesting here is why Uganda has so many individually certified smallholders, whereas most of the reported 250 certified producers in South Africa are individual large-scale farms (and an unknown number of group certifications). Climatic conditions, land tenure arrangements and the country’s particular histories would be contributing factors; but the radical differences cannot be attributed to these alone. This suggests that the barriers to entry (in terms of legislation, certification costs, skills development and so on) for smallholder organic agriculture are possible to overcome.

Non-certified commercial organic farmers, as well as subsistence organic by default farmers, are not reflected in the FiBL data. Very little reliable data exists on these non-certified producers. However, that is not to say that non-certified organics and organic by default are not significant players in the South African agricultural sector – particularly when it comes to smallholder rural producers. Kunene-Ngubane, Chimonyo and Kolanisi (2010) for example, report that roughly two thirds of South Africa’s 14.1 million cattle are found in communal areas, with the majority of these consisting of indigenous varieties of cattle such as the Nguni. Indigenous varieties are ideally suited to organic production and many may be organic by default (Kunene-Ngubane et al. 2010).

6.2 Demand

6.2.1 Local demand

South Africa is one of only a few African countries with a significant domestic market for its organic produce (Barrow 2006; Institute of Natural Resources 2008) and Naidoo cites research showing the country could be the largest market for organic food in Africa (2012). Bienabe, Vermeulen and Bramley conducted research on the food ‘quality turn’ in South Africa; the move away from mass consumption based solely on price attributes to products differentiated by their quality attributes (2011). They cite research by the Bureau for Agricultural Policy in 2007 and 2008 that showed the

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9 South Africa is often described as having a dualistic agriculture sector: separated into a small number of large-scale commercial farmers who produce a large amount of the food, and a very large number of subsistence farmers (Cousins 2013). Cousins, however, recommends a far more nuanced classification of the smallholder farmers of South Africa; this is provided in section 7.1.

10 An external reviewer felt this might be more applicable to smaller stock and not necessarily to cattle.

11 Despite widespread use of the term ‘organic by default’, one external reviewer warned against its use, and conflating organic and traditional farming. He said: “Most cattle farmers would be dipping against ticks and, although they may use few anti-biotics, they are often neither organic nor environmentally responsible”.
three largest trends being introduced in new food products at that time were indulgence, convenience and health (Bienabe, Vermeulen & Bramley 2011). South African middle and upper income consumers are reflecting these global food trends with many in Bienabe, Vermeulen and Bramley’s study willing to pay a price premium for organic food, because they perceived it as healthier. Low-income South African consumers are more concerned with food availability although there is a small amount of interest from this group in organic and free-range foods (Bienabe, Vermeulen and Bramley 2011).

While the FiBL data sets suggest negative growth of organics in South Africa, local players paint a somewhat contrary picture. According to over 20 interviews with organic industry stakeholders, Waarts et al. (2009) claimed over 90% of organic food was sold through the formal retail sector. Pick ‘n Pay and Woolworths are the only big retailers who mention organic produce in their annual reports. In its 2013 annual report, Woolworths reported strong growth in its ‘Free Range and Organic’ food category. This category grew from R0.67 billion in 2011, to R1.7 billion in 2012, ending at R4 billion in 2013 (Woolworths Holdings Limited 2013). The exact value of organic produce disaggregated from free-range products was not possible to ascertain. Although it is not clear how much of the organic market Woolworths controls in South Africa, it is recognised as one of the leading outlets (Engel 2008; Institute of Natural Resources 2008; Naidoo 2012), and therefore the growth in demand here could indicate growth overall, especially when one considers the trends reported in other outlets discussed below.

Competitor Pick ‘n Pay, in their annual report from 2013, also cites growing demand for ‘Organic and Fair Trade products’ (Pick ‘n Pay 2013). One of their fresh produce executives told the media that the organic category grew by 50% during 2012 (Van Biljon 2013); while the 2013 annual report highlights the availability of suitable organic suppliers as a key priority in expanding its organic range (Pick ‘n Pay 2013; Supermarket & Retailer 2012). Another limiting factor inhibiting growth of the category is consistency of supply, which Pick ‘n Pay ascribed to the lower yields of organic farming compared to conventional agriculture (Van Biljon 2013).

At the other end of the retail spectrum, the Bryanston Organic Market, South Africa’s oldest community market for organic produce, the sentiment appears to be the same – demand for organics is growing in South Africa. Market operations manager, Audrey Wainwright, highlighted that, despite growth in demand, profit margins on organic produce for smallholder producers remain slim due to high input and transport costs (Wainwright to Metelerkamp 2015).

The notion that the limiting factor in the South African organic sector is supply rather than demand also seems pervasive in other grey literature (Den Hartigh 2008; Erasmus 2008; Supermarket & Retailer 2012; Engel 2008). In 2008, *Farmers Weekly* reported that “in South Africa, the low supply of locally produced organic products is the main restriction for market growth” (Farmers’ Weekly 2008: 15). More recently, local trade publication *Supermarket and Retailer* reported that, while supermarkets increasingly seek to feature organic foodstuffs on their shelves, “demand far exceeds the supply” (Supermarket and Retailer 2012:28). In 2009, Woolworths’ launched their Farming for the Future standard for their farmers, which attempts to reduce chemical usage and protect

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12 An external reviewer felt this figure is difficult to confirm, as much organic produce would have been sold in informal retail outlets (such as organic markets, box schemes etc.). Perhaps the figure could apply to third party-certified organic produce, but would not include all organically produced food.
biodiversity, but do not completely exclude use of inorganic fertilisers or plant protection (Brodie 2014). The reasons given for this decision (as opposed to further promotion of organic standards) do not seem related to a lack of demand for organics, but rather concerns that organic agriculture cannot produce enough to feed the whole country (Brodie 2014), that it is “not feasible to source and sell only organic produce” (King & Thobela 2014:163).

The reasons why larger producers are not stepping into the demand-supply gap did not come through as a prominent issue in the literature. Naidoo cites the higher costs of production for farmers (and hence prices for consumers) as a disadvantage to the growth of organics (Naidoo 2012). Another news report says some sector organisations are “dismissive of the notion that organic somehow costs more to farm (high organic prices, they say, are solely due to retail mark-ups)” (Brodie 2014). However, the same article quotes an organic farmer as saying that they do require the premium, especially since organic farming is much more labour intensive and recent increases to the minimum wages of farmworkers have increased this cost factor (Brodie 2014). Although they do not directly link it to the lack of supply, the FRIDGE Report mentions that South African organic producers do not seem to receive the same level of premiums from local retailers as earned internationally (despite consumers paying a fairly high premium); they say this was the reason for the failure of the certified organic meat industry (Institute for Natural Resources 2008).

Perhaps the reasons for not adopting organic agriculture have more to do with the perception of the risks involved. The FRIDGE report conducted a case study of Swiss frozen vegetable production company, BioSwiss, which rents farms in South Africa. BioSwiss is always looking for more land to rent and engage local landholders, many of who initially seem interested in farming organically. However, the risks of extra costs during conversion seem to put them off and most withdraw; BioSwiss speculates that these farmers may also be sceptical of viability in the long term (Institute for Natural Resources 2008).

Although working with a small sample (just 20 organic farmers responded to their survey in 2003) Niemeyer and Lombard produced some interesting findings on the conversion process for South African organic farmers. They found that the farmers in their survey matched the early adopters described in models of innovation: they are younger and better educated; this matches the experience internationally, that older, less-educated farmers would be the later adopters (Niemeyer & Lombard 2003). These farmers also had considerably smaller farms than the average conventional farms; the authors felt that perhaps this was because larger-scale farmers perceive greater risks and difficulties in implementing organic on such a large area (Niemeyer and Lombard 2003). The organic farmers cited a desire to protect the environment and improve soil fertility as their main reasons for conversion, while the promise of higher prices and lower input costs rated lower. This is different to the general findings in the international literature, where the promise of higher profits is a close second to concern for the environment. Niemeyer and Lombard speculate that this could be because most farmers in the South African survey reported no real problems with low farming profits before conversion (2003).

Perhaps the difficulties during conversion to organic and faced by already organic farmers have dissuaded farmers from filling the market demand. Niemeyer and Lombard found the biggest issues during conversion were the increase in weeds and, for those farmers who used more chemical inputs before conversion, pests and disease were also an issue (2003). More farmers were satisfied
with yields and financial returns than those who were dissatisfied, and few reported a drop in yields during conversion. Niemeyer and Lombard speculate that the dissatisfied farmers were likely experiencing some of the issues that can lower financial performance during conversion: increasing fixed costs, certification fees, costs of advice, and lack of access to premium prices (2003). The FRIDGE Report that studied organic farmers in South Africa found that their biggest challenges were lack of government support, as well as a lack of technical and other information on organic production (2008).

