CONSEQUENCES OF LAND EXPROPRIATION WITHOUT COMPENSATION IN SOUTH AFRICA – AN OBJECTIVE AGRICULTURAL SCIENTIFIC AND ECONOMIC VIEW

Submission to the Parliamentary Cons	stitutional Review Committee
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FOREWORD

The African National Congress (ANC) has taken a resolution to expropriate land without compensation during its 54th Conference in December 2017 at NASREC, Johannesburg.

One of the most important aspects of the resolution was the following:

"In determining the mechanisms of implementation, we must ensure that we do not undermine future investment in the economy, or damage agricultural production and food security. Furthermore, our interventions must not cause harm to other sectors of the economy." 1)

The president of South Africa, mr Cyril Ramaphosa, said in his State of the Nation Address in February that "... the policy, should be implemented in a way that increases agricultural production and improves food security. Government will undertake a process of consultation to determine the modalities of the implementation of this resolution." ²⁾

The National Assembly of Parliament adopted a motion on land reform during a sitting on 27 February 2018 and only instructed "the Constitutional Review Committee to review section 25 of the Constitution and other clauses where necessary to make it possible for the state to expropriate land in the public interest without compensation, and to propose the necessary constitutional amendments where applicable with regards to the kind of future land tenure regime needed." ³⁾

The total omission of the abovementioned proviso from the resolution gives reason to serious concern about the future of agricultural production, food security and the sustainable contribution of the industry to economic growth.

It is also totally incomprehensible and unacceptable that the amendment which was moved by the Chief Whip of the ANC as a substitution of paragraph 8 of the motion of mr Julius Malema with reference to be "... *implemented in a manner that increases agricultural production, improves food security...*" and which was also acknowledge as a specific proviso by the president during his State of the Nation Address, was totally ignored by the National Assembly as another instruction to the Committee. ⁴⁾

The president, mr Cyril Ramaphosa, "... again called in his Freedom Day address on 27 April 2018 "... on South Africans to be part of a process of consultation to ensure that land redistribution is implemented in a way that is "meaningful" and "contributes to a stronger economy, greater agricultural production and improved food security" and that "... land reform will not be implemented in a way that threatens food security or agricultural production." ⁵⁾

This submission, therefore, will focus exclusively on the devastating consequences that the expropriation of land without compensation will have on the sustainability of commercial agricultural production, food security and the contribution of the industry to economic growth, based on sound international acknowledge scientific, economic and financial principles.

This submission to the Constitutional Review Committee consists mainly of specific abstracts from very authoritative international and local reports on agriculture, food security and the expropriation of land, as well as, papers delivered at conferences and articles on this subject.

It is made by a very concerned agricultural economist* about the expropriation of land without compensation who spent his whole career since 1975 to keep agricultural producers in production for their own financial survival, profitable and sustainable food security and a meaningful contribution of the industry to the economy of the country for which the commercial production of food is a prerequisite for success.

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1. Land expropriation

1.1 Resolution of the African National Congress (ANC)

The most important aspects of the resolution taken on land redistribution During the 54th Conference of the ANC in December 2017 at NASREC as part of its "Economic Transformation", programme was the following: ¹⁾

- "14. We must pursue with greater determination the programme of land reform and rural development as part of the programme of radical socio-economic transformation.
- 15. Expropriation of land without compensation should be among the key mechanisms available to government to give effect to land reform and redistribution.
- 16. In determining the mechanisms of implementation, we must ensure that we do not undermine future investment in the economy, or damage agricultural production and food security. Furthermore, our interventions must not cause harm to other sectors of the economy.
- 17. The ANC's approach to land reform must be based on three elements: increased security of tenure, land restitution and land redistribution. Concrete interventions are required to improve the functioning of all three elements of land reform. These interventions should focus on government-owned land and should also be guided by the ANC's Ready to Govern policy document which prioritised the redistribution of vacant, unused and under-utilised state land, as well as land held for speculation and hopelessly indebted land.
- 18. The accelerated programme of land reform must be done in an orderly manner. Strong action must be taken against those who occupy land unlawfully.
- 19. The programme of land reform must have clear targets and timeframes, <u>be</u> guided by sound legal and economic principles, and must contribute to the country's overall job creation and investment objectives.
- 20. In addition, it was resolved to:
 - a) Ensure active measures be put in place to drive land redistribution, such as a land tax, support for black farmers and preferential allocation of water rights and infrastructure provisions to black farmers.
 - b) Ensure effective programmes to increase training and support measures that will ensure the success of beneficiaries of land reform.

- c) Ensure land reform enhances food security for poor families and maintain food security for South Africa as a whole.
- d) Empower local governments to effectively advance land reform in their areas both for agricultural and other purposes.
- e) Accelerate the rolling out of title deeds to black South Africans to guarantee their security of tenure and to provide them with instruments of financial collateral.
- f) Democratize control and administration of areas under communal land tenure."

1.2 State of the Nation Address

The president of South Africa, Mr Cyril Ramaphosa, said in his State of the Nation Address in February 2018 that the government will continue with the resolution on the policy of land expropriation without compensation as taken by the ANC at its 54th Congress in December last year.

He said that the government "... will accelerate our land redistribution programme not only to redress a grave historical injustice, but also to bring more producers into the agricultural sector and to make more land available for cultivation" and that the government "... will pursue a comprehensive approach that makes effective use of all the mechanisms at our disposal."

The president also said that "... the policy, which has been criticised by farming industry bodies, should be implemented in a way that increases agricultural production and improves food security. Government will undertake a process of consultation to determine the modalities of the implementation of this resolution." ²⁾

1.3 National Assembly of Parliament

The National Assembly of Parliament thereafter adopted a motion on land reform during a sitting 27 February 2018 and instructed "the Constitutional Review Committee to review section 25 of the Constitution and other clauses where necessary to make it possible for the state to expropriate land in the public interest without compensation," and to propose the necessary constitutional

amendments where applicable with regards to the kind of future land tenure regime needed."

The full motion that was adopted by the National Assembly read as follows: 3)

That the House -

- (1) notes that South Africa has a unique history of brutal dispossession of land from black people by the settler colonial white minority;
- (2) further notes that land dispossession left an indelible mark on the social, political and economic landscape of the country, and has helped design a society based on the exploitation of black people and sustenance of white domination;
- (3) acknowledges that the African majority was only confined to 13% of the land in South Africa while whites owned 87% at the end of the apartheid regime in 1994:
- (4) further acknowledges that the current land reform programme has been fraught with difficulties since its inception in 1994 and that the pace of land reform has been slow with only 8% of the land transferred back to black people since 1994;
- (5) acknowledges that the recent land audit claims that black people own less than 2% of the rural land, and less than 7% of the urban land;
- (6) recognises that the current policy instruments, including the willing buyer willing seller policy, and other provisions of Section 25 of the Constitution may be hindering effective land reform.
- (7) left open
- (8) notes that in his State of the Nation Address, President Cyril Ramaphosa, in recognising the original sin of land dispossession, made a commitment that Government would continue the land reform programme that entails expropriation of land without compensation, making use of all mechanisms at the disposal of the state, implemented in a manner that increases agricultural production, improve food security and ensures that the land is returned to those from whom it was taken under colonialism and apartheid and undertake a process of consultation to determine the modalities of the governing party resolution.
- (9) further notes that any amendment to the Constitution to allow for land expropriation without compensation must go through a parliamentary

process as Parliament is the only institution that can amend the Constitution; and

- (10) with the concurrence of the NCOP instructs the Constitutional Review

 Committee to
 - (a) review section 25 of the Constitution and other clauses where necessary
 - (b) propose the necessary constitutional amendments where applicable with regards to the kind of future land tenure regime needed
 - (c) and (d) left open
 - (e) report to the Assembly by no later than 30 August 2018.

It is also totally incomprehensible and unacceptable that the amendment which was moved by the Chief Whip of the ANC as a substitution of paragraph 8 of the motion of Mr Julius Malema with reference to being "... *implemented in a manner that increases agricultural production, improves food security..."* and which was also acknowledge as a specific proviso by the president during his State of the Nation Address, was totally ignored by the National Assembly as another instruction to the Committee. ⁴⁾

1.4 Constitutional Review Committee

One of the most important elements of the above decision by the National Assembly which should be the cause of very serious concern for the agricultural industry and the economy of the country is the fact the following aspect of the ANC-resolution and the Speech of the Nation Address was omitted from the original resolution and therefore also from the terms of reference of the Constitutional Review Committee, namely: "In determining the mechanisms of implementation, we must ensure that we do not undermine future investment in the economy, or damage agricultural production and food security. Furthermore, our interventions must not cause harm to other sectors of the economy."

The concern is that the Constitutional Review Committee and will not focus on this specific aspect of the ANC-resolution but only concentrate on a review of section 25 of the Constitution and only propose specific "clauses where necessary to make it possible for the state to expropriate land in the public interest without compensation," irrespective of the <u>very destructive consequences</u> that it will have for the agricultural industry, food security, the economy and the <u>country</u>.

The president, Mr Cyril Ramaphosa, again said in his Freedom Day address ⁵⁾ ".... called on South Africans to be part of a process of consultation to ensure that land redistribution is implemented in a way that is "meaningful" and "contributes to a stronger economy, greater agricultural production and improved food security" and that "... land reform will not be implemented in a way that threatens food security or agricultural production."

2. Food security 6)

At the 1974 World Food Conference the term "food security" was defined with an emphasis on supply. Food security, they said, is the "availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices". Later definitions added demand and access issues to this definition.

The final report of the <u>1996 World Food Summit</u> states that food security "exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life."

Household food security exists when all members, always, have access to enough food for an active, healthy life. Individuals who are food secure do not live in <u>hunger</u> or fear of <u>starvation</u>.

Food insecurity, on the other hand, is a situation of "limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways", according to the <u>United States</u> <u>Department of Agriculture</u> (USDA).

Food security incorporates a measure of resilience to future disruption or unavailability of critical food supply due to various risk factors including droughts, shipping disruptions, fuel shortages, economic instability, and wars.

The <u>Food and Agriculture Organization</u> (FAO) of the United Nations "identified the four pillars of food security as availability, access, utilization, and

stability." The <u>United Nations</u> (UN) "recognized the <u>Right to Food</u> in the Declaration of Human Rights in 1948, and has since noted that it is vital for the enjoyment of all other rights."

2.1 Population growth and food security

A report on Climate Smart Agriculture⁷⁾ that was published in 2013 by the FAO of the United Nations gives a basic view on the magnitude of the problems that can be expected with the population growth and food security in the world as follows:

"Between now and 2050, the world's population will increase by one-third. If current income and consumption growth trends continue, the FAO estimates that agricultural production will have to increase by 60 percent by 2050 to satisfy the expected demand for food. Agriculture must, therefore, transform itself if it is to feed a growing global population and provide the basis for economic growth and poverty reduction. Climate change will make this task more difficult due to adverse impacts on agriculture which will require urgent adaptions.

During the period from 2010-2012, there were still almost 870 million people estimated to be undernourished. In addition, another billion people are malnourished, lacking essential micronutrients. About 60 percent of the malnourished people were small subsistence farmers. There were 32 countries, 20 of which in Africa, facing food crises and in need of international emergency support. In most of these countries, paradoxically, agriculture is an important, if not the major, part of the economy."

Apart from the fact that there were still at least "870 million people estimated to be undernourished," it is shocking "that 60 percent of the malnourished people were small subsistence farmers." The very same people on whom most of the countries in Africa and the international community rely upon to feed the millions of under and malnourished people."

2.2 State of Food Security

"The United Nations released a report in September 2017 titled the "State of Food Security and Nutrition in the World 2017," identifying a five-percent increase in global hunger from 2015 to 2016. According to the report, 'the number of chronically undernourished people has reached 815 million people or 11 percent of the global population."

This comprehensive report is the result of the first time that the <u>UN. Food and Agriculture Organization</u> (FAO), the <u>International Fund for Agricultural Development</u> (IFAD), the <u>United Nations Children's Fund</u> (UNICEF), the <u>World Food Programme</u> (WFP), and the <u>World Health Organization</u> (WHO) have collaborated on this topic and provides a broader view on hunger, malnutrition, and health.

"Conflict and climate change are among the identified causes for the increase in food insecurity and hunger, both of which have <u>continued to increase</u> in 2017 in some areas of the world. The authors suggest that "climate change not only magnifies problems of food insecurity and nutrition but can also contribute to a further downward spiral into conflict, protracted crisis, and continued fragility.

A key worrisome finding is that after a prolonged decline, the most recent estimates indicate that global hunger increased in 2016 and now affects 815 million people. Moreover, although still well below levels of a decade ago, the percentage of the global population estimated to be suffering from hunger also increased in 2016. In parts of the world, this recent surge in hunger reached an extreme level, with a famine declared in areas of South Sudan in early 2017 and alerts of the high risk of famine issued for three other contexts (northeast Nigeria, Somalia and Yemen). In 2016, the food security situation deteriorated sharply in parts of sub-Saharan Africa, South-Eastern Asia and Western Asia. This was most notable in situations of conflict, where the food security impacts of conflict were compounded by droughts or floods, linked in part to the El Niño phenomenon. However, worsening food security conditions have also been observed in more peaceful settings, especially where economic slowdown has drained foreign exchange and fiscal revenues, affecting both food availability through reduced import capacity and food access through reduced fiscal space to protect poor households against rising domestic food prices.

