

POTATO Case Study

OF A SUCCESSFUL BLACK FARMER FUELLED BY POTATO PASSION



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BY

S. LEKGAU AND A. JOOSTE

Foreword

The vision of the National Agricultural Marketing Council (NAMC) is to be an effective and efficient advisor to the Minister of Agriculture, Forestry and Fisheries (DAFF) and Industry on the marketing of agricultural products. NAMC is further mandated to carry out its strategic objectives one of them being to increase market access for all market participants. It is against this strategic objective that the NAMC has a responsibility of ensuring that small farmers are linked to the markets. Therefore, one of the ways of ensuring market access is to document successful case studies. It is through case studies that many entrepreneurs will emerge as they will be motivated to pursue agricultural business enterprises of their choice. It is further through case studies that lessons are learned which are good for the future of the agricultural producers and the industry as well.

This potato case study tells the story of Solly Ratjomane, a black commercial farmer who has been successfully integrated into the main stream economy through production and marketing of fresh potatoes. This case study provides an insight of how Solly started his farming business and the road map he used in pursing his dream of becoming a commercial producer of potatoes. The report highlights the lessons learned in the production of potatoes, how Solly designed his farming operation to minimize the cost of production, as well as his production, diversification, competitive and marketing strategies. The report ends with challenges that Solly is encountering and how he plans to address them.

It is hoped that this case study will provide information that will enlighten upcoming potato industry entrepreneurs.

Acknowledgement

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TABLE OF CONTENTS

SECTION 1

1.1. Introduction	7
1.2. World trends in potato production	8
1.2.1 Trends: World production of potatoes	8
1.2.2 Trends: World potato hectares planted and yield	9
1.2.3 Trends: World trade of potatoes	10
1.2.4 Trends: World consumption of potatoes	11
1.3. The South African potato industry	12
1.3.1 South African potato production	13
1.3.2 Potato production regions	14
1.3.3 Hectares under production	16
1.3.4 Main cultivars planted	17
1.3.5 Per capita consumption of potatoes	18
1.3.6 Sales and pricing of potatoes	19
1.3.7 Potato supply chain	19
1.4. Transformation in the agricultural sub-sector	21
1.5. Small-scale and emerging farmers	22

SECTION 2

2.1. Who is Solly Ratjomane?	23
2.2. Solly's philosophy	24
2.3. At the beginning	24
2.4. The learning curve: Technical assistance	25
2.5. Designed strategic approach: Cost component	26
2.6. Production strategy	27
2.7. Diversification strategy	27
2.8. Marketing strategy	27
2.9. Main challenges	29
3. Conclusion	30
4. References	31

List of Figures

Figure 1: World production of potatoes	8
Figure 2: World total hectares and yield of potatoes	10
Figure 3: World top exporters of potatoes	11
Figure 4: Total production of potatoes from 1997 to 2011	14
Figure 5: Potato production regions	15
Figure 6: Total hectares planted	17
Figure 7: Main cultivars planted in 2010	17
Figure 8: RSA per capita consumption	18
Figure 9: Breakdown of input costs	26
Figure 10: Solly's Boerdery marketing channels	28

List of Tables

Table 1: Six largest potatoes producing countries in Africa	9
Table 2: World potato consumption in 2007	12
Table 3: The sixteen production regions	16
Table 4: Small-scale and emerging potato producers	22

List of Acronyms

FAO	Food and Agricultural Organisation
PSA	Potatoes South Africa
SACU	South African Custom Union
DAFF	Department of Agriculture, Forestry and Fisheries
PCS	Potato Certification Service
NFPM	National Fresh Produce Markets
DoA	Department of Agriculture
FFF	Fresh French Fries
SADC	Southern African Development Community
BBBEE	Broad Based Black Economic Empowerment

SUCCESSFUL BLACK COMMERCIAL FARMER FUELLED BY POTATO PASSION: MR SOLLY RATJOMANE

1.1. Introduction

Potatoes are among the top commodities produced in South Africa. It is one of the most important staple crops, topping all vegetables in terms of volume and value of production. Potatoes are produced in all nine provinces of South Africa, with most production emanating from the commercial sector and a small contribution from the smallholder sector. The industry is operating in a free market economy, where prices are determined by demand and supply.

The industry contributes significantly to the livelihoods of many people in South Africa, including income generation for producers and job creation for many people in the primary and secondary industries. Potatoes are also an important crop contributing to food security. The value of the industry has grown from R1.3 billion in 1996 to R5.4 billion in 2010, representing a positive growth of 307 %.

Solly, the focus of this study, is a successful black commercial potato producer in the Dendron area in the Limpopo Province. He has been producing potatoes for the last 26 years and has continued to reap the rewards of being in the potato industry, supplying potatoes to the national fresh produce markets, retailers and informal markets.