In terms of supply from smallholders, it should be noted that compatibility issues with retail giants such as Pick ‘n Pay and Woolworths, could be resulting in a significant market mismatch situation. In short, supply of organic food may exist, but not in the right quantity, quality and variety at the right times and at the right price to match current demand. Both the case studies of smallholder organics (see section 7.2) as well as Pick ‘n Pay and the national government Department of Trade and Industry have cited the stringent quality and health and safety requirements of retailers as a major barrier to smallholders wanting to supply retailers (DTI 2012, Van Biljon 2013). This could in turn be driving some producers to abandon expensive organic certification, and seek out simpler and more profitable marketing channels in the informal sector.

These marketing channels include more localised, informal and decentralised options such as bakkie traders, direct sales, box schemes, specialised restaurants and farmers’ markets (DAFF n.d.). The informal nature of this shift makes reliable, published market information impossible to come by at present, although localised studies are beginning to emerge that provide anecdotal support to the notion of growth in decentralised marketing chains. A recent study into organic box schemes in operation in Cape Town, suggests a growth in the number of clients buying organics outside of the major retailers. Based on a survey of 354 of these 650 regular subscribers, on average box scheme subscribers source 50% of all fresh produce from these organic suppliers at an average cost of R615 per month (Thom & Conradie 2012).

6.2.2 Export demand
On the export front, the South African market has the advantage of being able to produce organic products during the European and North American winter season. This to some extent removes it from direct competition with organic farmers in many developed economies in the fresh fruit and vegetable sectors (Waarts et al. 2009). Combined, Europe and North America constitute 90% of the world organic market in terms of retail sales.

The FRIDGE report survey in 2008 elicited responses from 60 South Africa certified producers, with a total area under management of 8437ha. These 60 producers reported combined sales of R160 million, of which local and export sales were roughly 54% and 46% respectively (Institute of Natural Resources 2008). This suggests that export markets play a critical role in the sector at present, and may to some extent explain the lack of supply to domestic retailers.

Three trade reports of European origin focussing on growing the export of organics from South Africa to Europe were reviewed. All three indicate that significant export markets exist for organics

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13 One external reviewer highlighted that this point is borne out from his own experience of working with smallholder organic farmers in KwaZulu-Natal province.

14 Informal vendors selling directly to the public from the back of small trucks.
from South Africa, which are not being fully exploited (TIPS & AusAid 2006; Waarts et al. 2009; Barrow 2006). Export destinations commonly cited include Germany, the Netherlands, the UK, the USA, and the Far East (Willer and Lernoud 2015; DAFF N.d.). The total European market for organics is valued at around EUR 24.3 billion and grew on average by 6% over 2013, while certain member states such as Switzerland and Norway grew by more than 12% (Willer & Lernoud 2015). This growth within South Africa’s primary export market implies that production could be expanded to accommodate this demand.

Interestingly, when compared to the views of the local retail sector, similar limitations in the growth of the organics export sector seem to emerge from the export community, namely that insufficient availability of certified produce is limiting exports (Waarts et al. 2009; Barrow 2006).

Table 2: Overall domestic and export market value estimates

<table>
<thead>
<tr>
<th>Date</th>
<th>Reported in</th>
<th>Value</th>
<th>Area of focus</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Vermeulen and Bienabe (2007)</td>
<td>R5 million</td>
<td>The organic sector: local consumption and exports</td>
<td>Leonard Mead, then chairman of Organics SA, which pulled together data from the biggest players in the industry: retailers, producers and certifiers</td>
</tr>
<tr>
<td>2005</td>
<td>National Policy on Organic Production 8th Draft</td>
<td>Between R200 million and R400 million</td>
<td>The organic sector: local consumption and exports (including both certified and uncertified produce)</td>
<td>Unclear – publishing date is given as 2005, yet no reference with that date exists in the list of references</td>
</tr>
<tr>
<td>2008</td>
<td>FRIDGE Report (2008)</td>
<td>R477 million</td>
<td>Total local and export sales of certified organics</td>
<td>Survey and extrapolation&lt;sup&gt;15&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>15</sup> The authors of the FRIDGE report extrapolated this to South Africa based on a survey of 60 organic farmers. See Institute of Natural Resources (2008).
6.3. Key products

South Africa’s varied climatic zones and soils allow for diversified production. The FRIDGE report presented the following key commodities by both land area (Figure 3) and value of sales (Figure 4):

**Figure 3: Key commodities by area (ha)**

![Key Commodities by Area (Ha)](image)

Source: Institute of Natural Resources (2008)

**Figure 4: Key commodities by value of sales (ZAR)**

![Key Commodities by Value of Sales](image)

Source: Institute of Natural Resources (2008)

Interestingly, while teas (Rooibos and Honeybush) constituted 64% of total land area under production among the survey respondents, when considered as a percentage of total sales, teas only accounted for 1% of the total. Conversely, fruit and vegetables, which accounted for 84% of the total
estimated value of sales, accounted for only 27% of land utilisation\textsuperscript{16} (Institute of Natural Resources 2008). Thus the question of what South Africa’s key organic crops are is highly dependent on the frame of reference.

Table 3: 2014 Key organic products produced in SA by area

<table>
<thead>
<tr>
<th></th>
<th>Area (ha)</th>
<th>% of total South African land for that crop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coconut</td>
<td>7 850\textsuperscript{17}</td>
<td>No Data</td>
</tr>
<tr>
<td>Rooibos</td>
<td>3 750</td>
<td>No data</td>
</tr>
<tr>
<td>Citrus fruit</td>
<td>2 035</td>
<td>2.7</td>
</tr>
<tr>
<td>Fruit, tropical and subtropical</td>
<td>1 725</td>
<td>4.4</td>
</tr>
<tr>
<td>Vegetables</td>
<td>1 078</td>
<td>0.9</td>
</tr>
<tr>
<td>Cereals</td>
<td>805</td>
<td>0.0</td>
</tr>
<tr>
<td>Grapes</td>
<td>773</td>
<td>0.7</td>
</tr>
<tr>
<td>Fruit, temperate</td>
<td>703</td>
<td>1.2</td>
</tr>
<tr>
<td>Cropland/crops, no details</td>
<td>404</td>
<td>No Data</td>
</tr>
<tr>
<td>Root crops</td>
<td>292</td>
<td>0.3</td>
</tr>
<tr>
<td>Oilseeds</td>
<td>268</td>
<td>0.0</td>
</tr>
<tr>
<td>Dried pulses &amp; protein crops for production of grain</td>
<td>236</td>
<td>0.4</td>
</tr>
<tr>
<td>Nuts</td>
<td>199</td>
<td>4.7</td>
</tr>
<tr>
<td>Berries</td>
<td>43</td>
<td>30.5</td>
</tr>
<tr>
<td>Olives</td>
<td>27</td>
<td>No data</td>
</tr>
<tr>
<td>Uncategorised</td>
<td>22 982</td>
<td>No data</td>
</tr>
<tr>
<td>Total</td>
<td>43 170</td>
<td>0.04</td>
</tr>
</tbody>
</table>


A more recent tally of land under management by IFOAM (see Table 3 above) presents a second, broader view of crops under production. A notable omission from this data set, however, is animal production. Also, no corresponding financial values are provided. The large area under organic coconut production is unconfirmed by other sources (e.g. the FRIDGE report of 2008 does not mention it) and, in the opinion of the researchers, seems unlikely.

Another important, albeit small sub-category of the organic sector is medicinal crops. Certified and non-certified organic crops with recognised medicinal properties, which are either endemic or indigenous, include: Buchu (Agathosma betulina), Honeybush tea (Cyclopia species), Ghaap (Hoodia gordonii), Devil’s Claw (Harpagophytum procumbens) and Aloe (Aloe ferox) (Smith 2008). Research in South Africa has indicated that there is a large potential for rural livelihoods development through

\textsuperscript{16} Although the draft National Organic Policy does not give its source, it lists bananas, avocados and mangoes as the largest fruit crops in terms of hectares, and curcubits, tomatoes, asparagus, brassicas and potatoes as the largest vegetables (DAFF n.d.). They also mention the relatively new organic dairy production.

\textsuperscript{17} One external reviewer consulted with those involved in the sale of organic coconut products in South Africa who agreed this figure seems highly unlikely; they all source organic coconuts from Mozambique.
wild collection and processing (value addition) of natural products\(^\text{18}\) (Ham, Diederichs, Jacobson et al. 2010).

From an export perspective, products within the organic sector, where exporting remains a significant marketing channel include: rooibos tea, wine, citrus, grapes, avocados, broccoli, cauliflower, certified organic inputs, essential oils, stone fruit, sub-tropical fruit, speciality vegetables and berries (Barrow 2006; Institute for Natural Resources 2008).

7. SMALLHOLDER FARMERS AND ORGANIC FARMING IN SOUTH AFRICA

7.1 Current status

In South Africa, 39% of ‘ultra-poor’ households (mostly found in rural areas) rely on agriculture for food and or extra cash income, which is a much greater percentage than in any richer household category (Lyne et al 2009). However, while most rural households conduct some level of agricultural production, only a very small percentage (less than 1%) relies on agriculture as their main income source (Pienaar 2013). Most of these poor rural households spend the largest proportion of their income on food (Lyne et al 2009). Aliber’s research using Statistics South Africa data found that the food spend per capita in poor rural households was actually 15% lower than that of the same income group in urban areas, suggesting that home food production may be higher than reported (Aliber 2009).