After a prolonged decline, world hunger appears to be on the rise again. The estimated number of undernourished people increased to 815 million in 2016, up from 777 million in 2015. Much of the recent increase in food insecurity can be traced to the greater number of conflicts, often exacerbated by climate-related shocks. Even in some peaceful settings, food security has deteriorated as economic slowdowns challenge access to food for the poor. The worrying trend in undernourishment is not yet reflected in levels of chronic child malnutrition

(stunting), which continue to fall – but at a slower rate in several regions. Despite the decline, in 2016 stunting still affected one out of four children under the age of five years or 155 million children. In some regions, stunting affects one-third of children under five. Wasting continues to threaten the lives of almost 52 million children (8 percent). Almost one-third (33 percent) of women of reproductive age worldwide suffer from anaemia, which also puts the nutrition and health of many children at risk. Child overweight and adult obesity are on the rise, including in low-and middle-income countries. Multiple forms of malnutrition are coexisting, with countries experiencing simultaneously high rates of child undernutrition and adult obesity."

2.3 Global Food Policy

In its 2014-2015 Global Food Policy Report,⁹⁾ the International Food Policy Research Institute (IFPRI) in the USA has drawn six key findings of which one is very important and noteworthy: "Supporting the world's 1,5 billion small farmers to move up to higher-value agriculture or move out of agriculture, is critical."

According to this report "... many parts of the world, especially in developing countries, agriculture is mainly a small-scale, family-based activity. These small family farms play a significant role in achieving global food security and nutrition, yet they also employ some of the poorest and most food-insecure people in the world. The important role of small family farms in enhancing global food security and nutrition should not be construed by policymakers as 'small is always beautiful.'

Smallholders are not a homogeneous group that should be supported at all costs but are rather a diverse set of households living in different types of economies. As a result, small family farmers can prosper either through a 'move up' or a 'move out' strategy. While some small farmers have the potential to undertake profitable commercial activities in the agricultural sector and expand their farm operation, others should be supported in existing agriculture and seeking nonfarm employment opportunities.

There are 570 million farms in the world. Approximately three-quarters of the world's farms are in Asia, and 60 percent of these can be found in just two countries: China and India.

A closer look at the characteristics of the world's farms reveals a multifaceted portfolio with implications for global food security and nutrition. Agriculture is predominately a family activity: an overwhelming majority (more than 90 percent) of the world's farms are family farms. This means that these farms are owned, managed, or operated by family members who also provide a minimum share of farm labour. Family farms cultivate a large portion of global farmland (about 75 percent on average) and produce 80 percent of the world's food. The share of land held by family farms varies across regions, ranging from 85 percent in Asia and 62 percent in Africa south of the Sahara to 18 percent in South America.

Most of the world's farms are small. There is a significant overlap between small farms and family farms in the developing world, with the two terms often used interchangeably in Asia and Africa south of the Sahara—places where family farms have limited access to land. While more than 80 percent (475 million) of the world's farms operate on less than two hectares of land, these farms account for only 12 percent of the world's farmland. There are significant regional variations in farm size: farms in Asia and Africa average 1–2 hectares while, at the other end of the spectrum, farms in the Americas average 74–118 hectares. "

2.4 Challenges of Small Farmers in Food Production

The abovementioned report makes it very clear that there are many challenges that small farmers will have to face if they want to make any significant contribution to agricultural production and food security.

"Global and national food security and nutrition are closely tied to small family farms through a two-way relationship: small family farmers are likely to experience the three challenges of poverty, food insecurity, and undernutrition, yet they also play a crucial role in improving food security and nutrition. The three challenges are inextricably linked and remain primarily a rural phenomenon: approximately three-quarters of the world's poor live in rural areas, and half of the world's hungry are estimated to live on small farms.

Agriculture remains the main source of income and employment for 2,5 billion people in low income countries: 60 percent of these people are members of smallholder households. At the same time, food production systems in many parts

of the world are heavily dependent on small family farms. This is particularly true in Asia and Africa south of the Sahara, where small farms (which are mostly family operated) provide an estimated 80 percent of the regional food supply. Thus, the food security and nutrition of many small family farms depends (at least partly) on their involvement in the agricultural sector, either through the consumption of food from their own production or from income earned because of agricultural activities.

Empirical evidence shows that small family farms often have efficiency benefits—that is, higher land productivity (or higher farm output per unit of land) than large family farms. These advantages come from the more intensive use of inputs, lower labour supervision costs, and better local knowledge compared with their larger counterparts.

However, small family farms exhibit lower labour productivity than large family farms. This trend is reflected in an overuse of mainly family labour (because of both scarce alternative sources of employment and income and labour market imperfections) as well as in an underuse of modern farming technologies.

The role of small family farms in advancing national and global food security and nutrition, as well as overall development, is increasingly seen in a broader context. The old wisdom of "small is always beautiful" because of efficiency gains cannot be universally applied. Research suggests that small is still beautiful in countries where nonfarm growth is weak, and the rural population is increasing (such as in agriculture-based economies), but bigger is better where the nonfarm sectors are booming, and the urban population is increasing (as in transforming and transformed economies). Thus, optimal farm size is a dynamic concept that changes as a country's overall economy grows and as non-agricultural sectors develop."

According to this report "... a spectrum of challenges hinders the profitability of small family farms because they are increasingly faced with a mix of challenges, including those that are naturally occurring and those that are caused by humans, that influence their capacity to increase production and move toward profitable farming systems.

These challenges lead farmers to undertake lower-risk and lower-yielding agricultural activities that perpetuate a cycle of poverty, including that of little or no

profit. Women on small farms—who account for an average of 43 percent of the agricultural labour force in developing countries—are particularly disadvantaged in accessing productive resources, such as land, livestock, agricultural inputs, technology, markets, and extension and financial services.

Yet women play a vital role in improving agricultural output, enhancing food security and nutrition in the household, and promoting overall development. High production constraints also make agriculture unattractive to young people—the very ones who can bring energy, vitality, and innovation into the agricultural labour force in many developing countries."

The most important challenges are the following:

2.4.1 "Limited Farm Size

Over the past several decades, high population growth and inheritance-based land fragmentation have resulted in decreasing farm size and high population density in many Asian countries and parts of Africa. Recent trends indicate that Africa south of the Sahara will continue to experience declining farm size, but Asia is showing signs of farm consolidation. An analysis of the relationship between increasing rural population density and smallholder farming systems in Kenya shows that, in addition to declining farm size and incomes, increasing rural population density is associated with decreasing agricultural labour productivity after a certain population density threshold. This inverse relationship is potentially the result of unsustainable agricultural intensification.

2.4.2 Access to Financial Services

Many small family farmers are excluded from productivity-enhancing financial services, such as loans and saving accounts, and are thus unable to secure much-needed capital and lack the buffer against adversity and shocks that financial services offer. An analysis of maize farmers in Ghana reveals that small farms face more credit constraints than large farms. In rural areas, where most smallholders reside, access to formal financial services is particularly limited. Reasons for this include dispersed demand and the high cost of service in low-population areas; weak administrative

capacity of rural banks; agriculture-specific risks such as variable weather patterns, pests, and price fluctuations that affect whole communities; and lack of formally defined property and land-use rights to act as collateral for loans.

2.4.3 Climate Change

The growing incidence and intensity of extreme weather events increasingly threaten the global food system. If business as usual continues and the world becomes 3–4°C warmer by 2050, crop yields could decline by 15–20 percent across Africa south of the Sahara. In some countries, yields from rainfed agriculture could decrease by up to 50 percent by 2020, with small-scale farmers being hit the hardest. In Malawi, smallholder farmers have experienced greater economic losses during droughts than have large landholders, in part because smallholders grew more drought-sensitive crops. Small family farms are particularly vulnerable to more frequent extreme weather events because of such factors as chronic food insecurity, lack of access to formal safety nets, and high reliance on climate-dependent agriculture coupled with limited resources and capacity for mitigating and adapting to the effects of climate change.

2.4.4 Price Spikes and Volatility

Recent food price volatility and spikes have affected both producers and poor consumers. The complex set of factors behind the recent food price crises in 2007–2008 and 2011—including diversion of crops for biofuel, extreme weather events, low grain stocks, and panicky trade behaviours—is still present or has the potential to remerge. The magnitude and direction of the impact on small family farms depend on several variables, including whether input costs increase, whether the farmers are net buyers or sellers of food, farmer capacity to step up production and to bring the increased output to market, and off-farm income. Recent studies in Bangladesh and Malawi suggest that an increase in the price of staple crops (rice and maize) resulted in a higher welfare loss for small landholders compared with large landholders.

2.4.5 Access to Modern Markets

Profitable market access by small family farmers is challenged by a multidimensional set of factors. The participation of smallholders in modern market channels has a positive effect on their income, but participation is determined by a mix of non-land assets, with varied results on the role of farm size in determining participation. These non-land assets include rural infrastructure (such as road access and irrigation), membership in cooperatives, education, modern market participation of nearby farms, and rural nonfarm employment. Lack of information (regarding price, supply and demand, and quality standards) leads smallholder farmers to face higher prices from opportunistic middlemen and traders as well as lower market participation. Amid rapid economic growth, urbanization, and globalization, food supply channels are becoming longer geographically but shorter in terms of participants.

2.4.6 Action plans for supporting sustainable

As stakeholders continue to deliberate on action plans for supporting sustainable small family farms, it is important to recognize that there is no "one size fits all" policy. The appropriate development pathway and livelihood strategies for each small family farm should reflect its characteristics and the level of transformation within the country's economy.

Public policy should support small family farms in either moving up to commercially oriented and profitable farming systems or moving out of agriculture to seek nonfarm employment opportunities. In agriculture-based economies, it is important to focus on advancing policies that move up small family farmers who have the potential to become profitable by increasing their productivity. In both transforming and transformed economies, it is -equally imperative to help such family farmers move up by promoting high-value agriculture and improving links to urban and global markets. For small family farmers that are already profitable, policies that help scale up commercial activities are essential. Small family farms without profit potential, however, will require humanitarian assistance in the

short run and viable exit strategies out of agriculture to engage in urban and nonfarm economic activities in the long run.

To move small family farms with profit potential toward greater prosperity while at the same time improving global food security and nutrition and health outcomes, several steps must be taken, as outlined below.

2.4.7 Promote Land Rights and Efficient Land Markets

Institutional reforms are needed to facilitate the efficient transfer of land through the certification of land rights and through well-functioning and transparent land-rental and sales markets. Lifting restrictions on minimum or maximum landownership or land-rental markets and securing property rights improves agricultural productivity. It does so by encouraging the transfer of land from small and poor farmers who have less ability or willingness to undertake agricultural activities (but who stay in agriculture due to fear of unfair compensation for land transfers) to more efficient (but often still poor) producers with more interest and resources.

2.4.8 Risk Management, Mitigation, and Adaptation Strategies

Small family farms urgently need better access to risk-management tools and strategies to increase their resilience to a spectrum of shocks, including weather and price shocks. Tools such as index-based insurance can help farmers take productivity-enhancing risks, although their commercial viability for a smallholder clientele is still being studied. In the face of volatile crop prices, collaboration is needed among the private sector, governments, and donors to design innovative and flexible market-based price stabilization tools—such as hedging in futures markets—that are suitable for small family farms. In terms of climate-induced shocks, a pro-poor climate change policy that creates value for small family farms and integrates them into global carbon markets is essential, although a viable modality has not yet been developed. Investments in triple-win agricultural practices and technologies can be effective in raising smallholder productivity alongside climate-change mitigation and adaptation strategies.

2.4.9 Support Efficient and Inclusive Food Value Chains

Linking small family farms to modern agri-food value chains is critical for improving agricultural productivity, food security, and nutrition. Overcoming barriers to accessing modern value chains requires institutional innovations for coordination among small family farms, including group lending and producer associations. Such mechanisms require strong institutional capacity in a stable policy environment that promotes private-sector investments that are adapted to the needs of small family farms. Information and communication technologies also offer the opportunity to link small family farms to markets, by helping them reduce transaction costs, increase their bargaining power, and acquire real-time market information.

Financial services (bundled with, for example, insurance) and investments in rural infrastructure also need to be scaled up. Furthermore, the participation of small family farms in modern value chains can be leveraged for better nutrition and health. Greater investments in the development of nutrient-rich crop varieties accessible to the poor, coupled with public information campaigns and pricing policies, can help increase the availability and consumption of nutritious foods. Sound regulatory and monitoring systems along the entire chain can also help to ensure that agricultural intensification does not harm people's health.

2.4.10 Close Gender Gaps and Develop Young Farmers

Addressing the inequity in access to productive resources, services, and markets for women farmers (who account for a large percentage of small family farmers) is not only a rights issue but also an efficiency issue. Gender inequality also leads to inefficient allocation of resources, which in turn means reduced agricultural productivity and poor nutrition and health outcomes. Closing the gender gap in agriculture has high returns that accrue to the entire society—not just women. Developing youth participation in agriculture is also essential to realize agricultural growth, improve food security and nutrition, and promote overall development. Interventions to increase the profitability of small family farms should target young farmers. Such steps would include better agricultural training,

improved land rights, and enhanced access to financial and nonfinancial services.