Farming has not come easy for him. However, through the assistance of other white commercial farmers, the Limpopo Department of Agriculture, tribal authorities, financial institutions, commodity organisations and other institutions, he has managed to overcome many difficulties and is regarded as a successful commercial potato farmer. Before continuing with Solly's story a brief overview of the global potato industry is provided.

1.2. World trends in potato production

1.2.1 Trends: World production of potatoes

Potatoes are the world's most widely grown tuber crop and the fourth largest crop in terms of fresh produce after rice, wheat and maize (Sopib, 2011). Potatoes are grown in over 150 countries throughout the world, and in many of these countries the commodity is considered a staple food. However, potato production in the world is undergoing a major change in terms of locality of production. According to the Food and Agricultural Organisation (FAO, 2008), in the 1990s most of the potatoes were produced in Europe, North America and countries of the Soviet Union. Since then, there has been a major growth in the production of potatoes in Asia, Africa and Latin America, where production has risen from less than 30 million tons in the early 1960s to more than 165 million tons in 2007. In 2005, for the first time, the developing world's production of potatoes exceeded the production of the developed world (FAO, 2008).

The leading producers of potatoes in the world is Asia/Oceania, as depicted in Figure 1. Asia/Oceania accounts for 48 % of potatoes produced in the world. The biggest producers in Asian countries are China and India. The second largest producer of potatoes is Europe with 33 % of the total volumes produced, followed by Africa and North America each with 7 % and Latin America with 5 %.

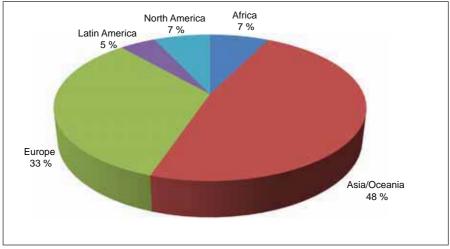


Figure 1: World production of potatoes Source: Faostat, 2010

On the African continent, production of potatoes has risen from 2 million tons in the 1960s to a record of more than 20 million tons in 2010. Table 1 gives a breakdown of the most important potato producing countries in Africa. Malawi is the leading producer of potatoes in Africa, with 20 % of the total production, followed by Egypt with 16 % and Algeria with 14 %. South Africa accounts for 9 % of the total production of potatoes in Africa, with Rwanda and Morocco accounting for 8 % and 7 % respectively. The rest of the African continent accounts for 27 % of the total production.

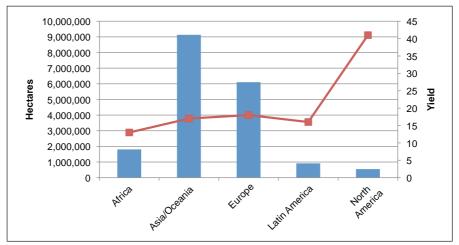
Table 1: Six largest potato producing countries in Africa

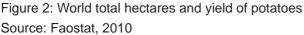
Countries	Production (tons)
Malawi	4 706 400
Egypt	3 643 220
Algeria	3 290 000
South Africa	2 071 930
Rwanda	1 789 400
Morocco	1 604 620
Rest of Africa	6 362 281
Total	23 467 851

Source: Faostat, 2010

1.2.2 Trends: World potato hectares planted and yield

As depicted in Figure 2, Asia/Oceania was the largest region in terms of hectares of potatoes planted during the 2010 production season. This region planted a total of 9.1 million hectares planted, representing 49 % of the total area planted with potatoes and had an average yield of 17 tons per ha. Europe was the second largest region, with 6.1 million hectares, representing 33 % of the total area planted with potatoes, and had an average yield of 18 tons per ha. Africa is the third largest region, with an estimated 1.8 million hectares planted, representing 10 % of the area, and had an average yield of 13 tons per ha. Other continents, such as Latin America and North America have average yields of 16 and 41 tons per ha respectively.





North America has fewer hectares under production, but the average yield per ha exceeds that of Africa three fold. This suggests that North American countries could have even greater yields in the production of potatoes per ha. In Africa, for example, the average yield is 13 ha, but South African producers had an average yield of 33 tons per ha in the 2010 season (PSA, 2011).

1.2.3 Trends: World trade of potatoes

In international trade, both the value and volume of traded processed potato products far outweigh trade in fresh potatoes. International trade of potatoes and potato products still remains low, relative to production, as only 6 % of the output is traded (FAO, 2008). The challenges relating to the small volumes of potatoes traded on world markets include tariff escalation by importing countries. Other challenges are high transportation costs due to the bulkiness of the product and some restrictive policies, e.g phyto-sanitary measures and technical barriers on trade.

As depicted in Figure 3, the biggest exporters of potatoes in the world markets are the Netherlands, France, Germany, Canada, Egypt, the United States of America, Belgium, the United Kingdom, Spain and China. On the African continent, Egypt and South Africa are the only two countries that play an important role in the world market for potatoes. According to the World Trade Atlas data (2011), South Africa contributes less than 1 % of

potato exports to world markets. Potato exports by South Africa is mainly destined for Southern African Custom Union (SACU) countries. One African country that plays an important role in the export of potatoes is Egypt, which is ranked 5th in world markets (FAO, 2011).