There are few reliable data sources on smallholder farming in South Africa (Pienaar 2013). Cousins cites the work of Aliber and colleagues as a summary of the best available information on smallholders (Cousins 2013); they also used the Statistics South Africa data. They found there are 4 million black individuals (2.5 million households) practising some form of agriculture; mostly female; and over 90% of these as an additional (not main) source of food. Most black smallholders are based in the Eastern Cape, KwaZulu-Natal and Limpopo. Note that only 8% of smallholders engage in agriculture as their main or an extra source of income (Cousins 2013). The Department of Agriculture, Forestry and Fisheries divides smallholders into two main categories: the approximately 140 000 households who market their produce and the 2 million households that produce only for household consumption (Pienaar 2013). But Cousins makes a strong case for a more nuanced understanding or classification of smallholders (2013). He and David Chikazunga have developed the following typology after surveying various smallholder projects in South Africa:

<table>
<thead>
<tr>
<th>Table 4: Typology of smallholder farmers in South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective of production</strong></td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>Household consumption</td>
</tr>
</tbody>
</table>

\(^{18}\) Although substantial funding has been directed to these types of ventures, the failure rates are high, which is attributed to the value chains for these products being more complex than most (Ham, Diederichs, Jacobson et al. 2010).
Aside from the typology above, Cousins also provided a definition of smallholders that is relevant to the South African context: “Smallholders are small-scale farmers who use farm produce for home consumption to some degree, and use family labour within the farming operation to some degree, but for whom farming contributes a highly variable amount of cash income via marketing of farm produce. Levels of mechanisation, capital intensity and access to finance are also variable among such farmers” (SAFL and PLAAS 2013:3).

Pienaar found that rural producers were most likely to be emerging commercial farmers if they had salaried employment, which indicates the need for capital to invest in production, and that this group very likely have more knowledge of marketing channels and how to deal with buyers (Pienaar 2013). Pienaar concluded that attempts to commercialise smallholders are wasted on certain groups within his typology (those with very low incomes), as they “would typically not have the means, nor the ambition to do so” (2009:87). He indicates that efforts to turn these smallholders into commercial farmers would be inefficient, and they would be unlikely to create employment on their farms (2013). Instead government should focus on the creation of other livelihood opportunities for them, and provide support to improve their household food gardens for own consumption. The groups who have access to more land and those who are already producing crops or livestock commercially should be the ones government targets for development into commercial farmers. They need access to capital and better extension services and should be able to grow the contribution of agriculture to their household incomes, as well as create employment for others (Pienaar 2013). Note that, although Pienaar cites Cousins (2013) several times, they differ fundamentally on their reasons for saying that attempts to commercialise smallholders will fail. While Pienaar seems to blame the smallholders, Cousins (and others) blame the structure of the economic system. A more detailed explanation of Cousins’ view is found in section 8.2.
Bringing smallholder farmers into organic production is seen as a way to improve their livelihoods and promote economic development: through opportunities to access premium markets abroad and via the price premiums that can be obtained in domestic markets (Thamaga-Chitja & Hendriks 2008). Organic production is seen as particularly suited to African smallholders because it is similar to many traditional farming methods (Thamaga-Chitja & Hendriks 2008; Naidoo 2012). In addition, they could face shorter conversion periods in areas where their land has not been exposed to the “intensive chemical treatment of commercial agriculture” (Thamaga-Chitja & Hendriks 2008:318). Climatic conditions in Africa also lead to longer production cycles, which give a competitive advantage over local producers in many northern countries (Thamaga-Chitja & Hendriks 2008). Auerbach mentions the environmental benefits of organic agriculture, as well as the potential longer-term cost savings to organic farmers as fertiliser and chemical input prices continue to rise (2013). For all of these reasons, there has been increased interest at a high level in promoting organic agriculture to African smallholder farmers (IAASTD 2008; UNEP-UNCTAD 2008a and 2008b; El-Hage Scialabba 2007). The UNEP-UNCTAD report is often cited as follows: “the evidence presented in the study supports the argument that organic agriculture can be more conducive to food security in Africa than most conventional production systems” (2008b:iii); yet, when one examines the report, this point does not seem to be based on a direct empirical comparison between organic or conventional farms.

However, Thamaga-Chitja and Hendriks (2008) warn of a number of constraints facing smallholders that can result in low production:

- Poor access to productive land, inputs, credit and water;
- Problems accessing both local and international organic markets;
- Dependence on costly international certifiers and standards when exporting; and
- Lack of knowledge of organic methods (compounded by lack of extension services).

The following section will unpack these constraints in the form of case studies of organic smallholder projects in South Africa.

7.2. Smallholder success stories

Part of the brief for this literature review was to present smallholder organic farmer ‘success stories’ from South Africa. Despite no clear stipulations on what would or would not constitute ‘success’ in this regard, only three cases emerged that were possible to include, thereby negating the need to clearly define what is meant by ‘success’ for smallholder organic projects for this review19. These cases were the only three where at least a few different sources on each could be obtained and where the authors of these documents mention what they regard as positive outcomes or successes.

However, although there are many websites and newspaper articles extolling the virtues of these smallholder organic projects, most seem to disappear off the radar after a few years. Van Der Heijden and Vink explain this as follows: “case studies of successful linkages between supermarkets and small farmers in South Africa tend to highlight the exceptions, rather than the norm, illustrated in the fact that so few of them are cited (repeatedly) in the relevant literature” (2013:79). It has been hard to find many articles on the Ezemvelo Farmers’ Organisation (EFO) from after 2010. While

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19 However, comments from the external reviewers also indicate a need to debate and define measures of success in these types of smallholder organic projects.
this may well be due to the research programme surrounding the project ending then, two more recent sources seem to suggest issues at both the EFO and Siyavuna co-operatives related to produce being rejected for not meeting quality requirements and low incomes for farmers (Msomi 2012; Barlow and Van Dijk 2013). It seems that more empirical research is needed on the case studies below to interrogate the current status of the projects.

7.2.1. **Heiveld Co-operative (Northern Cape)**

Situated at the very northwest of the Cape Floristic region, in the harsh conditions of the Suid Bokkeveld, is the town of Nieuwoudtville. It is near here that a group of smallholders has joined together to manufacture and market their wild-collected and cultivated rooibos. During apartheid, these smallholders were extremely poor, surviving on small stock farming, rooibos harvesting and as seasonal labourers on huge white-owned rooibos farms (Oettle 2008; Orlando 2013). Orlando says that even though it was the smallholders’ ancestors who had discovered rooibos and shown its uses to the colonialists, they were not allowed to partake in the benefits thereof (2013). Due to a complete lack of extension support from government, these smallholders used no pesticides or fertilisers and were organic by default (Oettle 2008). They operated individually and received poor income for their small amounts of produce and, due to their lack of processing equipment, had to pay inflated prices to use the machinery of the large-scale rooibos farmers in the area (Orlando 2013).

The democratic government of 1994 provided these smallholders with irrigation and some farm infrastructure, but realised that they needed much broader support. Government approached the Environmental Monitoring Group (EMG), an NGO based in Cape Town, as EMG had experience in community-driven development (Orlando 2013). According to Noel Oettle, one of the key facilitators, EMG used a participatory action research approach to build up the confidence of the community so that they could make their own choices around the future they wanted; any decision they took should emerge from them, and not be imposed from the outside by donors or NGOs (Orlando 2013).

At the time when EMG first engaged the community in 1998, the global price for rooibos tea was depressed following de-regulation. Since the smallholders did not have direct access to markets, and sold on to Rooibos Limited (the old state body turned private company) or to commercial farmers, the prices they received hardly covered their production costs, let alone provided surplus to invest in expanding production in the future (Orlando 2013). Initial meetings with the community identified that they were interested in becoming more profitable in rooibos production and perhaps in community-based tourism. EMG found funding for and arranged two exchange visits for community members to a successful co-operative of rooibos smallholders in Wupperthal and to community-tourism projects in Namaqualand. The members returned and made plans to form a co-operative, which would allow them to purchase a chopping machine to reduce their costs of production and pool their product to get better prices. Once the community had decided on these goals, EMG provided support to help achieve them (Orlando 2013).

The co-operative was formed in 2003, and obtained organic certification the same year and Fairtrade certification in 2005 (Orlando 2013). Membership has increased from 14 to 49 (Orlando
In 2012 they were able to achieve a price of R17.50 per kilogram for their rooibos, which Oettle told Orlando was the highest return in the world for a kilogram of wild tea (2013). Orlando also mentions the pride among members in their exclusivity deal with Pick ‘n Pay, where theirs is the only organic rooibos stocked in stores (2013).

Orlando lists various benefits to the community over time:
- Sharing costs of equipment and infrastructure;
- Sharing knowledge with other smallholders on production;
- Ability to access high-value international markets;
- Competing with larger-scale producers; and
- Increased confidence.