2.4.11 Scale Up Productive Cross-Sector Social Safety Nets

Productive cross-sector social safety nets that combine long-term tools (to build productive and resilient livelihood strategies) with short-term social safety support (to provide a cushion against shocks) can be of great benefit to small family farmers. Ethiopia, for example, has created the Productive Safety Net Programme (PSNP) and Other Food Security Programme (OFSP)/Household Assets Building Program (HABP), which provide a portfolio of productivity-enhancing mechanisms. These programs are targeted at food-insecure households, most of which engage in small family farming, and are designed to ensure a minimum level of food consumption, protect and build assets, and assist households in boosting income generated from agricultural activities. Based on recent evidence, the PSNP reduced the length of the hungry season by one-third compared with households with no program benefits. Households with access to both PSNP and OFSP/HABP had even greater reductions in their hungry season and increases in their livestock holdings."

2.4.12 A Personal Story

According to Ngubane,¹⁰⁾ a researcher at the University of the Western Cape, "... a new sense of urgency has entered South Africa's land reform process after the country's parliament took a resolution to amend the constitution to effect land expropriation without compensation. But even this -will fail if the country doesn't improve support for small and emerging black farmers who should be allocated a prime role in any reform process.

Black people who venture into commercial farming are bound to fail. Commercial farming is a capital-intensive business. The battle to secure support has forced many struggling black farmers to rent out their land to established white farmers.

The situation is made worse by the fact that what limited state support there is has been hijacked by corrupt elements or a small authoritarian rural elite.

A selected few politically connected individuals have begun to dominate the space.

If this is left unchanged, South Africa is likely to see more black commercial farmers being forced out of the space. Some may turn to renting out their land, others may sell their properties back to white farmers. This will render the land acquisition process futile."

Ngubane has spoken to a young black farmer in South Africa about his personal story and the obstacles that he is facing in the agricultural industry.

The young farmer said "... that he would advise young black South Africans to go into farming only if they have passion for it. Farming is not like most jobs. It's extraordinarily hard and requires lots of patience which runs out if not accompanied by loads of passion. Farming will break and bankrupt you. It will test your mental strength."

The following <u>three challenges</u> are the "make or break" for young black farmers according to his experience:

a) "Access to information

My experience tells me that young black people who try out farming face a dearth of information about critical aspects. For example, you don't find readily accessible information on planting practices.

I think this is a function of the fact that the country doesn't have a very good extension service programme – a worldwide practice of professional agents who help farmers improve productivity by providing advice, information and other critical support services.

The Department of Agriculture is meant to run an extension service programme. But in my experience, it's very poor to non-existent. The only time extension officers have been to my farm was when they came to give me advice on my irrigation system. And it turned out to be very bad advice.

In my case, I certainly needed good information to make headway because I ventured into unknown territory. Yes, I grew up on a farm. But my homegrown farming knowledge was on livestock. I'm currently producing vegetables and some grains. A well-functioning agricultural extension service would have saved me time and money.

b) Access to finance

Everywhere you look in South Africa there are claims that the country provides financial support for small and emerging farmers. The banks and state-owned development finance institutions make this empty claim.

The Land Bank is a perfect example. It is supposed to develop small black farmers like myself. But it's almost impossible to get funding from the Land Bank.

When I tried to apply for finance to purchase the farm, the Land Bank sent me a two-page list of requirements. I could satisfy everything on the list except for one thing: they required off-take agreements (that's a pre-assurance from a business that it will buy my produce).

It's almost impossible for someone like myself with no commercial farming experience to get off-take agreements from a market dominated by a few mainstream retailers.

Big retailers – and even smaller ones – won't offer an off-take agreement to someone starting out.

And the Land Bank wouldn't dare take a risk on my endeavour. So, I took a different route, approaching a bank for a normal loan and bonding my home against the farm property.

But even here I struggled. I think that financial institutions also need to understand that there is a different kind of farmer emerging. Ones like me. I'm not farming full-time because I can't yet afford to do so. My off-

farm job funds my seed, fertiliser and pays my staff. I need to keep my off-farm job while building the farm into a self-sustaining operation. The banks I approached didn't seem to want to grasp my situation.

c) Access to markets

This is the most critical factor of farming. For example, even when I produced 17 000 cabbages last season I still struggled. That's because I was only able to find a market for them when it was too late – they'd been in the ground too long.

I'm also disadvantaged by distance. My vegetable and grain producing farm is 70 km outside Johannesburg so it's difficult to access the big city markets.

But with the assistance of family and friends, I managed to secure another retailer to pick up my produce. In hindsight, I should have tapped these networks first before going for big markets like the Pretoria and Johannesburg fresh produce markets which offered me unacceptably low prices."

3. State of land redistribution in South Africa

A report titled the "High Level Panel on the Assessment of Key Legislation and the Acceleration of Fundamental Change" was published in November 2017 and was researched and compiled by an impressive panel of 11 prominent South Africans, including former politicians, jurists, auditors and academics, chaired by former president Kgalema Motlanthe.

Land reform legislation was one of the key terms of reference of the Panel and the report came to the following strong conclusions:

The <u>first</u> of these was that compensation for land is not the main obstacle to land reform, but rather corruption by officials, the transfer of budget money to the elite, the lack of the government's political will and the lack of training and capacity of the state.

A <u>second</u> factor was the lack of a budget (due to the lack of political will) for land reform.

The report showed that the budget for 20 years has not kept pace with inflation and amounts to just under 0,4% of the national budget.

<u>Thirdly</u>, the report has shown that instead of empowering and advancing new landowners, they become "tenants" of land to the state. This is because they do not get title deeds for the land allocated to them - and therefore cannot use the land as collateral for loans to buy cattle, seeds, feeds and implements.

<u>Fourthly</u>, the report states that the government has not effectively used its constitutional powers for land reform purposes, nor has it used the constitutional provisions that compensation may be below market value under certain circumstances.

<u>Fifthly</u>, the report states that the state did not "sufficiently promoted, enforced and protected", the rights of disadvantaged South Africans in Article 25 (5), (6), (7) and (9) of the Constitution, but that these rights are rather under siege through "policies and practices" that want to channel the benefits of land reform to specific elites and potential political alliance partners.

According to Eloff ¹²⁾ "... corruption is a two-way process, and the non-governmental organizations and individuals may not have participated in land reform as enthusiastically as they could, but the fact remains that the panel chaired by a former president has put the blamed for the slow and inadequate land reform almost exclusively on the state.

In addition to corruption, lack of ability, budgets and title deeds, poor legislation and poor application of existing legislation are the other great sinners."

According to Mabasa, ¹³⁾ "... land redistribution as a second pillar of land policy has as its bias, a strong emphasis on agricultural land. In 1998, the Mbeki administration had set a target of 30% of the land being transferred to emerging black farmers.

While targets are necessary, it is even more important to ensure that, one designs programmes, learning institutions and specialised agricultural universities, specifically geared towards stimulating interest in transforming the agricultural economy aimed at encouraging commercial farming from grassroots levels.

The redistribution policy, much like restitution, does not have as its end goal, the objective of ensuring a sizeable percentage of black participation in food production

ownership. Hap-hazard and inconsistent implementation of different policies over the past two decades have not yielded the desired results.

The pervasive nature of corruption and its effect in almost all spheres of government and the private sector have similarly marred any real hopes of ensuring that large numbers of emerging farmers enter into and thrive in the agricultural and food production industries."

The Minister of Agriculture, Forestry and Fisheries, Mr Senzeni Zokwana, said in his budget speech in Parliament on 16 May 2018 that the government "...has invested considerably in agriculture to create a favourable and supportive environment for the farming community particularly subsistence and smallholder producers; this includes the support provided by the Development Financial Institutions (DFI) however this support has not translated into meaningful participation of black producers in the agricultural, forestry and fisheries value chains. As a result, these sectors remain untransformed 20 years into our democracy.

This suggests that focus should be given not only to support smallholder production but to increase the number of black commercial producers. Therefore, the Department of Agriculture, Forestry and Fisheries (DAFF) with the assistance of the Department of Trade and Industry, the Land Bank, the National Empowerment Fund and the Industrial Development Corporation developed a programme to commercialize black producers in the agriculture, forestry and fisheries sectors. This is an incentive-based programme to provide access for small, medium and large scale black producers in these sectors."

This development should be applauded and supported as the most responsible and effective way that the government could follow to successfully transform the agricultural industry and to expand production and food security in a profitable and sustainable manner.

According to Ishmael Tshiame, general manager of the Grain Farmer Development Association (GFADA),¹⁵⁾ "there are currently 24 successful producers who can be deemed sustainable black commercial farmers in the grain and oilseeds industry in South Africa.

These farmers had previously been assisted by the organisation through partnerships and were no longer receiving assistance from GFADA.

GFADA was established in 2009 to support new entrants to the grain industry with the necessary knowledge and capacity to become sustainable commercial farmers.

'Farmers are assisted with grant funding for soil correction, crop insurance premiums and mentorship, but need to raise the rest of their input costs from credit providers.'

Farmers were supported for five years with the aim of lowering their risk and improving profit margins so that they would be able to reinvest in their farming operations.

As part of GFADA's maize farming project, 43 farmers were funded at a value of more than R7, 8 million during the 2016/2017 production season to establish maize operations consisting of more than 6 600 hectares, and a total harvest of 28 025 tons was realised at an average yield of 4,2 tons per hectare.

For the 2017/2018 season, the number had increased to 51 farmers and R15,2 million in funding, with about 10 700 hectares planted to maize.

'The Eastern Cape Department of Rural Development and Agrarian Reform is partnering with us to support maize farmers, but more government support is needed,' according Tshiame.

The DAFF, unfortunately, still do not have a plan since 1994 for the future of commercial agriculture and will have to rely on experts with many years of experience outside the Department to develop such a plan.

4. International Aid and Support

According to Brink ¹⁶⁾¹⁷⁾ "... the international community and the big donors such as the United States of America, the Europe and Australian Agencies for International Development, the World Bank, the International Fund for Agricultural Development (IFAD) and others who have invested huge amounts of money in Africa over many decades to alleviate hunger and to eradicate poverty were not successful in finding solutions to these problems. The efforts to concentrate only on an increase in

the efficiency of production by small subsistence farmers did not deliver the expected results.

The production of food by small subsistence farmers, who in many cases are struggling to make a living themselves, never was sustainable because it was not profitable. The profitability and sustainability of food production are prerequisites for any country who strives to achieve food security and to eradicate poverty. The total transformation and commercialisation of the agricultural industry, together with the simultaneous industrialisation of the economy, is the road to food security and the eradication of poverty in Africa.

Two very serious obstacles can be identified that still lie ahead on the road to food security in these mostly underdeveloped countries in Africa, which are the following:

The <u>first obstacle</u> is the unwillingness or inability of these countries and the international community to make a paradigm shift by finally realising that the production of food by small subsistence farmers will never be the solution to food insecurity and poverty eradication in Africa. These farmers never were the solution to hunger and poverty in Africa in the past and they will never be the solution in the future. It simply cannot any longer be expected of them to feed almost the whole population of Africa.

No farmer in the world can produce food at prices that poor people can afford. Food security is not the responsibility of farmers but of the governments in the world. They must create an environment that will enhance the profitability and sustainability of agricultural production, food security and economic growth."

The primary responsibilities of farmers are to:

- a) apply the best agricultural scientific farming practices, sound financially principles and the optimal use of natural resources, capital, management and labour to the benefit of their own financial survival and the sustainability of agricultural production.
- b) make a substantial contribution to viability, vigour and sustainability of every enterprise in the agricultural industry.
- c) make a growing contribution to the economic growth of the country in term of its gross production value.

The time has now arrived for everybody involved in the process to achieve food security in Africa to acknowledge and accept this reality. There can no longer be an argument about this conclusion because more than enough evidence exists of the unsuccessful efforts to produce enough food for the population in Africa over the past decades. Once this obstacle can be overcome and the mind shift can be made towards the total transformation of the agricultural industry, the sooner the road to food security can become a very strong scientific and economic possibility, and reality in Africa.

However, a very important question that should be asked in this regard is: How is it possible that the international community and the big donors continued year after year and decade after decade with the same development policy in African countries, despite it being proved to be unsuccessful, yet expecting different results?

The ultimate question is what should be done to achieve food security and to eradicate poverty in these countries? The answer is very simple, namely the profitable and sustainable commercial production of food. This is the determining prerequisites to achieve food security - there is no other way!

The <u>second obstacle</u> as far as food security and poverty is concerned is the fact that the subsistence agricultural industry in Africa in any event never had the capacity to support an ever-growing population in a sustainable manner. The fact that the agricultural industry in almost all these countries still makes the biggest contribution to economic growth and that it is still the most "important, if not the major, part of the economy" is a further obstacle and remains the most important reason for the underdeveloped status of these countries.

The only solution to this obstacle is the deliberate transfer of a major proportion of the population out of the agricultural industry over time to relieve the industry from this enormous burden, even if it takes longer than a generation or two to achieve this objective.

The realisation of this transfer can be found in the development of the industries in the secondary and tertiary sectors of the economy will be essential during the transformation of the struggling subsistence agriculture to a highly scientific and commercialised industry. The investment in industrial development, specifically in agricultural-related industries as well, will initially have to play a major and decisive role

in this transformation process to create business and employment opportunities outside the agricultural industry.