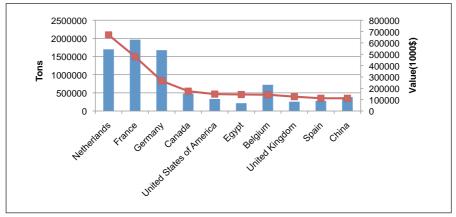


Figure 3: World top exporters of potatoes Source: Faostat, 2012

1.2.4 Trends: World consumption of potatoes

In terms of the consumption of potatoes, the world is facing a shift in consumers demanding for more processed products than fresh potatoes, especially in the developed countries (FAO, 2008). More potatoes are required for processing in order to meet the rising needs of consumers, which is reflected by the fast food, snack and convenience food industries. The major drivers behind this development include a growing urban population, rising income, diversification of diets, and lifestyles that leave less time for preparing fresh products for consumption.

Asia/Oceania, with almost 4 billion people in 2005, consumes almost half of the world's potatoes. However, even with a high population, the annual per capita consumption was only 41 kg as shown in Table 2. Europeans are the second highest consumers of potatoes. The continent's annual per capita consumption is very high at 91 kg. The third largest consumer is the Americans, with annual per capita consumption of 37 kg. Africa has the lowest per capita consumption of potatoes which was 14 kg in 2007 (FAO, 2012).

Table 2: World potato consumption in 2007

	Kg per capita
Africa	14
Asia/Oceania	41
Europe	91
Americas	37
World	32

Source: Faostat, 2012

1.3. The South African potato industry

Potatoes are one of the most important vegetable and staple foods produced in South Africa and have a long shelf life compared to many other vegetables, if handled correctly. The industry's contribution to the horticultural sector has shown a continual increase in gross value of production from R1.2 billion in 1996 to R5.1 billion in 2010 (DAFF, 2011). The potato industry operates under free market conditions, where the prices of potatoes are determined by the market forces of demand and supply. The industry is also not a major role player in the international marketing of potatoes.

According to Potatoes South Africa (PSA) (2012), there were 654 production units for potatoes in 2011. Production is divided into two different types, namely seed and table potatoes (which includes potatoes for processing). Table potatoes are produced by 600 to 700 commercial producers, while certified seed potatoes are produced by approximately 100 registered seed potato growers under the supervision and administration of the Potato Certification Service (PCS). The process of certification is monitored by a sophisticated data management system and approximately 10 000 hectares are registered annually for seed production (PSA, 2012). The industry has a sophisticated seed potato industry, which plays an important role in the growth of the table potato and processing industries.

Most of the potatoes are grown on relatively large farms, increasingly under irrigation, with yields averaging around 40 tons per ha. Potatoes under irrigation accounted for 84 % of the cultivated hectares during the 2010 production year. However, potatoes are also grown under dryland conditions during the summer, when there is more rainfall. Dryland potato production accounted for 16 % of the hectares under production during the 2010 production year.

Potatoes are distributed as table, processing and seed crop. The table crop and processing accounts for 88 % of the total production and is mainly used for consumption. The seed crop accounts for 12 % of the total production and is used for regeneration. Potatoes for consumption are marketed through various marketing channels, such as the formal, informal and export markets. The formal sector includes all the retailers such as Fruit and Veg, Pick-n-Pay, Shoprite/Checkers, Spar, Woolworths, Freshmark, Housewife market as well as other retailers and processors. Processors like Willards, Simba, and McCain work on a contractual basis, with producers providing them with raw materials which are then converted into processed products. In the export markets, the SACU countries play a leading role as the major destination for potatoes from South Africa.

1.3.1 South African potato production

It is estimated that production of table potatoes comes from between 700 and 800 commercial producers, who produce the total South African crop of seed and table potatoes (PSA, 2012). Figure 4 shows the production trend of potatoes in South Africa over the last 15 years. During the 2011 production year, a total of 2.1 million tons of potatoes were produced compared to 1.6 million tons produced in 1997. This shows a positive growth of 33 % in production of potatoes over the last 15 years. Further, in 2011 there was an increase in production by 4 % as compared to the 2010 production season. There was decrease of 10 % in production of potatoes was attributed to high input costs such as seed, fertiliser and fuel.