This confidence was visible in their collaboration with Rhoda Malgas (then based at the University of Cape Town, now Stellenbosch University) in participatory research on the sustainable harvesting of rooibos (Orlando 2013). They are also able to contribute to the community, as their Fairtrade certification requires that they reinvest a percentage of profits: they have invested in community projects and provided educational scholarships to local children (Orlando 2013). They have also started producing their own branded product to capture more value. This has provided jobs for local women who sew the cotton bags that the Heiveld-branded tea is sold in (Orlando 2013). They employ two permanent office staff, 11 seasonal workers and three women’s groups for producing the packaging (Orlando 2013).

Oettle attributes the success of this group to long-term support provided by EMG (over 16 years now). He says that it shows that there is no ‘quick-fix’ when it comes to integrating marginalised communities into a global economy (Oettle 2008). Indeed, reading over Orlando’s thesis, the sheer number of grants and donations made to the Heiveld Co-operative over many years is apparent.20

7.2.2. Ezemvelo Farmers’ Organisation (KwaZulu-Natal)

The Ezemvelo Farmers’ Organisation is perhaps the most visible project involving certified organic smallholders in South Africa. This is likely due to their being the first cooperative in the country to obtain organic certification (Gadzikwa, Lyne & Hendriks 2006) and because they have had connections with Pick ‘n Pay and Woolworths, and have been used in numerous public relations exercises. However, their pervasiveness exists within the academic literature too, due to their strong links with the University of KwaZulu-Natal (UKZN).

The farmers who make up the EFO live in rural Umbumbulu District in central KwaZulu-Natal. Their initial contact with UKZN was when they were approached to be part of Prof. Modi’s study on indigenous crops (Gadzikwa, Lyne & Hendriks 2006). Experienced organic professionals, Raymond Auerbach and James Hartzell, assisted the farmers with organic production and marketing to Pick ‘n Pay (Institute for Natural Resources 2008). During 2002 and 2003, two Provincial Departments (Economic Development and Tourism, and Agriculture and Environmental Affairs) joined UKZN and Woolworths in supporting EFO as an organic pilot project. The group was certified in 2003 by

20 See Appendix B for a list of sponsors. An external reviewer questioned the impact this has on long-term sustainability.
Ecocert/Afrisco (paid for by sponsors) and had 48 certified members. They supplied Woolworths with *amadumbe*\(^2\), sweet potatoes and potatoes through a certified organic packhouse (Gadzikwa, Lyne & Hendriks 2006). The FRIDGE report conducted primary data collection for their case study of EFO in 2007. Although farmers had poorly maintained records, the researchers concluded that farmers earned between R750 and R1092 each during 2006\(^2\) (Institute for Natural Resources 2008). While the researchers felt this was low, the Institute for Natural Resources reported that the farmers ‘seemed happy’ and commented that this money had made a real improvements in their lives (2008).

Kisako-Lwayo and Obi studied the factors that affect the adoption of organic farming by smallholder farmers in KwaZulu-Natal (2014). They focussed on the Umbumbulu district, and used the EFO farmers in their sample (Kisako-Lwayo & Obi 2014). They purposively selected 48 certified organic farmers, and 103 partially certified organic farmers, and then randomly selected 49 non-organic farmers from the same area. Farmers were asked about the socio-economic characteristics of their household and their farming enterprise, as well as being presented with an experimental gambling exercise, where they had to make a choice between various sets of gambles in order to assess how risk averse they were. After this, they were also asked to rank the risks they perceived as influencing their farming activities.

The findings showed most farmers were females (70%) over 51 years of age, as younger people were moving to cities, and men were engaged in wage labour at neighbouring sugarcane farms, or as itinerant workers in Durban and Johannesburg (Kisako-Lwayo & Obi 2014). Education levels were low, household sizes large and farms small (0.59 hectares for certified organic, 0.71 hectares for partially certified and 0.67 for conventional). Despite the sample consisting of farmers, outside wage employment was the main source of income. Certified organic farmers were more likely to derive most of their income from the farm, and had a much higher income from farming than the other groups (one study by Lyne and Hendriks showed the certified organic farmers earned more than 175% higher than the non-certified or partially certified groups (2009)). “This is an indication that the adoption of fully-certified organic farming and its commercialisation has brought economic benefits to these otherwise poor rural households and is an important contributor to household income” (Kisaka-Lwayo & Obi 2014:34). Fully certified farmers also had a larger asset base including more chicken and livestock (Kisako-Lwayo & Obi 2014).

Whilst, overall, the farmers could be classified as risk averse, the non-organic farmers were significantly more risk averse than the organic farmers. This is consistent with the notion that more risk-averse farmers are less likely to experiment with new approaches (Kisaka-Lwayo & Obi 2014). Although all farmers interviewed had only communal tenure rights over their land, most felt this was secure enough to allow investments like building structures, planting trees etc. The organic farmers rated uncertain climate, lack of finance for inputs and tractor unavailability as the main risks of concern to them. The authors speculated on possible reasons for these: there had been a drought in the district at that time; farmers lack assets to use as security for loans from banks (most still do not

\(^{21}\) *Amadumbe* is the Zulu word for indigenous taro, a root crop.

\(^{22}\) Although it seems that these figures are based on the records of only three farmers.
have title deeds to their land); and there was one tractor allocated to the EFO and so demand for its services was extremely high during certain periods.

The partially certified farmers also ranked uncertain climate and tractor unavailability highly, along with delayed payments for produce. This last point is related to the retailers having long payment periods back to the agents, although the authors do not speculate on why other groups did not indicate this as a risk. The non-certified farmers shared concerns about the climate and lack of access to finance, but added livestock damage to crops as a concern (some of the EFO farmers had had fencing provided to them) (Kisaka-Lwayo & Obi 2014).

A very interesting finding was that the non-organic farmers had much higher crop diversification than the organic farmers, as crop diversification is a key feature of the organic approach. Organic farmers grew *amadumbe*, potatoes, sweet potatoes and green beans; whilst non-organic farmers grew these plus maize, sugarcane, bananas, chillies and peas (Kisako-Lwayo and Obi 2014). The authors ascribe this to the non-organic farmers being more risk averse, but another possible reason could be that there are more marketing channels available to non-organic farmers. Alternatively, if the non-organic farmers are producing mainly for subsistence, perhaps the specialisation of the organic farmers is driven by cash cropping; as one reviewer said, commercial farming tends to have less diversity than semi-commercial or subsistence farming. The Institute for Natural Resources reported in 2008 that EFO farmers also grew pumpkins, African melon, maize and green peppers for local markets and own consumption.

Most sources for this case were theses and articles by Masters’ and PhD students at UKZN published before 2010. The most recent source was from the website of a rural KZN NGO, which seems to be from a presentation delivered at a rural development conference in 2012. The author is listed as Thuli Msomi, who is mentioned on the website of the Institute of Poverty, Land and Agrarian Studies (University of the Western Cape) as an MPhil student of Emeritus Professor Ben Cousins (and possibly also an official in the KZN Department of Rural Development). Her interviews with the 45 certified farmers at EFO show attendance at co-operative meetings has dropped drastically, membership renewals have fallen from a high of 200 in 2009 to about 126 in 2012, and EFO was not certified in 2012 because they did not have sponsorship for the costs (Msomi 2012). There seems to be a need to interrogate why this once much-praised project looks to be increasingly dysfunctional.

### 7.2.3 Siyavuna Development Centre (KwaZulu-Natal)

The not for profit company (NPO) Siyavuna Development Centre (SDC) started in 2010, and is located in the Hibiscus Coast Municipality in southern KZN. The SDC was formed by a facilitator, Wim Troosters (Auerbach 2013), who had been working in the area since 2008 with an NGO called Give a Child a Family (Geerts 2014). Sofie Geerts wrote her Doctoral thesis on the organic farming project of SDC, which follows a Community Investment Programme (CIP) approach (see explanation in following paragraph).

Siyavuna’s website describes their vision as that of empowering rural organic farmers through training and mentoring in organic methods, and developing micro-enterprises through farmers’

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23 Geerts seems to be married to Troosters.
associations and cooperatives, marketing under the brand name Kumnandi\(^{24}\) (Siyavuna n.d.a). The Kumnandi brand is associated with local, fresh and organic produce, and Siyavuna hopes that the brand will increase in popularity and result in increased demand for the produce (n.d.c). Marketing under one brand is also meant to eliminate competition between farmers and increase cooperation (Siyavuna n.d.a). They say they currently work with 380 farmers (although no date is given on the website) and that the biggest constraint these farmers face is marketing, so the collection points and guaranteed market with cash paid upfront are the most valuable parts of the programme (Siyavuna n.d.a). Although not mentioned in Geerts’ thesis, the farmers at Siyavuna have formed a PGS\(^{25}\) (Siyavuna n.d.c).

Siyavuna talks about the model they use being Agricultural Sustainable Community Investment Programme (Agri-SCIP). Siyavuna feels it is unfair to expect emerging rural farmers to master the production and farm management aspects, as well as the entrepreneurial skills to market their produce (n.d.c). The Agri-SCIP approach\(^{26}\) is believed to overcome many of these problems and Siyavuna stresses the importance it places on ongoing training for farmers (n.d.d).