This transformation process of the agricultural industry should be approached along the following recommended road to secure a successful outcome with life-changing benefits to the total present and future populations in Africa:

- a) Food production must be intensified and vertically expanded after which further horizontal expansion can be continued. Production must be commercialised, operated and managed on a profitable and sustainable basis to achieve food security and poverty eradication.
- b) Entrepreneurship, as well as adequate access to land, capital, labour and management as the four basic production inputs, are prerequisites for the success of food production.
- c) The production and marketing of food must be based on the optimum level of production because it is the most important principle to determine and evaluate the profitability of agricultural production over time and to identify problems and opportunities to increase the profitability and sustainability, as well as the possible expansion of production. It is also the only principle that includes all the other agricultural disciplines.

The production systems with which small subsistence farmers in Africa tried to produce enough food for the whole population under very difficult conditions over many decades are not the solutions to food insecurity and poverty.

The total transformation and commercialisation of the agricultural industry, together with the simultaneous industrialisation of the economy, is the road to food security and the eradication of poverty in Africa."

5. Objectives, Characteristics and Realities of the Agricultural Industry

The basic objectives of the agricultural industry are the improvement of the profitability and sustainability of agricultural production and food security to:

- a) support and ensure the financial survival of producers to sustain market orientated production and marketing,
- b) support and protect the industry against local and international challenges and treats and to investigate and develop new opportunities,
- c) increase the ability of the industry to make a higher contribution to economic growth.

"The industry displays specific characteristics and realities that seriously endanger the sustainability of agricultural production and food security, of which the following are the most important: ¹⁸⁾

- a) Climate change which is caused by global warming and which has devastating consequences on agricultural production;
- b) The interference of the government in agriculture with political and economic policies which in many cases causes negative consequences for the industry, with specific reference to the minimum wages, land reform policy, fiscal policy and the poor economic growth of the country;
- c) The fact that agricultural producers are price-takers and not price-makers and who in many cases must absorb price increases on the input side, which are determined based on production cost plus a profit margin by input suppliers, while the prices of agricultural products are determined by supply and demand. This is the main reason why prices of production inputs always increase at a faster rate than the prices of agricultural products.
- d) Food manufacturers and traders also base their prices on their production cost plus a profit margin and are very well placed to pass all their cost increases on to consumers which have a direct impact on the demand for food. A pricing mechanism and luxury that agriculture does not possesses. This again is the main reason why the consumer prices of food always increase at a faster rate than the prices of agricultural products.
- e) Consumers for the most part do not buy food directly from farmers and the price consumers pay for food is exceedingly higher than what farmers receive for the raw product. While input prices increased for farmers, millers and retailers, the farmer's share of the consumer's Rand remained relatively stable or even decreased in some years. Between 2008 and 2015, a wheat farmer's share of a 700-gram loaf of white

bread fluctuated between 15% and 20%. This implies that when a consumer bought a loaf of white bread, the raw material (wheat) simply costs R1,99 in comparison to the total bread loaf price of R11,11. For example, if the loaf consists out of 21 slices, the farmer's cost for that bread is only 4 slices while the rest of the "wheat to-bread" value chain is responsible for the additional cost and demystify a common misconception that farmers are responsible for high bread prices; ¹⁹⁾

- f) A more disturbing trend is the fact that food manufacturers and traders are normally ready to quickly raise their prices when agricultural prices are trading higher, but they are not always willing to lower their prices for consumers just as quickly when the prices of agricultural products decline again. This trend is very detrimental to the consumption of food. For example, the maize prices for producers are at least 60% lower than last year, but the latest figures show that the price of maize meal in June was only 8% lower than a year ago;
- g) These two factors are directly responsible for the fact that the prices of agricultural inputs and consumer prices of food have increased faster than the producer prices of agricultural products over the years. Government policy also causes cost increases for the industry, including various taxes, increases in electricity tariffs and minimum wages;
- h) The inherent characteristic of agriculture which makes it subjected to a price inelastic demand for food causes a decline in the prices of agricultural products which is not accompanied by a corresponding increase in the demand for food. This means, for example, that a price cut of 20% in food prices do not give rise to a 20% increase in food demand, while the same price decreases of cell phones, flat screen TV's and other durable products will result in a 20% or even higher increase in demand. This trend seriously harms some industries that cannot compete with surplus production in the international market due to the large production, price and export subsidies with which many countries support their producers;
- i) The present South African government formulates the political and economic policy of the country and does not acknowledge the importance of commercial agriculture as the actual creator of food security. The government offers virtually no support for the commercial and sustainability of food production, even during the very severe drought experienced last year, while it also does not have a plan for the future of the commercial agriculture in South Africa.

- j) The production of food is very seriously threatened by the subsidising of the production and marketing of agricultural products, especially by the USA, which makes it impossible for South African producers to compete against these unfair practices in the international markets if they are not protected by the implementation of efficient import tariffs.
- k) The backward and forward linkages with the production input industries as well as the food manufacturing and processing industry, the so-called multiplier effect, makes the contribution of the agricultural industry to economic growth much higher than only the gross production value of agricultural products.

6. Profitability and Sustainability of Commercial Food Production ²⁰⁾

The most important principle in the agricultural science is the optimum and maximum profit level of production and it is the basic approach to successful agricultural production and marketing while it also incorporates all the different agricultural disciplines.²¹⁾

The very important question is how can the profitability and sustainability of food production be created and improved?

"It is generally accepted that profits are the difference between total revenue and total cost of a business enterprise. It largely boils down to the characteristics and utilisation of the inputs used to produce products, to manufacture goods and to deliver services, such as financial, legislative, medical or bank services, as it is respectively being found in all the individual industries in the primary, secondary and tertiary sectors of the economy. The agricultural industry is no different.

The specific business principles how profitability can be achieved and improved are based on the specific requirements in terms of prices, quantities and quality on the input and output side of an enterprise.

6.1 The input side

The main input requirements of a business are mainly based on the prices, quality and availability of the four basic production and manufacturing inputs, namely land or raw materials, capital, labour and management, which forms the foundation of all economic activity. In a free market, the prices or costs of these production inputs are in most cases determined by supply and demand and can move freely to other applications where its efficiency and alternative earnings are the highest.

Government interventions, unfortunately, disrupt the most important function of prices to keep the supply and demand in the market as far as possible in an equilibrium. These interventions in the free operation of market forces by the introduction of legislation creates many additional costs for all the industries such as with the supply of electricity and fuel as well as the determination of minimum wages in South Africa.

The most difficult aspect in this regard is how the international and domestic prices are determined by the supply and demand for each of these basic inputs and the reasons for the price changes.

In the most industries, the prices of agricultural inputs are based on production costs plus a profit margin. Agricultural producers, however, are price takers and not price makers and therefore do not have a price mechanism to pass cost increases on to the end consumers and producers must absorb price increase themselves.

The total cost or compensation to acquire these four production inputs is also the best and correct definition of what is meant by the term "production costs." It is generally accepted that the cost of the capital invested in the purchases of land and fixed improvements are determined by interest or rent, while interest also determines the compensation of own and borrowed capital of a business. Labour and management are compensated by wages and salaries, as well as certain perks that can also be earned.

The remuneration of the entrepreneur is, however, not a component of the production cost of a business as it can only be one of two possibilities namely a profit or a loss.

6.2 The output side

The prices of the production agricultural products are determined by supply and demand after the marketing was totally deregulated during the second half of the 1990's. In most industries in the different sectors in the economy, except in the agricultural sector, the prices of products and services to the end consumer are also based on production costs plus a profit margin, just as in the case of inputs as already mentioned.

Very reliable information and extensive expertise are required about all the international and domestic factors that can cause changes in the supply and demand of each output as it plays a vital role in the profitability and financial survival of any business venture. The producer prices of agricultural products are mainly based on the derivatives of international product prices.

6.3 Input/output price ratio

The profitability of any business enterprise or new venture with the main objective of making sustainable profits that can create economic growth and prosperity is essentially <u>determined by two main drivers</u>. If a business cannot achieve this objective in a sustainable manner, then there is nothing else that will succeed. All other factors that could influence the profitability of any business are then unimportant. These drivers are also the same for all the different industries and sectors of the economy and jointly determine the profitability, growth potential and wealth that can be created in the economy.

The <u>first main driver is the so-called input/output price ratio</u> that plays the biggest role in the profitability of any business enterprise. In the agriculture industry, as in any other industry, the profitability is largely determined by the changes in the prices producers pay for their inputs such as seed, fertiliser and fuel against the changes in the prices that they receive for their products. If the strong driving force of this price ratio should be ignored and not receive enough attention to improve it, it will lead to the financial downfall of any business venture.

In the production of maize, for example, this price relationship was, apart from bad climatic conditions, the biggest reason in the past why many commercial farmers had to leave the industry and why emerging farmers will battle today to become successful commercial farmers if the problem of a weakening input/output price ratio is not sufficiently addressed and improved.

The profitability of a cattle feedlot, for example, is directly determined by the changes in the price of a balanced ration and the price of beef. The general norm in the feedlot industry is a price ratio of 15 which means that the price of beef should be at least 15 times higher than the price of maize to achieve a break-even point. If the price of maize, for example, which is the largest component of a balanced ration, should increase faster over a certain period than the price of beef, this price ratio will fall below 15 and cause a corresponding decrease in the profitability of the feedlot. The opposite scenario would again improve the profitability of the feedlot.

It is the same principle in all the other industries in the economy, for example, the profitability of a gold mine will mainly be determined by the changes in the price of gold ore against the price of gold, while the profitability of a coal power station will be determined by the changes in the price of coal against the price of electricity. In the case of a bio-ethanol plant that uses maize as a feedstock, the profitability will again be determined by the price of maize and the price of bio-ethanol. An investigation into the manufacturing of bio-ethanol from maize in 2005 by Grain SA showed that the price of bio-ethanol in kiloliters, for example, should be at least 2,6 times more than the price of maize to break even. Any change in this price ratio will directly affect the profitability of the plant.

The result of all the different reasons for the price changes of both the inputs used to produce specific outputs will have a major impact on the profitability of a business and requires a lot of research and expertise on the reasons for the price changes. Producers, manufacturers and service providers will, therefore, must engage in every effort to negotiate the most competitive input prices and to manage the prices of their products as good as possible in the light of the risks it may pose to the profitability of their businesses.

The input/output price ratio will directly determine the profitability and sustainability of any industry and therefore the contribution that it could make to economic growth.

6.4 Efficiency

The second main driver that also has a big influence on the profitability of any business is the efficiency with which the inputs used in the production, manufacturing or service delivery processes are converted into specific outputs. This specifically refers to the number of inputs required to produce one unit of an output. The only way efficiency can be improved is with the application of the best and new technology developments which must support producers, manufacturers and service providers to deliver more outputs with the same quantity of inputs or to deliver the same quantity outputs with fewer inputs.

The efficiency of production in a cattle feedlot, for example, will be directly determined by the number of kilograms of a balanced ration that is required to produce one kilogram of meat. The general norm in the industry is that about 7 kilograms of a ration is needed to produce one kilogram of meat. If a certain feedlot, for example, requires 8 to 9 kilograms of a ration to produce a kilogram of beef, something must be a problem that will be very detrimental to the profitability of the feedlot. The reason for the problem apart from possible diseases or other problems that the animals may experience can be twofold. The ration may not contain the right type and amounts of nutrients or the ration may not be correctly formulated or the technology, in other words, the genetic potential of the cattle, may not be able to deliver the required conversion of the ration to beef. These problems should be addressed and solved by using a correctly formulated ration and only cattle that have the required feed conversion potential should be fed in the feedlot to improve the efficiency and thus improve the profitability of the production process. It deals specifically with the quantity and quality of the inputs which can be converted with the best technology into a given quantity and quality of outputs.

The efficiency of a gold mine will, for example, be determined by the amount of gold ore and the best technology that is needed to produce 1 kilogram of gold, while the efficiency of a coal power station will again be determined by the amount of coal and the best technology that is required to generate 1 kilowatt electricity.

An investigation into the best available technology in the United States and Europe to produce bio-ethanol from maize was also undertaken by Grain SA in 2005 and showed that about 180 liters of bio-ethanol can be produced from 1 ton of maize. Then new seed cultivars were developed through genetic modification with a

higher percentage fermentable starch content which significantly increased the efficiency of the fermentation process and today about 220 liters of bio-ethanol can be produced from 1 ton of maize.

The development of new enzymes again made it possible to produce bio-ethanol at lower temperatures during the cooking process which saved a lot of energy. These new technological developments significantly improve the efficiency and profitability of the manufacturing process. It also clearly indicated that the efficiency of a production or manufacturing process can be significantly increased through continued research and new technological developments to enable producers and processors to produce more outputs with the same number of inputs or the same number of outputs with fewer inputs. Any reduction or deterioration in the quantity or quality of the raw materials that would be experienced in the production and manufacturing processes will significantly impair the efficiency and profitability of a business."

6.5 Maize industry

The maize industry is by far the most important staple food producer in South Africa according to the South African Grain Information Service (SAGIS).²²⁾

As can be seen from the figures below the industry has produced an average of 12,7 million tons per year over the past 10 years. The average local human and animal consumption were around 10,5 million tons per year over the same period, which includes maize exports of approximately 600 million tons per year to Botswana, Lesotho, Namibia and Swaziland.

Grains and oilseeds	1000 tons
Maize	12 695
Wheat	1 779
Soybeans	877
Sunflower seed	715
Barley	276
Canola	77

The industry could only in three seasons since 1970 not produced enough maize to supply the total consumption in South Africa and our neighbouring countries and maize had to be imported. In all the other years the industry produces enough for

the country with even big surpluses which had to be exported at a loss mainly because South Africa cannot compete in the international market against the lower subsidised export prices which are international derivative prices and very high export costs.