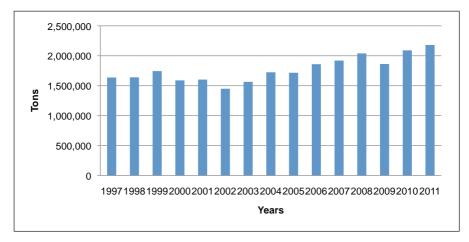


Figure 4: Total production of potatoes from 1997 to 2011 Source: PSA, 2012

1.3.2 Potato production regions

Potatoes are produced in sixteen regions across South Africa as depicted in Figure 5. The concentration of potato production is mainly in the following regions: Limpopo, Eastern Free State, Sandveld, Western Free State and KwaZulu-Natal. The season is divided into two production periods. The early crop is planted from January to March and the main crop is planted from April to August. The months of November and December are avoided because of high temperatures combined with long day lengths, which are not conducive for planting. In spite of the months when no planting is done, the country enjoys fresh potatoes produced throughout the year.

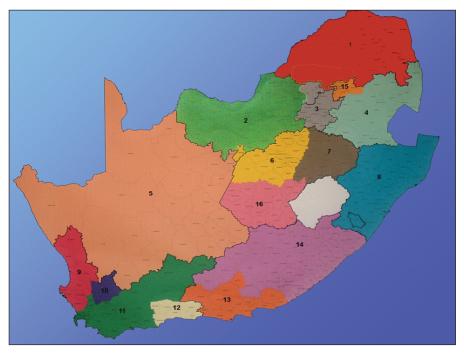


Figure 5: Potato production regions Source: PSA, 2012

Table 3 shows the potato production regions, where potatoes are produced both under irrigation and under dry land. Under dry land, potatoes are planted during spring and the early summer, and in regions with a climate and a proven reliable summer rainfall such as in Mpumalanga and the Eastern Free State.

Table 3 : The sixteen production regions

Number indication	Region
1	Limpopo
2.	North West
3.	Gauteng
4.	Mpumalanga
5.	Northern Cape
6.	Western Free State
7.	Eastern Free State
8.	KwaZulu-Natal
9.	Sandveld
10.	Ceres
11.	South-Western Cape
12	Southern Cape
13.	Eastern Cape
14.	North-Eastern Cape
15.	Loskop Valley
16.	South-Western Free State

Source: PSA, 2012

1.3.3 Hectares under production

Potato production in South Africa is largely under irrigation. Irrigation accounts for 80 % of the total area under production and dry land accounts for 20 %. Figure 6 shows the total hectares allocated to dry land and irrigation. The average annual hectares under potato production over the last 15 years is estimated at 52 112 ha. The industry has experienced a decline in farming units, which numbered 2 031 in 1993, 629 in 2009 and 654 in 2011. The decline in farming units, however, did not have any impact on total production.

The industry is further experiencing a continual improvement in the yield of potatoes produced, averaging 40 tons per hectare in 2010, compared to 33 tons per hectare in 2006. The increase in yield per hectare could be attributed to increased use of irrigation as well as improved planting materials.

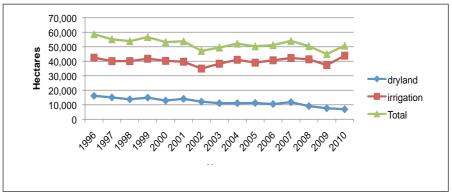


Figure 6: Total hectares planted Source: PSA, 2012

1.3.4 Main cultivars planted

There are many cultivars of potatoes used in production. These cultivars are selected and planted in line with market requirements and the suitability of production regions. The main cultivars planted during the 2010 production season included Mondial, which contributed 43 %, followed by BP1, with a contribution of 12 %, and UTD, which contributed 9 % (see Figure 7). There were other varieties, however, which contributed 36 % to the total production of potatoes during the 2010 season, which included Buffelspoort, Vanderplank, Darius, Fabula and others.

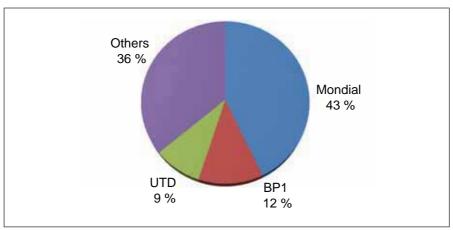


Figure 7: Main cultivars planted in 2010 Source: PSA, 2012

1.3.5 Per capita consumption of potatoes

In South Africa, potato consumption has been growing in urban areas, while in rural areas maize is still the staple (FAO, 2008). The rise in potato consumption could be attributed to rising levels of income that drive nutritional changes of consumers towards more energy-dense foods and prepared food products.

Potatoes are rich in several micronutrients, especially vitamin C, and are much more nutritious when eaten with the skin. A single medium sized potato of 150 g provides nearly half the daily adult nutritional requirement (100 mg). Potatoes are a source of iron, vitamins such as B1, B3 and B6 and minerals such as potassium, phosphorus and magnesium. Potatoes also contain dietary antioxidants, which may play a part in preventing diseases relating to ageing, and dietary fibre, which promotes good health.