When Troosters first came to the area to start a CIP, he made sure to begin by approaching local leadership to get their support for a project (Geerts 2014). He offered free organic farming training to everyone in the community, after which community members who were interested could sell their produce to a cooperative, which was set up to market the produce. At the same time, Siyavuna was set up as an NGO to facilitate and support the project. Each of the three areas that Siyavuna is now active in (Nositha, Gcilima and Kwanzi Makwe) has its own farmers’ association, which farmers become members of.

Geerts found overwhelming evidence through the survey that the farmers feel that they are able to fairly elect their representatives, that they can hold the chairperson of the farmers’ associations and the manager of the cooperative accountable and that they can influence the decisions of both. Geerts also asked farmers about whether their self-esteem had improved as a result of the project and over 97% indicated that it had (2014). She also felt that their sense of self-sufficiency, independence, and confidence in their ability had increased, which she felt would remain even if the project ended (Geerts 2014).

Geerts maintains that a key success factor is that the facilitator did not attempt to implement any kind of community ownership structure for the project until they had achieved some initial success with a large-scale income generation project. She based this on prior experience with these kinds of projects (Geerts 2014). Another aspect contributing to the success of the project is Siyavuna’s

\(^{24}\) *Kumnandi* means ‘delicious’ in the Zulu language.

\(^{25}\) Participatory Guarantee Systems are described in detail in sections 4 and 8.1.

\(^{26}\) One external reviewer added this description: “The basic premise of the SCIP model of economic development shares similarities with the ABCD (Asset Based Community Development) model, in which the starting point when working with communities is ‘what do you have?’ as opposed to ‘what do you need?’ The model insists that community ownership needs to be paramount to achieve long-term change and success. During the pilot phase of Siyavuna’s work, communities were approached with the question ‘what do you have?’ and the results revealed that the targeted communities have land, unused labour and knowledge of traditional agriculture”.

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extensive support: they source donor funding, provide training, facilitate meetings, organise sales outlets, etc. (Geerts 2014). Another key factor was that Siyavuna would purchase all the produce that farmers could supply on each collection day; a guaranteed market being a rare thing for most farmers (Geerts 2014).

In their study of current challenges facing black smallholder farmers in South Africa, with the ultimate aim of linking them to Dutch companies, Barlow and Van Dijk mention Siyavuna (2013). They refer especially to the fact that Siyavuna collects the produce, assesses its quality, has packing and cooling facilities and then markets the produce under the Kumandani brand (Barlow & Van Dijk 2013). It seems that Barlow and Van Dijk also interviewed 16 of the farmers involved in the SDC project, although it does not specify when the interviews took place, how they selected who to interview, or which communities they were from. Despite the questionable reliability of the results, the negative feedback reported about the project may deserve some attention. The farmers mentioned the following production constraints:

- They experience labour shortages during busy times;
- Most have very little agricultural equipment and rely on hand hoeing, family labour for weeding, and watering cans for irrigation;
- They cannot afford better equipment due to low profits from their farming operations;
- The difficulty in getting water to their land is the key constraint to their production – a central pump is unlikely to work due to the dispersed nature of the farms;
- Most farmers have less than 0.1ha under cultivation, which is enough for their family’s needs, but not enough for commercial viability;
- Eight of the 16 said their fencing was damaged, and as a result their crops were being destroyed by the livestock and stolen by community members;
- None have access to refrigerated storage and consequently incur loss of produce; and
- They have no transport and take produce to the collection points and other markets in buckets or wheelbarrows, clearly limiting the amount they can transport.

Barlow and Van Dijk (2013) also report marketing challenges faced by their interviewees. The main challenge is the rejection of their produce at the collection point due to not meeting the required quality standards. The farmers would rather the inspectors came to assess their produce for quality while it is still in the ground, to prevent spoilage. The farmers also report contradictions in the advice given to them by the Siyavuna mentors who visit their farms, and what they are told by the inspectors at the collection points. Another complaint was around the price received for the produce: farmers seemed aware that organic produce usually fetches a premium and reported that it was not being passed on to them. Lastly, the farmers cannot access other markets, aside from their local area or the cooperative, as they do not have the requisite skills or funds to find these markets, contact them, negotiate prices and deliver their products.

Geerts (2014) reported an average monthly sales figure of R188 per farmer in 2013, which she acknowledges is low (in comparison to an old age grant for example). However, as was the case with the Institute for Natural Resources’ assessment of the EFO, she felt the farmers were happy to be earning any amount, no matter how small (Geerts 2014). This does seem to contradict what farmers told Barlow and Van Dijk above.
Siyavuna claims that the cooperatives are in charge of pricing and do market research and price benchmarking monthly, in order to ensure minimal wastage (Siyavuna n.d.d). Siyavuna seem especially proud of the fact that they pay farmers fair prices. In an interview in 2014, Diane Peters, director of Siyavuna, was adamant that organic farming is the best option for smallholders. “The kind of feedback we get from farmers is: ‘this is working for us’, ‘it is a cheaper solution as we don’t have to keep buying fertilisers and chemicals’, ‘we are learning to look after our soil and our land in a way that is going to be sustainable for our children’ (South Africa The Good News 2014). Neither Geerts (2014) nor Barlow and Van Dijk (2013) mentioned that the produce was being sold at a premium, but Geerts (2014) mentioned that the farmers were being paid 60% of the sales price, which is much higher than usual in the farming sector (2014). Since some farmers claim they cannot cover their costs with the amounts they are being paid, it is clearly important to interrogate the financial arrangements within this cooperative more closely.

8. THE FUTURE OF SMALLHOLDER ORGANIC FARMING IN SOUTH AFRICA: LESSONS LEARNED FROM EXPERIENCE

This section brings together some of the issues raised during the case studies, and some from the literature that are relevant to smallholder organic farming.

8.1 Certification

Certification is one of the key features of organic agriculture, as it is the process whereby compliance with the organic standards is assured to allow customers to distinguish between organic and conventionally produced products (Thamaga-Chitja & Hendriks 2008). This is necessary to protect those farmers who adhere to set standards from competition from those who do not, and allow them to charge a price premium (Raynolds 2004; Thamaga-Chitja & Hendriks 2008). Arguably it also informs buyers of what exactly they are purchasing. The standards used for certification are most commonly those set by IFOAM, who also accredits the certification bodies (e.g. EcoCert and the Soil Association). The new SABS voluntary standards will now also allow for a new certification option for local markets.

Due to many African countries, including South Africa, not having their own national organic policies or certification standards, international certification bodies, usually from the countries smallholders are exporting to, currently certify most African smallholders. This means they have to comply with northern standards, which may not always be appropriate for their climatic and agroecological conditions. They also carry high fees, especially if the certification body does not have local inspectors (Thamaga-Chitja & Hendriks 2008).

For the farmer, the process of certification involves filling in application forms that are sent to the certifier. The certification body reviews the application, estimates the costs and sends an inspector out to the farm to verify the information and write a report. The certifier then reviews this and makes a recommendation: granting certification, refusing it or allowing the farmer to be ‘organic in conversion’ (certain conditions may need to be met during this time). Thamaga-Chitja and Hendriks (2008) point out that the forms are all written in English, which many farmers do not read or speak.
Fees for certification vary depending on a number of factors, but are out of reach for smallholders (Thamaga-Chitja & Hendriks 2008). Fees could be made lower if the international certifier accredits local inspection bodies. Another option is for farmers to form a group and obtain a group certification. This is cheaper; as the group puts in place an Internal Control System whereby they can assure the certifier that all group members are meeting the standards (Thamaga-Chitja & Hendriks 2008). Because the ICS is documented, the third party certification body can delegate inspections to a recognised body within the group itself that is responsible for compliance. The third party certifier then only needs to inspect how well the ICS is functioning and periodically re-inspect a small sample of the group (IFOAM n.d.a.). IFOAM has been driving the development and harmonisation of group certification through ICS and now has specific regulations that govern group certification (IFOAM n.d.a.).

Another issue related to certification is that many consumers in South Africa do not understand what organic actually means, and are confused about the differences between organic and free range (Chikazunga 2012; Bienabe, Vermeulen & Bramley 2011). There is therefore a need to educate consumers, in order for the certification as organic to hold real value in the marketplace (Bienabe, Vermeulen & Bramley 2011).

On a global level, Raynolds highlights that the manner in which certification has been deployed has meant exclusion for many producers (2004). Bienabe, Vermeulen and Bramley’s research on the quality turn in South Africa found that “even though organic production is widely recognised as being compatible with small-scale farming practices, it is more likely that, under its current patterns of development in South Africa, the development of the organic sector will be more to the advantage of large-scale producers” (2011:48). Their research found that quality attributes in food have been institutionalised through new certification schemes, mostly imposed by the large retailers who effectively set the rules in the food system. These retailers have increasingly been using preferred supplier schemes to gain greater control over their value chain, and these suppliers are mainly large-scale commercial producers (Bienabe, Vermeulen and Bramley 2011).