The wheat industry is the second biggest staple food producer in the country but do not produce enough wheat for the local consumption. According to SAGIS the average production of wheat over the past 10 seasons was 1,78 million tons, the average consumption 2,92 million tons and the average imports amounted to 1,49 million tons per year.

South Africa is a nett exporter of agricultural products and "...has been self-sufficient in most agriculture products except for wheat, poultry and red meat. Between 50% and 60% of the country's wheat requirement is imported, due to the fact that it is cheaper to import than to produce locally. We must, therefore, continue to look for solutions to reverse this unbalanced situation." ¹⁴⁾

The only solution for this problem is the protection of the industry against unfair international competition because of the subsidising of agricultural products in the international markets through the implementation of effective import tariffs which the government was very reluctant in the past to authorised although these tariff levels that South Africa can impose on these imports were successfully negotiated within the World Trade Organisation.

6.5.1 Efficiency in the maize industry ¹⁵⁾

An excellent example of how the efficiency of production has been increased over time can be found in maize production in South Africa. The historical biggest commercial maize harvest of 14,6 million tons was produced in South Africa during the 1980/81 season on 4,3 million hectares at an average yield of 3,4 tons per hectare. The second biggest maize harvest of 14,3 million tons was produced during the 2013/14 season on 2,7 million hectares at an average yield of 5,3 tons per hectare, which was also the highest yield per hectare at that stage in the history of the maize industry in South Africa.

A new record maize harvest of 16,8 million tons was produced during the 2016/17 season also on 2,6 hectares at an average yield of 6,4 tons per hectare which shows the excellent improvement in the efficiency of maize production because it can be accepted that all three the abovementioned production season were very good rainfall seasons.

It is also very important to note that there were also very poor rainfall seasons during which the country could not produce enough maize and had to rely on imports as mentioned before.

For example, the total commercial harvest that was produced during the very bad rainfall 1991/92 season was only 3,0 million tons on 3,5 million hectares at an average yield of 0,8 tons per hectare, while the total maize harvest that was produced during the devastating drought in 2015/16 season was only 7,8 million tons produced on 1,9 million hectares at an average yield of 4,0 tons per hectare, which also shows the higher efficiency of production. This meant that many maize producers were forced to leave the industry because of these very bad production seasons, together with a deteriorating price ratio between the prices that they paid for their inputs and the prices that they received for their maize.

"The average long-term yield of maize has also doubled from 2 to 4 tons per hectare since the eighties which also had a very positive effect on the coefficient of variance around this long-term average that has declined from 30% to 25%. This means that the average yield of maize can be in any season between 3 and 5 tons per hectare which should be accepted as "normal" under the local climatic and the land potential conditions in South Africa.

This excellent increase in the efficiency with which the maize crop was produced over time can directly be attributed to various reasons.

It should <u>firstly</u> be acknowledged that the very good rains that maize producers received during the very good planting seasons in 1980/81, 2013/14 and 2016/17 made all the difference because, without the good rain, these record harvests and yields would not have been possible. Fortunately, this allows the possibility to get a very good measurement of

how the efficiency of maize production has increased over time as it is fair to assume that these seasons had all very good rainfall during the planting and growing periods.

<u>Secondly</u>, it must be admitted that the sustained research and huge technology developments over many years have played the biggest role in the increase of the efficiency in maize production. Especially in terms of seed breeding and genetically modification techniques, the development of new active ingredients for weed and pests control remedies, new fertiliser products and better application methods, as well as new technology innovations in agricultural mechanisation.

Thirdly, maize producers have scaled down on the application of fertiliser and have also bought fewer tractors and machinery since the eighties. They have made a huge adjustment in the production of maize since 1988/89 to increase the efficiency with the withdrawal of almost 25% of the low potential land from the total production area in the country and the conversion of it to pastures. They have also applied a fallow land system for soil moisture conservation to decrease the yield risks in the lower rainfall production areas."

6.5.2 Marketing

The marketing of agricultural products in South Africa was regulated by the government after World War II in the late 1940's when different Marketing Boards were established in terms of the Agricultural Products Marketing Act (1937).

The main reasons for the Act were to expand the agricultural industry with government support to achieve food security for the country and to end the dependency on imported food products mainly from the United States of America. These products were imported at prices below the local production costs of the products produces in South Africa at the time, mainly because of the much higher potential of the USA to produce food under better climatic and soil conditions, as well as the application of new technology developments, but also the fact that it was highly subsidies by the USA government which eventually resulted in export dumping.

The main objectives were to stabilise the prices for producers of many food products at which they could produce profitable and sustainable, and to improve to orderly marketing of these products.

The government developed a couple of irrigation schemes after the soldiers who fought on the side of the European Allied Forces in the war came back from North Africa, one of which is the well know Vaalharts irrigation scheme near Jan Kempdorp in the Northern Cape Province.

The different staple food products, for example, that were regulated in terms of specific marketing schemes in terms of the Act mainly maize, wheat and dairy products. These products which were market by different marketing boards under a "one channel, fix price scheme" which meant that the respective marketing boards were the only buyers, sellers, importers and exporters of these products and the prices were controlled by the government and announced before the marketing season after authorisation from with the cabinet.

The marketing of agricultural products in terms of the previous Agricultural Marketing Act was deregulated under the new political dispensation during the second part of the 1990's. A new marketing system based on the model of the Chicago Board of Trade (CBOT) in the USA was adopted and modified for the South African circumstances and the South African Futures Exchange (SAFEX), 23) which is the agricultural division of the Johannesburg Stock Exchange (JSE), was developed and implemented in 1997. This marketing system is generally known as a commodity derivatives market or a "futures market" as it offers producers the opportunity to offer their products in the market at specific prices and volumes some months ahead of the production and harvesting period, as well as the opportunity the hedge possible price risks as far as possible, as well as for the purchasers to bid for contracts at the prices that they are prepared to pay for maize. The prices of the local products are in fact direct derivative prices based on the world prices of these products as traded on the CBOT. Grain SA took many groups of producers during this period to the CBOT for special training and first-hand experience and they had to

make a huge adaption and mind shift to learn how to manage their product price in co-operation with their SAFEX brokers.

Other agricultural products such as wheat, soybeans, sunflower, beef and wool are also traded on SAFEX under the same mechanism and rules as prescribed and controlled by the Agricultural Division of the JSE.

It is very important to note that the local maize price can be very volatile and has, for example, reached an all-time high of around R5000 per ton during the drought-stricken 2016/17 production season which was basically a derivative import parity price that was largely determined by the international maize price on the CBOT at that stage, as well as the import shipping freight, insurance, harbour costs, and the inland transport costs from the Durban harbour to the large maize mills in Randfontein.

During the very good 2016/17 season the price dropped to around R1800 per ton because of the record maize harvest of 16,8 million tons and the problems to find a market internationally specifically for the white maize surplus of around 4 million tons which eventually had to be carried over to the present season which has placed further pressure on the local maize prices this season.

White maize is only a staple food in Africa and it is only produced and consumed in a few countries in the world of which Mexico is the most important producer.

It was almost necessary to blend yellow maize with white maize for our local human consumption during the 2016/17 season, as we had experienced after the drought-stricken 1991/92 season.

It must therefore be realised that a very good season with a big maize harvest above 12 million tons could also be a "very bad season" because of the surplus that must be exported at much lower export parity price realisations in the export market based on the international maize price and the fact that the overseas importers must pay the shipping freight, insurance and harbour costs from the Durban free-on-board price to the import harbour. At the same time, the maize farmers in the USA receive

substantial production and export subsidies from their government which makes it very difficult to compete with them on an equal basis.

These variability in the production of maize, together with the volatility of the international and local maize prices, could take commercial farmers out of production and/or leave them with new production debt which will be devastating for their financial survival and could even wipe commercial farmers out as well as new small farmers who entered the industry in one season. The question is, therefore, how long will it be possible for small developing farmers and other beneficiaries of the expropriated land to stay in producing and to survive financially, and the second question that must be asked is what the consequences will be for food security and economic growth of the country.

All agricultural products are today produced in a free market with the minimum government intervention and the prices are exclusively determined by supply and demand. This meant that all the marketing schemes in terms of the Act were abolished, especially the "one channel fixed price schemes" for maize and wheat, as well as the pool schemes for oilseeds.

The Marketing Act was specifically designed and implemented in the 1940's to support the producers and to expand the production of staple and other agricultural products. This means that all the new producers who entered the industry after the late nighties no longer had the protection and support of the government in the marketing of their products and they had to take their own decision with the accompanying production and price risks. Something that the beneficiaries of the land expropriation will, therefore, find very difficult to adjust to these marketing circumstances.

7. Contribution of Agriculture to Economic Growth

The average <u>real annual contribution</u> of the agricultural industry to the economic growth (GDP) of the country as published by Statistics SA²⁴⁾ over the past couple of years was around 2,2%. This does not mean that the contribution in terms of its gross production value has shrink over time but because it is normal that the agricultural industry in developing countries decreases as the other industries in the secondary

and tertiary sectors of the economy grow at a faster rate. It is different in the case of underdeveloping countries where the agriculture is the main industry which delivers the highest contribution to the economic growth and where up to 80% of the population or even more are dependent on the agricultural industry for the livelihoods and economic survival.

The average <u>real quarterly growth rate</u> of the industry for the third and fourth quarters in 2017 were 41,1% and 37,5% respectively higher than the same quarters in 2016. These figures were also quoted by the president, Mr Cyril Ramaphosa, when he said in his State of the Nation Address that ".... Agriculture presents one of the greatest opportunities to significantly grow our economy and create jobs. Agriculture made the largest contribution, by a significant margin, to the improved growth of our economy in the second and third quarters of 2017. This year, we will take decisive action to realise the enormous economic potential of agriculture. We will accelerate our land redistribution programme not only to redress a grave historical injustice, but also to bring more producers into the agricultural sector and to make more land available for cultivation." *)

To say that "agriculture presents one of the greatest opportunities to significantly grow the economy and create jobs" is not realistic because the excellent growth rate in the agricultural industry that also made it the largest contributor of all the industries to economic growth during the 3rd and 4th quarters of 2017 was the result of one of the best years ever in the history of the industry. The excellent rainfall, especially in the summer grain production areas of the country, was responsible for the production of the biggest maize harvest in the history of the country of 16,8 million tons was produced, as mentioned. This harvest compares to the harvests that were produced in 2015 of 10 million tons and in 2016 of 7,8 million tons which were one of the major reasons why the industry had negative growth rates and therefore made negative contributions to economic growth during every quarter in both 2015 and 2016. This means that cognisance must be taken that the growth rate and contribution to economic growth of the industry in 2017 were from the very low base during the last two quarters in 2016 due to one of the most devastating droughts in history. These figures are calculated at constant 2010 prices which are also seasonally adjusted and that can make the real growth rate look even better than in nominal terms. Agricultural is one of the industries that already delivers to a very large extent on its growth potential under very difficult circumstances because of the application of the best

technology in the world which has increased the efficiency of production dramatically over the past 30 years.

The role of agriculture in South Africa, according to Agri SA²⁵⁾ ".... remains an important sector despite its relatively small contribution to the gross domestic product (GDP). The sector plays an important role in terms of job creation, especially in rural areas, but is also a foremost earner of foreign exchange.

Agriculture's prominent indirect role in the economy is a result of backward and forward linkages with other sectors. Purchases of intermediate goods and services form backward linkages with the manufacturing sector, while forward linkages are established through the supply of raw materials to industry.

Approximately 70% of agricultural output is used as intermediate products. Agriculture is, therefore, a crucial sector and a key driver of growth for the rest of the economy – a fact also acknowledged in policy-related documents such as the National Development Plan (NDP) 2030.

Essentially the NDP entails that agriculture – both emerging and commercial – should still be afforded the opportunity to contribute optimally to economic growth, job creation, foreign exchange earnings and development of the industrial sector within a safe and non-discriminatory environment."

According to Sihlobo ²⁶⁾ the agricultural industry continues to be a sector that could potentially absorb masses of unemployed South Africans, particularly the low skilled and rural labour force. In fact, the NDP notes that the sector has a potential to create an additional million jobs by 2030 if conditions highlighted in a document are met.

A long-term trend of the agricultural labour force shows "... that the number of people employed in the agricultural industry increased from 802 000 in the 1910's to a peak of 1,7 million in the 1960's. Afterwards, it decreased to an average of 750 000 in the 2010's. These numbers account for both seasonal and permanent labour.

Also worth noting is that agriculture's share in total employment has declined significantly over the past 77 years. Such trend is unsurprising – as economies develop, the share of people working in agriculture declines.

Back in the 1940's, the agricultural industry used to be one of the leading employers, with an average share of 42 percent in total employment. This, however, has changed over the years due to the introduction of new technologies in the industry, as well as growth and expansion in labour participation in other industries of the economy. Between the 1940's and 2010's, the agricultural labour share of total employment declined 21-fold to 5 percent."