As depicted in Figure 8, the average per capita consumption of potatoes over the last 15 years in South Africa was 31 kg. This shows lower per capita consumption of potatoes compared to that of developed countries in Europe, which have a per capita consumption of 91 kg. The per capita consumption of processed potatoes has continued to show a steady increase over the last 15 years. Although there was a decrease in per capita consumption of processed potatoes by 0.03 kg in 2009, there was also an increase in per capita consumption of 0.1 kg in 2010.

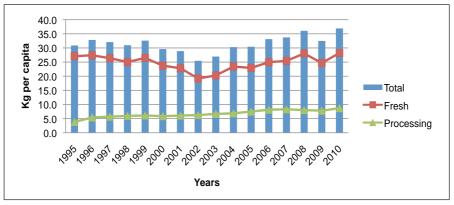


Figure 8: RSA per capita consumption Source: PSA, 2012

1.3.6 Sales and pricing of potatoes

The National Fresh Produce Markets (NFPM) act as the main price formation mechanism for potatoes. The Joburg Fresh Produce Market is the largest market in South Africa, with a market share of between 30 % and 35 %, and therefore plays an important role in price determination for many smaller markets. As prices transpire during marketing hours, they are communicated with stakeholders throughout the country. For example, farmers obtain prices on different markets via SMS sent by the potato industry to affiliated members. The timely transmission of markets information allows role players in the potato industry to make strategic business decisions on a daily basis.

In the processing and retail sectors, potatoes are normally sold on a contractual basis or by some form of production agreement and therefore the prices of products are determined based on negotiations. However, NFPM prices serve as a guiding mechanism for price determination.

On informal markets, the price is negotiated between producers and informal traders, where transaction takes place at farm gate. Often, prices at the farm gate benefit producers. This is because informal traders use their own transport to collect the produce. These methods of sale are not reliable, as traders will purchase as and when the commodity is available, without any agreements reached before production. At the same time informal traders also buy from NFPMs.

1.3.7 Potato supply chain

The supply chain of the potato industry includes the full range of activities required to bring potatoes through different phases of production (thus involving a combination of physical transformation of inputs), until delivery of final products to the consumers, as depicted in diagram 1. The South African potato supply chain involves mainly two types of potatoes, namely, table potatoes (which includes potatoes produced for processing), which account for 88 % and seed potatoes, which account for 12 % of the total production of potatoes. Table potatoes are produced for consumption, while seed potatoes are produced for regeneration.

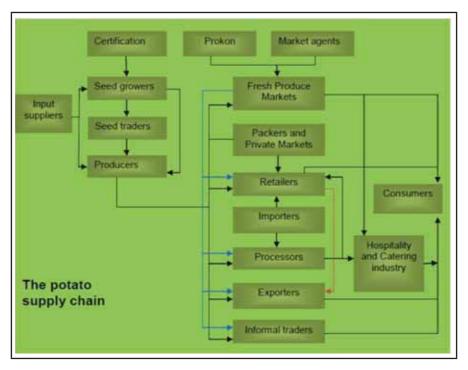


Diagram 1: Potato supply and value chain Source: PSA, 2012

Quality inputs are a prerequisite for successful potato production. About 25 % of production input costs goes towards buying seed potatoes. It is vitally important that potato growers purchase and plant certified seed potatoes rather than to replant from their own crop. The purchase of certified seed potatoes helps producers to produce a quality crop and to have fewer problems associated with the spread of diseases. Diseases can result in crop failure. In addition, the land can be infested with fungal and bacterial organisms that prevent further potato cultivation (Pieterse and Theron, 2003).

As part of the supply chain to the NFPM of South Africa, Prokon, a non profit company, ensures that potatoes traded on the market floors are of good quality and meet the necessary standards. The service benefits both producers and consumers, since it assures role players that the products are as per market requirements. Prokon further assists with the traceability of the produce in case a disease is found through their inspection services on the markets. The rest of the activities as per the supply chain of potatoes in diagram 1, are in relation to the distribution or marketing of the crop and are outlined in the sections that follow.

1.4. Transformation in the agricultural sub-sector

The South African potato industry, like many other agricultural sub-sectors in South Africa is dualist in nature, that is having very few large commercial farmers and many small-scale farmers. In order to address the legacy of dualism, the industry is undergoing transformation to insure that the sector is inclusive of all the farmers who can participate meaningfully in the mainstream economy. The transformation activities within the potato industry are conducted through regional managers. The regional managers give 'pointers' by identification of all transformation activities within their jurisdiction. These include small-scale, emerging commercial and empowerment partnership businesses. The primary objective is for regional managers to give pointers to all the transformation activities in different regions.

According to the transformation report of 2007/08, most of the transformation projects by PSA and other development partners was on skills development, mentoring, learner ships, internships for graduate students, trials, training and raising awareness in communities and schools. The idea behind these projects was to transfer potato production skills to developing farmers in all production regions and further to check yields after each trial and problems that could be associated with lower yields. In areas where there is success, the factors that are associated with higher yields are identified and communicated to the participants. The trails conducted would be either at agricultural training colleges or at identified farms or schools. The industry development and transformation programme is funded from statutory levy funds collected.