Since quality dynamics like organics have more complex information requirements, and require innovative supply chain arrangements and greater coordination vertically and horizontally, smallholder farmers are even less likely to be able to meet these demands (Bienabe, Vermeulen & Bramley 2011). The authors predict that the development of the organic sector (and its dominance by large retailers) will further widen the gap between large-scale and smallholder farmers in South Africa; this correlates with the findings of Raynolds (2004) on corporatisation of organics in other countries (Bienabe, Vermeulen & Bramley 2011). Raynolds advises that, in order to preserve the original social and environmental values of the organic movement, certification should be shifted away from being purely standards-focussed, to a form with wider societal benefits. In particular, she feels that local producers should be able to monitor each other, and costs should be shifted downstream (2004).

A new approach to certification has re-emerged in recent years as a response to some of the issues mentioned above around certification and smallholders. Participatory Guarantee Systems are “locally focussed quality assurance systems. They verify producers based on active participation of
stakeholders and are built on a foundation of trust, social networks, knowledge building and exchange” (Bouagnimbeck 2014:vi). No third party inspection or certification agencies are involved, so, unless the PGS has membership fees, the farmers are not charged fees for this certification (Willer & Lernoud 2015). This method of certification and quality assurance is designed for sales in local or direct markets (i.e. where the consumer has the chance to interact with and interrogate the farmers if they so wish) (IFOAM n.d.b.).

A recent multi-country study of PGS initiatives worldwide27, undertaken by IFOAM, found that PGS are growing rapidly: there are over 49000 smallholders involved in 50 PGS initiatives on all continents, with an additional 60 PGS currently being developed (Bouagnimbeck 2014). The reasons for this rapid growth are clear when one examines the kinds of positive benefits uncovered through the study: reduced production costs and risks; better access to information and resources; better farm outputs; increased income (among 98% of developing country farmers) through enhanced market access; increased food security and dietary diversity (over 80% of respondents) (Bouagnimbeck 2014). At the same time as these benefits accrue to individuals and households, various social processes also seem to develop around PGS: collective seed systems, knowledge sharing, collective work arrangements etc. The report concluded that “PGS as a development approach has the potential to make a significant contribution to the reduction of food insecurity/poverty and to improved nutrition among farmers in rural areas” (Bouagnimbeck 2014:viii).

It is clear that smallholders will require support for certification from somewhere. Thamaga-Chitja and Hendriks feel this is government’s role (2008). Thamaga-Chitja and Hendriks cite the sponsorship of organic certification costs as vital to the EFO; they would not have been able to afford it otherwise (2008). Different ways in which governments can support certification are discussed in section 8.4.

8.2 Market linkages
In order for smallholder farmers to become commercially viable, it is clear that they require links to markets, as Auerbach (2013) notes:

[Market linkages] are essential for long-term changes in the situation of small-scale producers, and in improving their terms of trade. Participatory Guarantee Systems can facilitate access to local markets for small-scale farmers, if they are reasonably well organized, thus reducing the need for expensive third party certification processes.... In heading towards robust farming systems to help resource-poor farmers to emerge as commercial producers, it will be important to link them to markets while providing training that reduces the risk of crop failure and helps them to manage quality.

(Auerbach 2013:32)

27 For this study, eight best practice cases were selected from across the world and 85 interviews conducted with farmers, and 24 with stakeholders involved in the PGS development. The PGS started in 2006 by the Bryanston Natural and Organic Market in Johannesburg was one of the cases.
In the Siyavuna case, lack of access to markets was raised as the major constraint facing farmers at the start of the project. Smallholder farmers face a number of disadvantages in trying to access markets. The demands made by formal retailers in terms of quality and health and safety have been mentioned before, but another key limiting factor is access to information. Farmers need information to make good decisions about their enterprises, and to successfully market their products; marketing problems are most commonly due to a lack of information (Thamaga-Chitja and Hendriks 2008).

Bienabe, Vermeulen and Bramley cite research from AC Nielsen in 2005 and The Economist in 2006 showing concern for the environment and animals increasing in importance as a factor driving European consumers to buy organic food (2011). Health reasons remained the main driver though and the same was true for South Africa (Bienabe, Vermeulen & Bramley 2011). In their comparison of prices of organic and conventional produce in Woolworths, they found that processed products carry a much higher premium, reflecting one of the main consumer trends currently: convenience (Bienabe, Vermeulen & Bramley 2011). Although they do not mention this point, it would seem that processing of organic produce might present a market opportunity for smallholders.

In their study on the challenges facing black smallholder farmers in South Africa (not necessarily organic), Barlow and Van Dijk refer to a 2010 report by the International Produce Marketing Association (which cannot be accessed by non-members). Apparently, the report gives the following breakdown of all vegetables grown in South Africa (conventional and organic): 46% is sold through municipal fresh produce markets; 42% is sold directly from the farm; 10% to processors and 2% is exported. Barlow and Van Dijk mention that farmers also have the option to sell into informal markets, and there are a number of collaborations between emerging and commercial producers where the commercial producer becomes the purchaser of the produce (2013). Barlow and Van Dijk recommend that smallholders should aim to supply the municipal fresh produce markets given the constraints in supplying to formal retailers (2013). However, the websites of the municipal markets do not indicate any special sections dedicated to organic produce; it seems that organic smallholders would need to forgo their organic price premium to participate in this marketing channel. Another issue Van Der Heijden and Vink (2013) raise is the decline in importance of municipal markets as more retailers purchase directly from larger-scale farmers.

Relating back to the motivation behind the recent rise of PGS’ are the alternative market channels that are developing, driven by consumers’ desire to support local producers and access healthy food, as well as by producers who find they can capture more of the profit share if they sell direct (Bienabe, Vermeulen & Bramley 2011; Willer & Lernoud 2015). These kinds of alternative market channels include things like farmers’ markets, organic box schemes and community-supported agriculture. However, these channels are currently mostly aimed at and supported by upper income urban consumers and smallholders would likely struggle to successfully interact with these markets without assistance28.

28 This comment is based on both the personal experience of one author in running a community-supported agriculture scheme with two emerging farmers and upper income Cape Town consumers in 2009/2010, as well as the example of Abalimi Bezekhaya and their more recent Harvest of Hope project that shows the high level of institutional support needed to link smallholders to these new alternative market channels.
Engel found in her survey of Woolworths’ consumers in 2006 that most people associated organic production with supporting smallholder farmers’ and cited this as the reason they buy organic (2008). Engel suggests that retailers should capitalise on this by stocking smallholder organics, but perhaps smallholders are missing an opportunity in not marketing directly to upper income urban consumers. Van Der Heijden and Vink recommend further research into alternative food networks that will have the greatest positive benefit for smallholders (2013).

Most of the views so far in this section seem to rest upon the assumption “that exclusion [of smallholders] results largely from the characteristics of producers, rather than from the structure of these modern markets” (Van Der Heijden & Vink 2013:70). This view is common in the South African literature, and shared by DAFF, who assume smallholders will be incorporated into the market if they have access to land and support services from government (Van Der Heijden & Vink 2013). There is a different view that questions this prevailing orthodoxy about access to markets for smallholder farmers in South Africa; described in the work of Van Der Heijden and Vink (2013) and Cousins (2013), it blames the structure of economic and social systems rather than some deficiency in the producers. To these authors, the massive barriers to entry smallholders face in trying to supply supermarkets are not the result of deliberate hostility from the supermarkets, but rather the results of the actions of rational economic agents, following best business practices around the world and trying to maximise return to their shareholders (Van Der Heijden and Vink 2013). Cousins’ research on the true nature of South African smallholder farmers has found that very few are able to produce successfully for a market, and that most are producing food to supplement their diets, while relying on income from off-farm sources (2013). He feels there is very little chance for smallholders to transition to fill the ‘missing middle’ (i.e. the gap between the large-scale commercial farmers and subsistence producers) until larger structural issues are addressed, which may be beyond the capacity of the state at this present time. In fact, Cousin’s analysis suggests that it is unlikely that such a broad-based transformation could take place within the current capitalist structure of the South African economy (Cousins 2013).

8.3 Institutional arrangements

Thamaga-Chitja and Hendriks argue that organic agriculture is often promoted to smallholders in Africa despite the fact that the conditions that would support the adoption and success of organic farming are often absent in African countries (2008). South Africa too suffers from the lack of an organic policy. This is compounded by the fact that organic agriculture is extremely knowledge intensive, and many African countries suffer from poor extension services, while farmers lack access to the Internet (Thamaga-Chitja & Hendriks 2008) and other sources of information.