The NDP has, however, made many assumptions to show that the agricultural industry has "a potential to create an additional million jobs by 2030. "27" but without taking all the serious problems experienced with land reform in South Africa since 1994 into consideration that the "High Level Panel on the Assessment of Key Legislation and the Acceleration of Fundamental Change" have identified in the land reform process of the government, as mentioned. One of these assumptions, for example, which relies heavily on the hope that "the current decline in employment in commercial farming is halted", did not take the new technology developments emerging from the so-called "fourth revolution" such as robotics, artificial intelligence, nanotechnology, quantum computing and autonomous vehicles into account. These technologies will have to be applied increasingly to drastically improve the efficiency of food production by 2030, but it will also result in a smaller labour force in commercial farming. The NDP, however, recommended the establishment thousands of small black subsistence farmers on very small land areas of between 0,5 and 5 hectares to "create employment but not food production" and which will be nothing else than "debt, malnutrition and poverty traps" for these aspirant farmers.

According to Kindleberger, ²⁸⁾ an economic historian, ".... the agriculture industry is the backbone of an economy which provides the basic ingredients to mankind and raw material for industrialisation and makes its contribution to economic development in the several following ways:

- (a) Contribution to national income
- (b) Source of food supply
- (c) Pre-requisite for raw material
- (d) Provision of surplus
- (e) Shift of manpower
- (f) Creation of infrastructure
- (g) Relief from a shortage of capital
- (h) Helpful to reduce inequality

- (i) Based on democratic notions
- (i) Create effective demand
- (k) Helpful in phasing out economic recession or depression
- (I) Source of foreign exchange for the country
- (m) Contribution to capital formation
- (n) Employment opportunities for rural people
- (o) Improving rural welfare
- (p) Extension of a market for industrial output

"Increase in agricultural production and the rise in the per-capita income of the rural community, together with the industrialisation and urbanisation, lead to an increased demand in industrial production.

"Thus, industrial and agricultural developments are not alternatives but are complementary and are mutually supporting with respect to both inputs and outputs. As the increased agricultural output and productivity tend to contribute substantially to an overall economic development of the country, it will be rational and appropriate to place greater emphasis on further development of the agricultural sector."

8. Incompatibility of Objectives

The two basic objectives of the land reform policy to expropriate land without compensation and the sustainability of food security is totally incompatible objectives as proven over many years in many countries.

Especially if the beneficiaries of expropriation are small farmers who cannot produce food profitably as it is a prerequisite for the achievement of sustainable food security."²⁹⁾

Food in Africa is produced mainly by small subsistence farmers but "the continent still has to spend at least US\$50 billion per year on food imports." ³⁰⁾

"They will find it very hard to adjust from subsistence farming to large scale commercial production under the severe climate conditions, the fact that most of them might not have the interest, experience, entrepreneurship, capital or management skills, which means that they will find it very hard to survive financially. If they further don't receive the necessary training and extension services from qualified and

experienced agricultural scientists and mentors to develop as full fledge commercial food producers, then South Africa has taken without any doubt the wrong road to the long term sustainable food security for the country with the decision to expropriate land without compensation." ¹⁵⁾

In the debate on his State of the Nation Address, president Cyril Ramaphosa said: "We need to interrogate the statement that the expropriation of land without compensation is incompatible with a growing, flourishing economy." 2)

According to Corrigan ³¹⁾ it also "... drew attention to the fact that large-scale investment will be necessary to make this happen. It stresses, for example, the need for new irrigation projects. This must be done to maintain efficiently functioning market mechanisms. 'Investment by farmers,' as the National Development Plan (NDP) notes, 'will occur if they believe income streams are secure.' This requires infrastructure and functioning market institutions, including insurance markets.

Elsewhere it calls for 'a more rapid transfer of land to black beneficiaries without distorting land markets or business confidence in the agribusiness sector.'

A regime of expropriation without compensation would do precisely what the National Development Plan warns against. It would significantly ramp up the risks associated with agriculture. The prospect of being deprived of assets without compensation would be a major disincentive for investment – indeed, a standing concern for any involvement in agriculture.

Perhaps more importantly, it would be viewed with great concern by the financial sector. Commercial agriculture cannot operate without access to significant funding sources. This is necessary for both capital expenditure (such as that contemplated in the NDP) and for operational expenditure. Currently, farm debt exceeds R160 billion, a majority of which is held by commercial institutions.

The prospect of their client' collateral being seized would be a deterrent to banks' continued involvement in the agricultural sector. The Banking Association of South Africa (BASA), cautioned last year that if this were to become policy, there was a strong likelihood that financial institutions would be reluctant to extend further finance.

It is hard to imagine that the government would be able to provide resources on a scale that would come close to making up for what a skittish banking sector would no longer be prepared to provide.

The result would be the decline of agricultural production. It is an outcome that would be entirely predictable.

Ironically, there is little evidence – not even from government's own investigations – that the need to pay compensation is undermining land reform. And by placing expropriation without compensation front and centre of efforts in this regard, the necessary adjustment to policy and implementation are likely to be deferred. This would only compound South Africa's current failures.

Finally, it is also important to understand that a move towards expropriation without compensation would throw a blanket of uncertainty over the very concept of property rights in South Africa. This would be equally true of all property holders, large and small, black and white. Having abridged property rights to expedite land reform, the scene could be set for intrusion into any number of other spheres. This would unsettle the economy well beyond agriculture.

The managing director of BASA Mr Coovadia, has commented by saying 'I cannot understand how you are going to expropriate land without compensation and still get investors in with confidence and get rating agencies to hold off on further downgrades.'

In reality, these things are fundamentally incompatible."

According to Theunissen,³²⁾ "... the available commercial agricultural land in the country is currently 82,2 million hectares. The population increases by about 15% over a ten-year period.

At this rate, the population will amount to about 70 million in 2035. At the current rate of urbanisation, 52,6 million (75%) South Africans will remain in cities. As the population grows and more and more people move to the cities, agricultural land becomes less, not more.

The reasons for this are because farms around the larger cities for housing are being lost, while more and more farms are being sacrificed for mining. According to

projections, the 82,2 million hectares of commercial agricultural land can decrease to 70,2 million by 2035.

Today, every farmer in the country must on average feed 1 500 people and there are currently 1,551 hectares of land available for each member of the population. Based on the projected population numbers and the decline in agricultural land, as well as an expected decline in the number of farmers, every farmer will have to feed 3 472 people over twenty years, while only 1,102 hectares of land per member of the population will be available."

9. Impact of the Expropriate of Land without Compensation

The question is what could the possible impact of the expropriate of land without compensation be on the South African agricultural economy?

<u>Hlomendlini and Makgolane</u> ³³⁾ have identified the following" three major impacts of land expropriation on the agriculture and economy:

9.1 Impact on food production

In many instances where land reform projects have been carried out on land that was previously used productively there is nothing left of it today. Without providing both technical and financial support for production three purposes, beneficiaries are, from the beginning, set up for failure. Notwithstanding the ANC's view that land reform is key for South Africa's economic stability, expropriation of agricultural land without compensation is likely to have huge knock-on effects on the agriculture sector as well as on the country's economy.

Although economic transformation and inclusive economic participation is needed in South Africa, the expropriating agricultural land without compensation could seriously damage the agricultural sector's competitive advantage and compromise national food security and ultimately lead to poverty and unemployment.

South Africa's population has increased quite rapidly (by approximately 15,5%) in the past ten years. In 2035, the South African population is estimated to reach

more than 80 million. This means more food supply will be required to sustain the growing population.

Land is one critical factor for production in the sector and its ownership is critical for the sustainability of the sector. Since it is the responsibility of the agricultural sector to produce food, the sector's production capacity will need to be enhanced to avoid food demand surpassing domestic supply and to ensure that the sector remains adequately competitive.

This can only be possible if commercial farmers remain on the farms. The expropriation without compensation is undoubtedly posing a big threat to food production. Without drastic improvements in food production, South Africa and the Southern African region will have to rely on food imports.

The remaining commercial farmers have been placed in the precarious position of having to produce about 80% of food in the country, with less arable land at their disposal. The situation is worsened by the fact that many farms that were previously productive, are now lying fallow because of failed attempts by the state to adequately carry out land reform projects. It is estimated that about 70 to 90% of land reform projects have failed or are struggling with inadequate post-land support under which the lack of skills is one of the contributing factors to the failures.

Productivity in the agricultural sector has been increasing which can be attributed to the fact that farmers are investing in new technology and farming methods. At the back of expropriation without compensation, such investments will be held back. Ultimately, that will lead to the collapse of land values.

Land ownership is a critical factor to ensure financial stability as well as the development of the farm. Notwithstanding the fact that agriculture is regarded as highly risky owing to uncontrollable factors like climate change, most of those that invest in the sector use the land value as assurance for their investment. Financial institutions regard land as collateral when providing finance to farmers. Given that farmers rely on financing from financial institutions like banks, without guaranteed ownership of land, securing finance from banks will become nearly impossible for farmers.

9.2 Impact on capital investment in agriculture

To ensure productivity and sustainability in the sector, capital investment is required. Capital assets and investment in the sector has been on the steady increase for the past five years

In 2016, the value of capital investment in the agricultural sector was recorded at R428 billion, in which land and fixed improvements constituted 54,1%. Expropriation without compensation is likely to change this trend, leading to large disinvestment in the sector. Without investment, the sector will regress, productivity will be compromised, and job losses will then ensue— and this may well throw the country deeper into recession in the coming years.

In addition, for sustainability and development of their farms, most farmers rely on creditors such as the commercial banks, the Land Band, and agricultural cooperatives. In 2016, finance sourced from commercial banks, the Land Bank, agricultural cooperatives, and other lenders amounted to nearly R145 billion mostly for financing capital assets of which land and fixed improvements constitute more than 50%.

The value of assets increased from R394 billion in 2015 to R438 billion in 2016. Debt as a percentage of assets stood at 34% in 2016. Whenever there is an increase in farming assets, farming debt as well as debt to assets ratio increases. This is an indication that if land expropriated without compensation were to be implemented in South Africa, farmers will be left with in a massive debt that they cannot repay.

9.3 Impact on the rest of the economy

In recent times, the South African economy has been facing some challenges: slow economic growth, high unemployment as well as the recent downgrades to sub-investment by two rating agencies. The political instabilities pose a big threat to our economy, and the taking of land without compensation or expropriation at low levels of compensation will also affect the already struggling economy.

The NDP identified agriculture as one of the critical sectors for economic

development with a potential to create about one million jobs by 2030 but with the current uncertainty around the land, this target might not be reached.

In addition, agriculture is critical to the development of the economy as the sector that has strong backwards and forwards linkages with the rest of the economy. Through backwards linkages, agriculture purchases goods such as fertilisers, chemicals and implements from the manufacturing sector. On the forwards linkages side, agriculture supply raw materials to industry and the food supply chain in general. Approximately 70% of agricultural output is used as intermediary products in other sectors, particularly the agro-processing sector which contributes almost 20% to employment in the manufacturing sector.

What this suggests is that any distress in the agricultural sector will lead to distress in the rest of the economy. Unemployment which is currently at a record high (27%) will increase further, more and more people will be excluded from participating in economic activities and the ultimate result of that will further slowing of economic growth, weakening the currency, and higher inflation to mention a few.

Given the importance of the agricultural sector in the economy, there is a great need to speed up transformation in the sector. This, however, should be done with the aim to better position the sector to effectively and sufficiently deliver on its triple objectives of ensuring that the nation is food secured, employment creation and contributing to the GDP growth.

The suggestion that land expropriation without compensation will fast-track land transfer to previously disadvantaged people may be true, but it will also seriously damage the agricultural sector and lead to economic collapse of the South African economy, similar to what happened in Zimbabwe.

According to the 2015 land audit, the state owns more than 4,000 farms, which equates to more than four million hectares. In addition, all the communal land in South Africa is owned by the state.

Instead of the political push to acquire more farm land, the government should bring into production the four million hectares that are currently not being used or underutilised. The focus of the government should be on increasing the sector's capacity with regards to its competitiveness, productivity and most importantly keep the farmer on the farm wherever as possible.

In this way, the government will be applauded for taking huge steps towards increasing the production capacity of the agricultural sector."

10. Economic growth

"The single biggest problem with the economy in South Africa is the fact that the ANC government has embraced a mixed social and communist ideology after 1994 that cannot create economic growth and rejected capitalism. This was the starting point of the destruction of economic growth as experienced at this stage. In contrast, a market-oriented capitalist economic system has always been very successful throughout the world, because it is the only system that can create economic growth driven by the profit motive. Socialism and communism can only destroy economic growth and prosperity and it is the main reason why the government will not be able to turn the economy around." 18)

The fight against poverty, inequality and unemployment does not lie in the expropriation of land without compensation, but in an economic policy that will improve the profitability of all the individual industries to be able to make higher contributions to the economic growth of the country.

"If the government in South Africa wants to stimulate economic growth in the country, it should be prepared to improve the profitability levels the agriculture and all the different industries in the three main sectors of the economy by identifying and seriously addressing the problems that prevent them from making a more sustainable contribution to the overall economic growth of the country because economic growth is totally dependent on the profitability of the economy.

Economic growth is driven and created in almost all the countries in the world today by the profit motive which can be create through economic activity. It is also the only way that capital can be accumulated for reinvestment for higher economic growth. Even countries that are still clinging to communist political systems have long ago realised that this is the only way how growth can be created. It is for this specific reason that countries such as Russia and China became two of America's largest

trading partners by significantly expanding their production and manufacturing capabilities to find profitable export realisations for their products.

The governments in the world should drastically reduce their involvement and interference in the economy and will have to acknowledge and understand the fact that the producers, manufacturers, traders, service providers and other economic active individuals on the supply side, and the consumers on the demand side of the economy, are the largest and most important role players, as the creators of economic growth, prosperity and progress in any country in the world.