In terms of transformation imperatives, the South African government through the Broad-Based Black Economic Empowerment (BBBEE) Act (Act No. 53 of 2003), has provided a guide as to how industries could be transformed. In agriculture, the AgriBEE Charter framework was finalised in 2008, but with outstanding thresholds.

Since the approval of the AgriBEE Charter, there has been efforts by the producers and the sub-sector stakeholders to put the AgriBEE into practice. One example of AgriBEE compliance in the industry was from Paul Steyn Boerdery (Pty) Ltd in the Eastern Free State, which complied due to clients and banks demanding their BEE status for future transactions. The company has sold 10 % of its shares to the son and the BEE partner. Currently the BEE partner owns 51 % and the son own 49 % of shares in a new company. The shares after the BEE transaction are 50 % for the father, 40 % for the

son and 10 % to the new company. Other partnership and equity schemes have also been concluded in the other provinces, which form part of the transformation of the potato industry.

1.5. Small-scale and emerging farmers

The guide to potato production in South Africa published by PSA in 2002 estimated that there were 1 130 emerging, small-scale farmers in South Africa but acknowledged that the statistics were not readily available. According to the classification of producers, small-scale farmers are those who have less than 2 ha under cultivation and emerging commercial farmers would have at least 2 ha and the potential to expand production to at least 10 ha. In practice, such farmers need to have at least 50 ha of arable land in order to practice crop rotation. Table 4 shows the small-scale and emerging potato producers.

Region	Small scale (less than 2ha)	Emerging farmers (from 2ha to 10ha)
Kwazulu-Natal	137	2
Western Cape	38	1
Eastern Cape	25	6
Free State	7	1
Limpopo	5	3
Mpumalanga	0	1
Total	212	14

Source: PSA, 2008

As shown in Table 4, there are 212 small scale potato farmers in SA. These farmers have less than 2 ha of potatoes under cultivation. These are some of the farmers who are struggling to produce potatoes with more of their land under dry land. This is because potato farming cost more due to investment that is required in land and infrastructure for good returns. This group of farmers also fall into the group that requires skills and knowledge from the industry on how to become commercial farmers. It is surprising, however, that there are no actively involved farmers of potatoes on a small scale in Mpumalanga, as the climatic conditions for dryland potato production are favourable to the area.

SECTION 2

BLACK COMMERCIAL FARMER FUELLED BY POTATO PASSION

South Africa's agricultural production could be linked to piano keys – divided between massive white commercial farms, with small-scale black farmers scattered in between. Solly Ratjomane comes along and crosses the divide.

2.1. Who is Solly Ratjomane?

Solly Ratjomane was born in 1956, and is a successful producer of seed and table potatoes. More importantly, he is the only wholly owned successful black commercial potato farmer in Limpopo Province. Under his brand name, "Solly's Boerdery", he supplies fresh produce markets and wholesalers in South Africa with potatoes and also exports his crop to Botswana. The 56-year old farmer owns Marinaspruit, a 1 430 ha farm near Dendron. Here 100 ha



potatoes are planted on a rotational basis with maize, tomatoes and dry beans.

Solly's Boerdery leases an additional 446 ha of land, where a further 80 ha of potatoes are cultivated annually. Of the total 180 ha of land used for potato production, 40 ha is used for seed production. Solly's Boerdery also has a livestock segment which comprises 242 Bonsmara and 78 Simbra cattle. The farm makes a significant contribution to job creation, having 25 permanent workers. During the potato harvest period, an additional 66 women are also employed by the business. It is important to note that the farm follows and practices basic conditions of employment, as prescribed by the Department of Labour.

Solly owns 12 tractors, two of which were obtained through the mechanisation programme of the Limpopo Department of Agriculture, which granted him 50 % of the cost of the tractors. He also has 12 centre pivots, two potato washing machines and three bakkies – one of which he won through the Toyota New Harvest Competition (see text box below)

The Toyota New Harvest Competition was launched by Toyota South Africa in November 2007 as a way of sowing a new seed in the South African farming sector, with the official launch of the competition aimed at recognising and rewarding the talent of previously disadvantaged farmers. The farmers selected as winners should have overcome all barriers using limited resources and opportunities to become successful and competitive commercial farmers. The identification and nominations are conducted annually by individuals such as Prof Carlu van der Westhuizen and institutions such as DAFF and Agri-SA as partners in development. The winners of the competition are awarded a brand-new Toyota Hilux bakkie. The competition is run annually, and in 2009 Solly was the winner of the new Toyota Hilux bakkie. Potatoes South Africa (PSA), as the role player in the nominations for the 2009 competition, also received R50 000 and, according to PSA, the money was invested in the development of emerging potato farmers.

Besides winning the Toyota New Harvest Farmer of the Year award (2009), he also received the award for the best commercial producer for the year 2005 from the Limpopo Department of Agriculture.