Because organic agriculture is one of the most highly regulated forms of agriculture, due to the “legally defined standards and norms of production, processing, and labelling” (Gadzikwa, Lyne & Hendriks 2006:344), smallholders who want to convert are faced with changes to their inputs, production processes, administration and record keeping, and marketing. One approach that has been taken to help small farmers adapt to these changes and especially to access markets, is the formation of group structures. IFOAM has special guidelines for this, and local certifiers like Afrisco certify accordingly (Gadzikwa, Lyne & Hendriks 2006). Within these groups, marketing of produce happens collectively, although farmers can produce collectively or individually.
The aim of these groups is to help farmers spread the costs of production (including certification) and marketing among the group. During conversion from conventional to organic farming, small farmers will face possibly reduced yields, extra costs of acquiring information about organic farming, increase in labour intensity and finding new market channels (Gadzikwa, Lyne & Hendriks 2006). It is expected that the benefits of participation in such groups include economies of scale (not only for the farmers, but also buyers who can interact with a single entity now, rather than many individual farmers), reduced certification costs as certifiers need only inspect a sample of the group and reduction in the cost of acquiring information on organic production (Gadzikwa, Lyne & Hendriks 2006). However, while collectives can reduce some costs, they introduce others, such as time spent in group meetings, membership fees, compliance with rules, free-riders and providing information to the group (Gadzikwa, Lyne & Hendriks 2006).

In his PhD research on the EFO farmers, Gadzikwa confirmed that membership of EFO had reduced farmers’ worries about livestock destroying their crops and access to technical farming knowledge. Nevertheless, farmers were still concerned about price uncertainty, lack of access to inputs, lack of transport, and communications infrastructure (Gadzikwa 2008). He also found that the problem of free-riding was a threat to EFO’s collective marketing efforts – farmers who were male, poorly educated, partially certified and aware of loopholes in the grading system (where it is unclear as to the origin of low quality produce) were most likely to free-ride. He concluded that, for EFO to survive in the longer term, they needed to continue to fund training, fencing and certification, as well as provide discounted inputs and an office with communications infrastructure (Gadzikwa 2008). They also needed to sort out issues with grading processes and contracts with buyers.

As seen in the case studies, while these group structures are definitely useful in reducing costs and accessing markets, they require long-term support, which is discussed in the following section.

8.4 Intensive support

Organic agriculture is far more knowledge intensive than conventional, and places more onerous demands on farmers (Thamaga-Chitja & Hendriks 2008; Bienabe, Vermeulen & Bramley 2011). Yet organic agriculture receives very little of the support that is available to conventional farmers, like access to subsidies and inputs, extension services, and research (Bienabe, Vermeulen and Bramley 2011). From the literature available on the various case studies, a strong theme has emerged around the intensive levels of support the projects have received. Oettle (2008) was adamant that the long-term support from EMG was key to Heiveld’s success. Orlando highlights the importance of EMG’s approach: building up people’s abilities and confidence to run projects on their own, and to make decisions about their own development (2013). The Institute for Natural Resources felt EFO was still around after seven years (in 2007 when they conducted their research) due to the long-term view and commitment of those supporting the project (2008). Both the Heiveld and Siyavuna models seem to indicate that having an NGO supporting the project means that they are able to leverage many different sources of funding, which seem essential to the longevity of these projects. Another reason for the case studies’ longevity is likely related to the fact that the NGOs not only provided technical production assistance, but also strengthened farmers’ skills around marketing and business, as well as running collective institutions (Bienabe, Vermeulen & Bramley 2011).
Diane Peters of Siyavuna and Noel Oettle of EMG have both stated that expecting smallholder farmers to succeed after a couple of years of support and funding is completely unrealistic. Thamaga-Chitja and Hendriks highlight the large amounts of support developed country governments have shown to their organic sectors: “market facilitation, certification cost-sharing, funded market research and subsidised conversion to organic farming systems” (2008:323). The point Thamaga-Chitja and Hendriks are making is that this kind of support could only happen in the context of a policy that supports organic agriculture; they insist that this must include legislated organic standards (2008). Expressing concern that the rise of organics means a further widening of the gap between smallholders and retailers, Bienabe, Vermeulen and Bramley feel government needs policy that can assist smallholders’ entry to the organic market (2011); this policy needs to be cognisant of the increased power that private quality standards have brought to retailers and large-scale producers. A suggestion is to create ‘less sophisticated’ standards for local markets (Bienabe, Vermeulen & Bramley 2011), although the authors are not clear on whether retailers would accept these standards.

Van Der Heidjen and Vink question many of these recommendations and policy initiatives:

Many development agencies and researchers in South Africa continue to espouse solutions that do not take sufficient cognisance of modern market reality. It is difficult to understand how foreign donors can recommend market access strategies to small South African farmers that would be scoffed at by farmers (and legislators) in their home countries. If interventions such as better market information, better physical infrastructure, better access to inputs such as seeds and capital equipment, and the formation of producer organisations really are the magic cure for modern market exclusion it does not make sense that they have not been embraced by any of the industrialised countries where small farmers are being excluded

(Van Der Heidjen & Vink 2013:82).

They recommend that government needs to come up with very different kinds of solutions for smallholders; for example, government is a massive institutional purchaser of food who could themselves support organic smallholders (Van Der Heidjen & Vink 2013).

A 2008 report by UNEP-UNCTAD explored the experiences of various countries to recommend best practices for the promotion of organic agriculture by developing country governments. South Africa was one of the case study countries and the full list of policy recommendations can be found in Appendix C at the end of this report. This report contradicts Van Der Heijden and Vink (2013) above, finding instead that many of the interventions they list as not useful, were in fact key to the success of many developing and developed country organic sectors (UNEP-UNCTAD 2008a). The report gives recommendations around how to set up organic policy, regulations and certification; highlighting that the particular circumstances of each country, their resources and objectives will necessarily result in different approaches. More relevant to the current discussion is that the report also recommends how to support smallholders.
UNEP-UNCTAD suggest that developing country governments should support smallholders in complying with certification requirements (2008a). One suggestion is that governments finance certification costs; this is a common practice in the European Union and United States. Currently, developing country smallholders are mostly receiving assistance with certification costs from development organisations or sometimes from exporters and importers (UNEP-UNCTAD 2008a). Assistance can also come via training: suggestions made by UNEP-UNCTAD include governments translating standards into an easy to understand format (e.g. pictorial); or providing training on the set up and management of the internal control system required for group certification (2008a). The South African case study in the report mentions that some training has been provided by government, in combination with training on other quality management systems like EurepGAP (UNEP-UNCTAD 2008a). They also recommend that governments should be encouraging the development of alternative assessment procedures (other than third party certification) such as PGS. Bouagnimbeck’s study of successful PGS reached the same conclusion and suggested interventions such as using PGS as a tool in development programmes, subsidising PGS, recognising PGS as an accepted system in organic regulations and assigning research and extension budgets to PGS (2014).

Another area of focus should be the development of the domestic market. UNEP-UNCTAD point out that organic producers face many of the same challenges as conventional ones, but extra challenges too. As a fairly ‘new’ sector, with more demanding consumers and more exacting standards based on the certification rules, governments could particularly assist with: separate facilities to conventional produce (e.g. for transport and processing); awareness raising in the general public; provision of market information systems for information on producers, suppliers, prices, quantities available etc. (2008a). A key recommended action here is support for farmers to organise themselves so they can benefit from joint marketing, distribution and storage (UNEP-UNCTAD 2008a). Support for organic imports is suggested, at least initially, to help boost consumer demand and encourage local producers that a market exists, as well as provide organic inputs for further processing of locally grown produce. The example the report gives is that, while organic fruit may be available locally, organic sugar may not, making the production of organic juice or jam impossible or prohibitively expensive) (UNEP-UNCTAD 2008a).

Support for on-farm production activities is seen as essential. Greater investment in research on organics is regarded as very likely to result in large productivity gains due to an almost complete lack thereof in the past (UNEP-UNCTAD 2008a). While organic farmers are often directly subsidised or funded in the European Union, UNEP-UNCTAD realise this is unlikely to happen in developing countries as they do not have the resources for this with their much larger farming populations and lower gross domestic products (2008a). But direct support in the EU is often merely compensation to organic farmers who are often disadvantaged by existing conventional agriculture policies. UNEP-UNCTAD also caution against seeing credit support as potentially discriminatory if they exclude the most vulnerable producers (e.g. those who have insecure tenure and cannot offer security for loans) (2008a). Another channel of support is through the provision of extension services. Unfortunately, these are often extremely weak services in most developing countries: poorly trained and too few staff, highly influenced by agro-chemical companies, using a very directive approach. UNEP-UNCTAD recommend that governments learn from the participatory organic extension approaches developed by many NGOs in the developing world (2008a). Organic farming relies on organic waste as an input
to its soil fertility management: governments can greatly assist by finding ways to recycle organic waste for farmers’ use (UNEP-UNCTAD 2008a). There is a dire lack of organic certified seed in many developing countries, and many importing nations demand their use. Governments can assist by promoting organic seed breading and allowing organic farmers to access untreated seed (UNEP-UNCTAD 2008a).

9. CONCLUSION
Data on the organic market in South Africa is inconsistent, unreliable and conflicting at times. As such it was difficult to establish concrete figures and trends. Overall it appears that the land under organic certification has increased in Africa, but South Africa is lagging behind other African countries. Further research is required to find out why this is the case, as other African countries appear to share many of the same barriers faced by South African organic smallholder farmers. The demand for organic produce is growing according to reports from major retailers, farmers’ markets, box schemes, and agricultural publications. It is not clear why larger-scale farmers have not taken greater advantage of the unmet local demand; although some sources indicated it may be due to high costs and risks perceived by farmers in the conversion process, lack of government support and lack of production knowledge.