The most important function of any government is the responsibility the create an environment that will be conducive to the success of more profitable business opportunities, enterprises, industries, and higher capital formation for investment and economic growth." ¹⁹⁾

The so-called "white monopoly capital" and through that the onslaught against capital formation in the economy does not exist, except for the specific industries which are totally regulated by the government as the state's own enterprises, but which are and still will be the destroyers of economic growth for as long as it will not have profitable prospects in the future.

The actual "white oligopoly capital" (cartels) which does exist in the economy should be address in terms of the Competitions Act. The Competitions Commission and Tribunal have already prosecuted and penalised many oligopolies in the past in different industries such as the fertiliser and food manufacturing industries for price collusion and the demarcation of marketing areas and have also addressed the market dominance of large companies in terms of the Act. ³⁴⁾

No entrepreneur or capitalist in the country who can identify profitable business opportunities and who is prepared to take and manage the risks involved should be held back to make profits within the rules and regulations of the legislation in the country whereby capital is accumulated for reinvestment and acceptable profits which drives and creates economic growth that made them successful entrepreneurs and capitalists in the first place.

As mentioned, Russia and China are today the biggest trading partners of the USA and China is, according to many market analysts and commentators, fast becoming the major economic power in the world which is a very important topic almost everywhere.

In their book "The One Hour China Book" two Peking University professors ³⁵⁾ explain six powerful economic and demographic mega-trends they have identified shaping the economy of the People's Republic of China.

"Our trends are phenomena that are generating revenue, creating big companies and minting Chinese millionaires (and billionaires),' they explain. Their view is based on studying and working with thousands of individual companies.

This is about business and they do not delve into Chinese politics or state capitalism. They believe firmly that the business of China is mostly - business.

The <u>first mega-trend</u> needed to understand China is urbanisation and the largest migration into urban areas in human history. In the 1980s, 80% of Chinese were living agrarian lives; soon there will be 1 billion Chinese city dwellers.

Consider the impact of this migration. It requires the building of cities, housing, buses, subways, police services, parks, roads, sewage treatment, water and electricity infrastructure, an economy to support them, and all with huge environmental impact. Today there are 160 Chinese cities with over 1 million people – and to put this in perspective, Europe has 35 such cities.

This mega-trend is fundamentally changing the Chinese people, whose disposable income per capita has shot up over 300%. In most countries, urbanisation does not directly lead to wealth, but urbanisation is necessary for wealth. Real estate accounts for about 20% to 22% of investment in fixed assets and employs over 100 million people directly or indirectly. And construction has produced great wealth.

The <u>second mega-trend</u> is China's huge manufacturing scale. This has all sorts of implications. If you are much larger than your competitors, you can outspend them on research, factories, fixed assets, marketing and other fixed costs.

The Chinese manufacturing base has increased by over 20 times in the last 30 years!

To get a sense of this size, China produces 80% of the world's air-conditioners, 90% of personal computers, 75% of solar panels, 70% of cell phones and 63% of the world's shoes.

China has several big advantages – a primary one is the rapidly growing domestic market to which 20 million cars are sold, versus the USA's 16 million. To service this market, Chinese manufacturing wins against foreign competition through producing good quality, low-cost, simple as well as high-tech goods, through efficiency and scale.

The <u>third mega-trend</u> is China's rising number of consumers. In 2009, 18% of the world's middle class was Chinese and by 2030, that will rise to 66%. North America and Europe combined hold 51% currently and are forecast to drop to 21% by 2030, not because they are getting poorer, but because the Asian middle class is rising.

The huge Chinese market is getting hungrier every night. They have moved from 'subsistence living' to being able to purchase more aspirational goods. Their per capita GDP has risen from \$200 in 1982 to \$5 500 in 2015. With prosperity comes the rise in meat-eating, which is why China now has 450 million pigs, about half of the global pig population, and consumes 28% of the world's meat. Little wonder that Kentucky Fried Chicken (KFC) is the number one fast food chain in China with 4 000 restaurants.

And like consumers everywhere, the Chinese are perpetually demanding, on price, quality, service, convenience and every other dimension.

This has a direct impact on the growth of farming, infrastructure, supermarkets, refrigerated trucks, logistics, home electricity and refrigerators, and more, to meet the growing demand for meat.

The <u>fourth mega-trend</u> is money, and lots of it. <u>Capitalism requires capital and China's financial system today will impress any capitalist anywhere</u>, the authors point out. Their bank deposits are over \$19 trillion today and growing by over \$2 trillion every year. In 2016 their foreign exchange reserves were \$3,2 trillion and they are the single largest foreign purchaser of US government debt. All this said, it is not only the volume but the efficiency, sophistication and architecture of China's financial system that comes with this mega-trend. Ping An is a massive Chinese insurance and

financial services company with 275 000 staff, 870 000 sales agents, over \$100bn in revenue and 110 million customers. In 2015, it was worth more than Prudential, AIG and MetLife. China's big four state-owned banks do dominate the banking sector, but they have evolved from mostly government organisations into quasi-corporate, state-owned entities.

The <u>fifth mega-trend</u> flows from the previous ones - China is a 'brainpower behemoth.' The stereotype of China as a limitless pool of factory workers, who will work long hours for low wages, is rapidly changing. In 1993, China accounted for only 2,2% of the world's research and development investment. Today it has overtaken France, England and most European countries, surpassed Japan, and is only second to the USA.

The <u>sixth mega-trend</u> is the Chinese internet, which has grown so fast that Chinese has already replaced English as the primary language. China didn't move slowly into acceptance of the internet as the West did; for them it happened all at once with videos, music, chat, games, news, dating, shopping, etc."

The Reserve Bank in South Africa, just as all the Central Banks in many other countries in the world, believe that it can, according to its mandate in terms of sections 223 to 225 of the Constitution ³⁶⁾ and the Reserve Bank Act (1989) ³⁷⁾ "... achieve and maintain price stability in the interest of balanced and sustainable economic growth" and through that also protect the currency which are basically almost impossible to achieve with monetary policy.

The prices of goods and services (inflation), the price of the Rand against other international currencies (exchange rates) and economic growth (profit = changes in the prices of inputs and outputs, as well as, technology) are determined by all the local and international factors that influence the buyers and sellers (and speculators) to decide at what prices they are willing to buy or to sell products and services, the Rand and the inputs and outputs of the economy. (Economics 101, chapter 1, page 1).

Higher inflation is not only a problem of higher demand, but it can just as well be increased because of developments on the supply side of the economy such as a serious drought that affects the prices of agricultural and food products or a reduction in the production of crude oil by the oil-producing countries in the world to increase

the international price of oil which also increases the international and local prices of fuel.

The influence of interest rate policy of the Bank on these variables play a very insignificant role and is almost negligible small and statistical analysis has shown that there is absolutely no evidence that the changes in interest rates can explain or declare the changes in the inflation and exchange rates, as well as economic growth, and that influence of monetary policy is, therefore, insignificant and irrelevant. ³⁸⁾

The average interest expenditure paid by all the industries in the economy over the 5 quarters from June 2015 to June 2016 was R49,7 billion of the total average expenditure of R20,2 trillion which amounts to only 2,4%.³⁹⁾ The interest costs that consumers pay is so small in comparison to their total spending on consumer goods that it does not even feature as an item in the list of the total consumption expenditure by households of the Reserve Bank. A good estimate could be between 2 and 2,5% is clear evidence that interest rate fluctuations can hardly affect economic growth.

"The Constitution of the country cannot be so prescriptive about economic policy because the government has already gone much too far to interfere in a market-oriented economy with various laws that disturb the free operation of market forces and price formation. Prices have an extremely important function to always restore the equilibrium between the supply and demand in the economy and must be allowed to send signals to producers and consumers about the imbalances in the market.

Interest rate levels must be determined in a free money and capital futures market and not by the Reserve Bank. The Reserve Bank is, in any case, nothing but a money and capital control board which tries to control both the price (interest) of capital and the money supply. Something that the free operation of market forces will not tolerate over the long term as it will eventually restore the balance between demand and supply in the market, albeit through some financial crisis." ⁴⁰⁾

"Monetary policy has a very limited impact on economic growth because profit is created through, firstly, the changes in the relationship between the prices of all inputs used in the economy and changes in the prices of all outputs, including products and services produced and delivered, and secondly, the efficiency with which the inputs are converted into outputs, which is determined and can be

increased mainly by the application of the best and latest technological developments, as mentioned.

The interest costs on the fixed and working capital costs used to construct, for example, a maize mill and to purchase maize to be milled for maize meal, can never play a more important role in the profitability and sustainability of the mill than the prices of the maize itself or the maize meal produced, otherwise the mill will not survive financially.

The role of monetary policy in promoting 'balanced and sustainable economic growth' or 'ensuring that the socio-economic well-being of people is protected' is therefore extremely limited. The influence of interest rates on the supply side of the economy is by no means as important as generally accepted, as it is only one of the four main inputs used in production, manufacturing and service delivery. The other three main inputs are land and raw materials, labour and management.

The contribution to economic growth by the consumers must not be underestimated. According to the Bureau for Economic Research at the University of Stellenbosch the consumer spending accounted for 60% to economic growth. 41)

The mind-boggling question is, therefore, why do the central banks in the world want to keep the consumers responsible and punish them for every "negative" move in the inflation for which they are not responsible for when the monetary policy of the Banks do not even have the slightest control over or influence on the reasons how prices in the world are determined by supply and demand? The question is how can they accept that the stabilisation of prices can solve almost all the problems in the economy when it is, in fact, the biggest, single delusion in the total economic science?

There can be nothing further away from the truth than the claim of the Reserve Bank that interest rate changes work slowly through the economy and only show its effect two years later.

If there is a single development that has seriously gone wrong in the world economy, it would be the general acceptance that all other economic variables, such as interest and exchange rates and even economic growth, are more important and have a

greater role in the economy to play than the market forces of the demand and supply of products and services.

The governments in the world should drastically reduce their involvement and interference in the economy and will have to acknowledge and accept that the producers, manufacturers, traders and service providers on the supply side, and the consumers on the demand side, are in fact the largest and most important role players in the economy, as the creators of economic growth, prosperity and progress in the world." ⁴²⁾

As long as the ANC clings to a policy of socialism, populism and communism, it can completely forget about creating economic growth. The only reason why the low growth in the country is still achieved is because there are still entrepreneurs in the private sectors that can manage the economic and business risks associated with the political and economic policy of the government and can create sustainable profits and generate capital formation for reinvestments.

The only way how the economy in South African can be restored is a total return to a capitalist economic system which today is the only successful system in the world that drives and creates economic growth through the profit motive to generate capital for reinvestment and higher growth, with the necessary built-in socio-economic obligations that the political dispensation requires.

The distribution of wealth will not solve the problems of inequality, poverty and unemployment because it is only a short-term solution until it is all consumed and digested, which will then only magnify these problems even further. The only solution is the creation of higher economic growth and the accumulation of more wealth for everybody in the country.

11. Summary and conclusions

11.1 The total omission of the proviso from the land expropriation without compensation resolution that it should not "... undermine future investment in the economy, or damage agricultural production and food security ..." by the National Assembly is totally unacceptable and gives reason to serious concern about the future policy on agricultural production and food security.

- 11.2 The Constitutional Court will have to decide whether the public hearings followed the "proper processes and consultation" by not considering the devastating effects that the expropriation process will have on the agriculture and the country.
- 11.3 It is totally inconceivable that the government will continue to expropriate land without compensation and not seriously taking cognisance of the extremely destructive consequences that such a process will have on the sustainability of agricultural production, food security and economic growth, irrespective if or how Article 25 of the Constitution may be amended or what other "land tenure regime needed" might be recommended by the committee, especially if the result of expropriation will be the redistribution of land to small and subsistence farmers.
- 11.4 Most countries in the world who rely on small and subsistence farmers to produce enough food for their populations are all experiencing unprecedented poverty and hunger. There is absolutely no reason to believe that the very destructive consequences of land redistribution in virtually all other African countries will be anything different in South Africa and it will undoubtedly come at a very high price of unprecedented famine, no economic progress and much greater poverty
- 11.5 The South Africa government, therefore, has taken without any doubt the wrong road with the decision to expropriate land without compensation without realising the devastating consequences that it will have on the sustainability of commercial agricultural production, food security and the contribution of the industry to economic growth.
- 11.6 The expropriation of land without compensation will not be the solution to the three main objectives of the African National Congress to eradicate poverty, inequality and unemployment and it will eventually degrade the country to an underdeveloped country as proven in many other African countries with unprecedented famine and much higher poverty.
- 11.7 Land redistribution was since 1994 hampered by corruption, lack of ability, budgets and title deeds, poor legislation and poor application of existing

legislation and has marred any real hopes of ensuring that large numbers of emerging farmers enter and thrive in the agricultural and food production industries.