2.2. Solly's philosophy

Solly acknowledges that farming isn't easy and believes a farm needs to be nurtured like a newborn baby. The key to success, according to him, is hard work, commitment, determination and never shying away from asking questions from knowledgeable industry advisors and producers. "Ultimately all efforts and investments will surely pay at the end of the production period, if you worked hard," says Solly. He then adds that one is never too old to learn. This philosophy is what turned Solly's farm's humble beginnings into the success it is today.

2.3. At the beginning

He started farming with tomatoes in 1983 on a one hectare piece of land which he leased from central government. Seeing that tomatoes couldn't be planted throughout the year, he ventured into planting potatoes on an additional hectare, which he leased. The neighbouring commercial farmer, Mr Wouter van Amstel, inspired Solly to take this route. "I knew Wouter before going into potatoes and knew that his father was also a potato farmer." Solly's passion for potatoes led to the expansion of his farm. In 1992, his production expanded to 36 ha, leased from the former Lebowa Government in the period when Government still subsidised farmers with fertilisers and chemicals.

When his farm expanded to 100 ha, Solly obtained a Land Bank loan. This was used to purchase a potato washing machine, which he shared with other commercial potato producers as a gesture of generosity for the assistance he received from them.

2.4. The learning curve: Technical assistance

Despite his belief in lifelong learning, the highest academic standard passed by Solly was standard six. He had no formal training in potato production, except for knowledge passed onto him by commercial farmers and other industry role players. He received formal training from Farmwise on how to market his potatoes, and Novon, an agro-chemical company in Polokwane, helped him with the technical aspects of potato production. His two sons furthered their education in bookkeeping and farm management respectively. His knowledge has also been broadened by international visits to countries such as Germany, Russia and Holland.

Currently, Solly receives assistance from various sources. An important aspect recognised by Solly is the value of consultants who visit the farm weekly to ensure that production isn't negatively affected by diseases and pests. Farming requires continual monitoring of all the activities on the farm, including the crop itself. According to him, commercial producers in his area have been very helpful since he started farming with potatoes. These are producers who have been in the industry for a long time and know how to produce potatoes commercially.

PSA provided valuable assistance to him. Solly highlights marketing infomation that guides his marketing decisions, information on industry developments and participating in industry meetings (where, for example, the development of new varieties are discussed) as vitally important services provided by PSA.

Solly's two sons help him to manage the farms. The eldest son manages the 446 ha of leased land where potatoes and livestock are produced. The youngest helps to manage the 1 430 ha farm. An important feature of Solly's business success is that the family helps him to make decisions and

sometimes makes these on his behalf. According to Solly, in the medium term, the intention is to ensure that his sons manage the potato production units, while he devotes his energy and attention to the development of the livestock component of his farm.

2.5. Designed strategic approach: Cost component

Managing input costs is one of the key strategies followed by Solly to mitigate against fluctuating and uncertain price increases. These, amongst others, include own repairs of broken equipment, proper care and management of water infrastructure, and reducing any waste to the minimum. He further purchases fertiliser based on the results of soil analyses taken before planting. Fertiliser is then bought in bulk and stored on the farm. This reduces the transaction costs associated with continual buying of inputs from various suppliers.

Figure 9 gives a breakdown of typical input costs associated with potato production. The highest input expenditure is potato seed, which accounts for 40 % of his operating costs. This is due to the fact that seed is procured from far away. The second highest cost item includes inputs such as fuel, fertilisers and chemicals, which account for 30 % of the total operating costs. Labour costs account for 15 %, packaging accounts for 10 % and marketing costs accounts for 5 % of the total variable input costs.

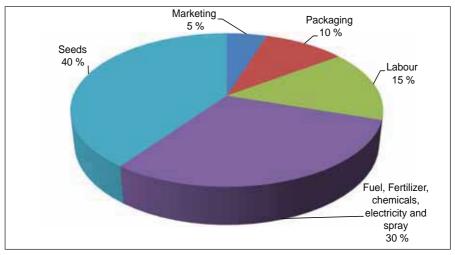


Figure 9: Breakdown of input costs

2.6. Production strategy

- Solly's Boerdery only produces the Mondial potato variety. This is mainly due to market demand and suitability of the cultivar for the area.
- Whereas the average industry yield per ha is 40 tons, Solly's farm produces on average 56 tons per ha, which is far higher than the industry average.
- For every hectare of table potatoes produced, 49 tons will be class A, 5 tons class B and only 1 ton will be class C.
- The average annual loss in production is estimated at 2 %. This low level of production loss can be attributed to good management practices. The loss of production is due to growth cracks, cutting during harvesting, mis formed growth and greening because of sunlight.