Research uncovered three case studies of working smallholder organic farmer projects, which seem to be managing to stay afloat, with significant long-term NGO support. However, some sources hint at major challenges facing the farmers of EFO and Siyavuna that are not frequently reported (Barlow and Van Dijk 2013; Msomi 2012).

Factors identified as key to the future of smallholder organics in South Africa include:
• Implementation of national organic standards to boost the local market;
• Further work on the potential benefits of PGS;
• Intensive, long-term support from government and NGOs including technical information, but also broader business and institutional skills;
• Greater support to farmers in accessing markets;
• Related to the above, a focus on institutional arrangements that promote cooperative/group approaches;
• Promotion of alternative market channels with less stringent requirements where smallholders can access a greater share of profits.

Given the apparently high number of failed organic smallholder projects, there needs to be careful enquiry into the reasons for the failure of these initiatives, to ensure that we do not repeat the same mistakes. It is unclear whether the need for extensive NGO support and high failure rate of smallholder farmer initiatives are due to the use of organic methods or rather symptomatic of difficulties faced by smallholders generally.

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29 One reviewer is currently undertaking research looking at these issues.
10. AREAS FOR FURTHER RESEARCH\textsuperscript{30}

- Produce reliable data on the size of the organic sector in South Africa. There are over ten international certifiers operating in South Africa and very few of these are responding to FiBL surveys. We experienced similar problems in sourcing data from certifiers and the FRIDGE report listed the same limitation. However, as certification agencies are for-profit enterprises, with sufficient funds to commission each South African certifier to compile their data and the adequate research capacity to coordinate and collate certifier data, a very clear picture could be built of certified organic production and processing.
- Develop a better understanding of why organic production does not seem to be growing as fast in South Africa as in other parts of the world.
- Further test the notion that demand for organics is outstripping supply. Is it true, to what extent, and in which particular product categories?
- Develop a better understanding of why organic production does not seem responding to market pull alluded to in preceding point.
- Build a clearer picture of organic imports to South Africa and the prices consumers are willing to pay for these imports; this could help local producers and processors identify new local market opportunities.
- Consult more widely on what would constitute a successful smallholder organic project.
- Related to the previous point, investigate in depth whether the perceived high ‘failure’ rate of smallholder organic projects is due to some aspect of their being organic in particular, or whether these failures are due to the same factors that may affect conventional smallholder projects (especially the suggestion made by Van Der Heijden and Vink (2013)).
- Investigate alternative food networks to support smallholders.

\textsuperscript{30} One reviewer suggested that it is important that systems approaches are used in organic research, to deal with the complexity of the issues.
REFERENCES


### APPENDIX A: Search terms used to search the literature

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APPENDIX B: Extensive support provided to Heiveld Cooperative

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<th>Source of funds</th>
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<td>Donation of water/irrigation and farm infrastructure</td>
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<td>Environmental Monitoring Group</td>
<td>Trained two mentor farmers from co-op in organic farming so they could advise others; helped co-op create a business plan; provided organisational development training so the co-op could define roles of office bearers and run meetings; trained co-op treasurer to keep the books; applied for other funding when needed; ongoing support</td>
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<td>University of Cape Town</td>
<td>Funded research into sustainable harvesting and climate change in the area</td>
</tr>
<tr>
<td>Indigo</td>
<td>Another NGO that has supported Heiveld at various points (e.g. with EMG and UCT, they set up and sponsored automated weather monitoring stations that co-op members manage)</td>
</tr>
<tr>
<td>United Nations Environment Programme</td>
<td>Sponsored the registration of the Heiveld trademark, published promotional booklet, provided a consultant who developed cloth packaging that could be made by local women</td>
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<td>Old Mutual Foundation</td>
<td>(Orlando did not mention this grant in her 2013 study, so one wonders how much other funding was directed to the co-operative) sponsored the building of second tea drying court and purchase of a tractor in 2009 (Old Mutual 2015).</td>
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<td>Canada Fund for Local Initiatives</td>
<td>Sponsored the construction of Heiveld’s first tea processing facility</td>
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<tr>
<td>Global Environment Fund Small Grants Programme</td>
<td>Sponsored solar power and water tanks</td>
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APPENDIX C: Summary of recommendations to developing country governments on policy development for support to organic agriculture (UNEP-UNCTAD 2008a)

Please note that what follows is a direct quote from pages xii to xiv of the report.

General policy
1. A country wanting to develop its organic sector needs to perform an in-depth integrated assessment of its general agriculture policies, programmes and plans, to understand how they affect the competitiveness and the conditions of the organic sector.
2. The objectives for government involvement for the development of the organic sector need to be clarified before actions are undertaken. All stakeholders should be involved in the policy development and development of plans and programmes.
3. General and organic agriculture policies should support each other to the greatest extent possible to promote effective policy coherence, especially if organic agriculture is promoted as a mainstream solution.
4. An action plan for the organic sector should be developed based on analysis of the state of the sector, participatory consultations, a needs assessment and proper sequencing of actions. The action plan should state measurable targets for the organic sector to help agencies and stakeholders focus their efforts.
5. One government ministry or agency should be assigned a leading role and organic desks should be established in other relevant ministries and agencies.
6. Governments should recognize the diverse interests represented in the organic sector and ensure that all of them are considered properly as well as direct special attention to disadvantaged groups.
7. A permanent body should be established for the consultations between the Government and the private sector.
8. Governments should actively contribute to awareness raising for organic agriculture on all levels.
9. Data about organic production and markets need to be collected over the years, analysed and made available to the sector and policymakers.

**Standards and regulation**

10. A national or regional standard for organic production should be developed, through close cooperation between the private sector and Government. It should be well adapted to the conditions in the country and mainly focus the domestic market.
11. Governments should facilitate the access to certification services, either by stimulating foreign certification bodies to open local offices or by supporting the development of local service providers. In some countries, especially where the private sector is weak, the Government could consider establishing a governmental certification service.
12. Compulsory requirements for mandatory third-party certification should be avoided as they will not enable other alternatives to emerge. Other conformity assessment procedures, such as participatory guarantee systems, should be explored.
13. Mandatory regulations should only be considered when the need is clearly established and other simpler options have been ruled out. In the early stage of development, a mandatory organic regulation is not likely to be a priority. Regulations for domestic markets should be based on local conditions, and not mainly on the conditions in export markets.
14. The recommendations from the International Task Force on Harmonization and Equivalence in Organic Agriculture (ITF) for regulatory solutions, in particular those relating to import access should be considered.
15. Producers, especially smallholders, should be supported to comply with standards, certification procedures and regulations. Special considerations should be taken for certification of smallholders. Training programmes for farmer groups to set up internal control systems should be supported.
16. Before establishing regulations, Government should clarify the objectives. Governments regulating the sector should develop the regulations in close consultation with the sector and ensure that the regulation is enabling rather than controlling in nature.

**Markets**

17. Public procurement of organic products should be encouraged, including featuring organic food in important public events.
18. Consumer education and awareness should be actively promoted.
19. A common (national, regional or international) mark for organic products should be established and promoted.
20. Domestic market development strategies should include measures for both the supply and demand side, including the role of imports.
21. The organization of farmers in regards to marketing, joint distribution and storage should be supported.
22. Market information systems should be established.
23. Export promotion activities should be supported, recognising the special nature of organic markets. Organic exporters should be encouraged to join forces to promote and market their products.
24. Organic products should be excluded from any mandatory phytosanitary treatments that are not permitted for organic products. Alternatives for fumigation should be supported.
Production
25. Direct support measures to producers need to be adapted to small farmers as well as to commercial operations.
26. Organic extension services need to be established and the staff trained. Organic extension should be developed and implemented in a participatory manner and have the farm and the farmer as the centre of attention.
27. Traditional knowledge about pest control treatments et al. should be surveyed and brought into the extension service and disseminated in other ways.
28. Recycling of agriculture and food waste into organic farming systems should be promoted.
29. Government (or others) should establish basic controls of biological inputs such as pest control agents and organic fertilizers.
30. Seed breeding and seed testing should be oriented to organic production. Compulsory seed treatments should be waived for organic farmers and untreated seeds should be made available. Alternative seed treatments should be developed and promoted.
31. Policies for genetically modified organisms (GMOs) need to ensure that GMO seeds are not distributed or used in a way that can cause contamination of seeds.

Other
32. Organic agriculture should be integrated into the curriculum for primary and secondary schools. Specialized institutions involved in training for organic agriculture should be supported. Higher education in organic agriculture should be developed.
33. Special research programmes should be established for organic research, and the sector should be involved in priority setting. Research and development (R&D) in organic agriculture should be participatory, build on and integrate traditional knowledge (where relevant) and be based on the needs of the producers.
34. Governments and the private sector should participate in relevant international forums such as the Codex Alimentarius, IFOAM and the ITF.
35. Regional cooperation in marketing, standards, conformity assessment and R&D should be promoted.