2.7. Diversification strategy

Solly's Boerdery primarily produces table potatoes and markets them through the NFPM, different food chain stores and other marketing outlets. However, Solly also has other enterprises that keep the business sustainable. These enterprises include his herd of 242 Bonsmara and 78 Simbra cattle, and other rotational crops such as maize, tomatoes and dry beans. These enterprises also bring cash flow into his business during the time when potatoes are not produced.

2.8. Marketing strategy

Solly uses his brand name "Solly's Boerdery" (see text box below) to market his potatoes through different marketing channels. The distribution channels include the NFPMs, which absorb 40 % of Solly potatoes, wholesalers (40 %) of Solly's potatoes, exports (8 %), processors (5 %), retailers (5 %), and the informal markets, which absorb 2 %, as depicted in Figure 10.

The brandname "Solly's Boerdery" is a bit of ingenuity born out of desperation.



Solly says in the dark days, when he still struggled to build a reputation, he had difficulty gaining market access. "Some people said I should use my name to market my potatoes. Others said that would prevent me from getting my potatoes sold." Hence he decided to compromise by pairing his name with the Afrikaans word for farm, "Boerdery". Hence Solly's Boerdery was born. Today, his farm sells potatoes to various market outlets in South Africa and other neighbouring African countries.

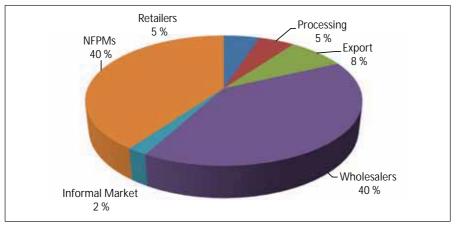


Figure 10: Solly's Boerdery marketing channels

Prices of potatoes at NFPM's are determined by demand and supply forces. Through this marketing channel, PSA notifies producers through an SMS on a daily basis of the current prices fetched on the market. The prices are based on the average price of potatoes per kg. It is through the SMS service and communication with market agents that Solly's Boerdery is able to strategically supply potatoes to the markets.

Solly's Boerdery supplies various fresh produce markets with potatoes, which include the Joburg (City Deep), Durban and Pietermaritzburg fresh produce markets. Wholesale marketing of potatoes is also an important channel for Solly's Boerdery with Farmwise as main offset. As the company benchmarks its prices with the prices of the NFPMs Solly ensures that his prices are competitive. The farm also supplies various processors with table potatoes that are used to manufacture chips.

Solly's Boerdery supplies retailers such as Pick-n-Pay, Freshmark and other supermarkets with potatoes. In this marketing channel, potatoes are packed in 7 kg bags and the retailers' brand packaging bags are used.

The main export market for Solly's potatoes is Botswana. Buyers normally make arrangements with Solly when potatoes are ready and use their own transport for collection. The prices charged for the export market are similar to those in the local market, but negotiation is often used. The informal market, through which 2 % of Solly's Boerdery produce is marketed, includes bakkie traders supplying hawkers and other small markets like spaza shops.

From the above it is clear that Solly's Boerdery uses a well structured marketing strategy that provides the necessary flexibility to strategically position the business according to market conditions.

2.9. Main challenges

- High infrastructure costs of potato production serve as a barrier to entry into the industry.
- Continual increases in input costs impact negatively on the profitability of farmers located far away from suppliers.
- Distances to the main markets serve as a barrier to entry into the market and further reduce marketing margins.

- Low prices received by the seed growers in spite of high input costs, and risks associated with diseases.
- Timely availability of chemicals is also regarded as a major challenge in the potato industry.
- Production is heavily dependent on the use of fertiliser, and the volatility in prices and availability has a negative impact on profitability.
- Availability and reliability of labour is problematic due to social and cultural factors, social grants, illnesses and urbanisation, and absorption by other sectors.

3. Conclusion

The potato industry, like many other agricultural sub-sectors has been operating in a dualistic mode. That is, having a few large white commercial farmers and many small-scale black farmers. Solly crossed the divide and became a successful black commercial farmer who produces potatoes. Under his brand name, "Solly's Boerdery", he supplies fresh produce markets, wholesalers, processors, and retailers and also exports his products to Botswana.

Farming with potatoes has never been easy for Solly. He had challenges relating to land, but used leased property until he bought his own farm, Marinaspruit. He also had other challenges, such as lack of potato production skills, but approached neighbouring white farmers for assistance until he became competent. For operating infrastructure such as washing machines, he relied on the assistance of neighbouring farmers until he bought his own machines. For his mentoring, skills development and orientation into potato farming, PSA played a major role. In spite of all the odds, Solly has persevered to be where he is today.

"Temo e nyaka thlokomelo bjale kage nke o hlokomela ngwana wa lesea".

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This publication was compiled in collaboration with:



SOUTH AFRICA

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Contact NAMC:

Block A, 4th Floor Meintjiesplein Building 536 Schoeman Street, Arcadia 0002 Private Bag x 935 Pretoria 0001 Tel:(012 341 1115 Fax ; 012 341 1811/1911 Website: www.namc.co.za.