- 11.8 The National Development Plan has made many assumptions to show that the agricultural industry has "a potential to create an additional million jobs by 2030, but without taking all the serious problems experienced with land reform in South Africa since 1994 into consideration that the "High Level Panel on the Assessment of Key Legislation and the Acceleration of Fundamental Change" have identified in the land reform process of the government.
- 11.9 There were a couple of alternative proposals over the past years that tried to address the land reform process such as the "willing buyer, willing seller" principle and the 50/50 ownership of land. The best and only solution, however, to successful land expropriation and sustainable agriculture production and food security is the development of black commercial farmers who can make a positive contribution to overall performance of the industry and the economy of the country
- 11.10 The agricultural industry displays specific characteristics and realities that seriously endanger the sustainability of agricultural production and food security which will make it very difficult for any new entrant to the industry to adapt to and to survive financially without the necessary, understanding, knowledge and experience gained over a long period of time.
- 11.11 The most important principle in the agricultural science is the optimum and maximum profit level of production and it is the basic approach to successful agricultural production and marketing while it also incorporates all the different agricultural disciplines.
- 11.12 The profitability and sustainability of food production are prerequisites for any country who strives to achieve food security and to eradicate poverty. It is created and driven in the agriculture industry, as in any other industry in the economy by, firstly, the changes in the prices producers pay for their inputs such as seed, fertiliser and fuel against the changes in the prices that they receive for their products, and secondly, by the efficiency with which the inputs are converted into outputs. The only way efficiency can be improved is with

the application of the best and new technology developments which must support producers, manufacturers and service providers to deliver more outputs with the same quantity of inputs or to deliver the same quantity outputs with fewer inputs.

- 11.13 The marketing of agricultural products that was totally deregulated in 1997 will make the price risks much higher for small farmers as they will not have the benefit of stabilised prices or a safety net regulated by the government. They will have to be trained to manage the prices of agricultural products in a futures market such as the South African Futures Exchange.
- 11.14 Any new entrant into the agricultural industry will find it very difficult to produce products profitably and sustainably because of the uncertainty and the volatility and input and output prices and the fact that the prices of agricultural products are determined by the free market forces of supply and demand, while the prices of production inputs are determined based on production costs plus a profit margin. This will always put the input/output-price ratios under pressure because farmers are price takers and not price makers.
- 11.15 Food security can only be sustainable if the commercial production of food is profitable and it is a prerequisite for any country who strives to achieve food security and to eradicate poverty. No farmer in the world can produce food at prices that poor people can afford. Food security is not the responsibility of famers but of the governments in the world. They must create an environment that will enhance the profitability and sustainability of agricultural production, food security and economic growth.
- 11.16 It is very clear that the dual objectives of land expropriation without compensation and the sustainability of food security can never be compatible objectives as the only relationship that can exist between it is a highly antagonistic relationship. It is realistically spoken only a choice between these two objectives.
- 11.17 No entrepreneur in the country who can identify profitable business opportunities and who is prepared to take and manage the risks involved in it should be held back or obstructed to make profits within the rules and

- regulations of the legislation in the country and to accumulate capital for further reinvestment and even higher profits and economic growth.
- 11.18 The role of agriculture in South Africa remains an important industry despite its relatively small contribution to the gross domestic product (GDP). The sector plays an important role in terms of job creation, especially in rural areas, but is also a foremost earner of foreign exchange. The industry's prominent indirect role in the economy is a result of backward and forward linkages with other sectors. Purchases of intermediate goods and services form backward linkages with the manufacturing sector, while forward linkages are established through the supply of raw materials to the industries in the secondary sector of the economy.
- 11.19 The only way to win the fight against poverty, inequality and unemployment will be the <u>development of commercial black farmers</u> which can put them into a position to make a profitable and sustainable contribution to their own livelihoods, the development of the agricultural industry and its contribution to the economic growth of the country. The government has already started such a program which should be supported by all the role players in die industry and which will be the most successfully effort to transform the agricultural industry, to redistribute land, and to expand production and food security in a profitable and sustainable manner.
- 11.20 The expropriation of land without compensation will downgrade the commercial agriculture to the subsistence level of food production, food insecurity and lower economic growth from which the country will never recover again.
- 11.21 Land expropriation and distribution are basically part of the very old "Africa ideology" that destroyed economic growth in many countries on the continent and had made up to 85% of the populations totally dependent on the agricultural industry with serious consequences such as unprecedented famine and much higher poverty. In was in almost all the countries purely a political objective for the ruling party to stay in power when the outcome of the next election was in the balance and which eventually earned these countries the status of underdeveloped or even non-developing countries.

- 11.22 If the government in South Africa wants to stimulate economic growth in the country, it should be prepared to improve the profitability levels the agriculture and all the different industries in the three main sectors of the economy by identifying and seriously addressing the problems that prevent these industries from making a more sustainable contribution to the overall economic growth of the country because economic growth is totally dependent on the profitability of the economy.
- 11.23 The most important function of any government is the responsibility the create an environment that will be conducive to the success of more profitable business opportunities, enterprises, industries, and higher capital formation for reinvestment and economic growth.
- 11.24 It is unthinkable that the government appears not to understand and acknowledge the key role of the primary industries such as agriculture, forestry, fisheries and mining in the economy as the main suppliers of the basic raw materials to the economy.
- 11.25 The governments in the world should drastically reduce their involvement and interference in the economy and will have to acknowledge and understand the fact that the producers, manufacturers, traders, service providers and other economic active individuals on the supply side, and the consumers on the demand side of the economy, are the largest and most important role players, as the creators of economic growth, prosperity and progress in any country in the world.
- 11.26 The only way how the economy in South African can be restored is a total return to a capitalist economic system which today is the only successful system in the world that drives and creates economic growth through the profit motive to generate capital for reinvestment and higher growth, with the built-in socio-economic obligations that the political dispensation requires.

REFERENCES

1) Report and resolutions of the 54th National Conference of the African National Congress, page 31, paragraph 16.

http://www.anc.org.za/sites/default/files/54th_National_Conference_Report.pdf

2) State of the Nation Address

http://www.thepresidency.gov.za/speeches/state-nation-address-president-republic-south-africa%2C-mr-cyril-ramaphosa

 Parliament to investigate ways to expropriate land without compensation – Andisiwe Makinana, City Press, 28 February 2018

https://city-press.news24.com/News/parliament-to-investigate-ways-to-expropriate-land-without-compensation-20180227

- 4) Republic of South Africa Minutes of proceedings of National Assembly, Tuesday, 27 February 2018, page 9.
- 5) Ramaphosa: Economic freedom means land must be returned Lameez Omarjee, Fin24.com, 27 April 2018

https://www.fin24.com/Economy/ramaphosa-economic-freedom-means-land-must-be-returned-20180427-2

6) Wikipedia – Food security

https://en.wikipedia.org/wiki/Food_security

7) Climate Smart Agriculture - Food and Agriculture Organization of the United Nations (FAO) 2013

http://www.fao.org/docrep/018/i3325e/i3325e00.htm

- 8) State of Food Security and Nutrition in the World 2017 Food and Agriculture Organization of the United Nations (FAO). Foreword pages vi and vii. http://www.fao.org/3/a-I7695e.pdf
- 2014-2015 Global Food Policy Report International Food Policy Research Institute (IFPRI)

http://www.ifpri.org/publication/2014-2015-global-food-policy-report

Chapter 4 - Helping Small Family Farmers to Move Up or Move Out - Pages 26 to 31.

http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/129075/filename/129286.pdf

 Ngubane, M - Obstacles facing a young black farmer in South Africa: a personal story, The Conversation, 12 April 2018.

https://theconversation.com/obstacles-facing-a-young-black-farmer-in-south-africa-a-personal-story-94037?utm_medium=email&utm_campaign=Latest%20from%20The%20Conversation%20for%20April%2026%202018%20-%20100248743&utm_content=Latest%20from%20The%20Conversation%20for%20April%2026%202018%20-

%20100248743+CID_379473455c5bf90a22ec783095c9d3a1&utm_source=campaign_monitor_africa&utm_term=Obstacles%20facing%20a%20young%20black%20farmer%20in%20South%20Africa%20a%20personal%20story

11) Report of the high level panel on the assessment of key legislation and the acceleration of fundamental change – Parliament, Republic of South Africa. November 2017.

https://www.parliament.gov.za/storage/app/media/Pages/2017/october/High_Level_Panel/HLP_Report/HLP_report.pdf

- 12) Eloff T, Grondhervorming: Wat het skeefgeloop? Executive director of the FW de Klerk Foundation. Netwerk.com, 7 May 2017. (Directly translated)
 https://www.netwerk24.com/Stemme/Aktueel/grondhervorming-wat-het-skeefgeloop-20180507
- **13)** Mabasa B, Why failing to revise land policy will fail aspiration of millions, 2 May 2018. https://www.werksmans.com/legal-briefs-view/failing-revise-land-policy-will-fail-aspiration-millions/
- 14) Zokwana, S Minister of Agriculture, Forestry and Fisheries, Budget vote speech, 16 May 2018

http://www.nda.agric.za/docs/media/Budget%20Vote%20Speech%20Final.pdf

15) Sishuba, S - Developing grain farmer programme shows positive results, Farmer's Weekly, May 24, 2018.

https://www.farmersweekly.co.za/agri-news/south-africa/developing-grain-farmer-programme-shows-positive-results/?utm_medium=email&utm_campaign=Weekly%20News%20%20Farmers
%20Weekly&utm_content=Weekly%20News%20%20Farmers
%20Weekly+CID_87382e9d4cdf61bf7064707f89e6b937&utm_source=TouchBasePro%20Email
%20Campaign&utm_term=Developing%20grain%20farmer%20programme%20shows%20positive
%20results

- 16) Brink, F The road to food security in Africa. Paper delivered at the annual Congress of the Fertilizer Association of Southern Africa, 14 April 2015, NH Lord Charles Hotel, Somerset West, Western Province, South Africa. (Copy available on request)*
- **17)** Brink, F Development of producers is the answer to food insecurity and famine in Africa, New Era, 4 November 2015.

 http://www.newera.com.na/2014/11/04/development-producers-answer-food-insecurity-famine-africa/
- 18) Brink, F Economic rules for the production of food. Paper delivered at the annual Congress of TLU (SA) on 16 September 2017, CSIR Conference Centre, Pretoria, Gauteng, South Africa. (Copy available on request)*
- 19) Fourie, P and Sihlobo, W What is a wheat farmer's percentage share of retail white bread? Grain SA, 22 October 2015. http://www.grainsa.co.za/upload/report_files/Bread-Article.pdf
- **20)** Brink, F How can economic growth be created? Article written April 2017 (Copy available on request) *
- **21)** Heady, EO Economics of agricultural production and resources use. Professor in Agricultural Economics, Iowa State University, USA, page 21 to 51.
- **22)** South African Grain Information Service (SAGIS) http://www.sagis.org.za
- 23) South African Futures Exchange (SAFEX)
 https://www.jse.co.za/trade/derivative-market/commodity-derivatives
- **24)** Statistics South Africa Gross Domestic Product (GDP), 4th Quarter 2017 http://www.statssa.gov.za/publications/P0441/P04414thQuarter2017.pdf
- **25)** Role of agriculture in South Africa Agri SA https://www.agrisa.co.za/about-us/role-of-agriculture-in-sa/
- **26)** Sihlobo, W A Few Notes on South Africa's Agricultural Jobs Market, 8 May 2018. https://wandilesihlobo.com/2018/05/08/a-few-notes-on-south-africas-agricultural-jobs-market/
- **27)** The National Development Plan: A vision for 2030 Chapter 6, pages 195 213. https://www.brandsouthafrica.com/governance/ndp/the-national-development-plan-a-vision-for-2030

- 28) Kindleberger C Role of agriculture in the economic development of a country http://www.economicsdiscussion.net/economic-development/role-of-agriculture-in-the-economic-development-of-a-country/4652
- 29) Brink F Profitability the prerequisite for sustainable agricultural production, Bizcommunity.com Paper delivered the "Sustainability of Agricultural Production" at the Annual Women in Agriculture and Agro-processing Summit in Centurion, Pretoria. 17 August 2017

 http://www.bizcommunity.com/Article/196/358/166198.html
- **30)** 'Africa spending at least \$50bn on food imports,' says Zim's Mnangagwa, News24.com

https://www.news24.com/Africa/Zimbabwe/africa-spending-at-least-50bn-on-food-imports-says-mnangagwa-20180516

31) T Corrigan, Why expropriation without compensation is incompatible with economic growth. News24.com, 22 February 2018.

https://www.news24.com/Columnists/GuestColumn/why-expropriation-without-compensation-is-incompatible-with-economic-growth-20180222

32) Theunissen, P – Politieke magsvertoon grondliggend tot grondkwessie. (Directly translated)

 $\underline{https://www.netwerk24.com/landbou/Plase/Plaasverkope/politieke-magsvertoon-grondliggend-tot-grondkwessie-20180509}$

33) H <u>Hlomendlini and P Makgolane</u>, Land expropriation without compensation: Possible impact on the South African agricultural economy. Bizcommunity.com, 28 July 2017.

http://www.bizcommunity.com/Article/196/358/165375.html

- **34)** Visser, A Collars for cartel watchdogs, Businesslive.com, 23 March 2015 https://www.businesslive.co.za/bd/companies/2015-03-23-collars-for-cartel-watchdogs/
- **35)** Jeffrey Towson, J and Woetzel, J The One Hour China Book (2017 Edition), Fin24.com, 18 May 2108.

https://www.fin24.com/Opinion/book-review-bone-up-on-chinas-business-trends-in-one-hour-20180517

36) Constitution of the Republic of South Africa (No. 108 of 1996) https://www.gov.za/sites/www.gov.za/files/images/a108-96.pdf **37)** Reserve Bank Act (1989)

https://www.resbank.co.za/AboutUs/Mandate/Pages/Mandate-Home.aspx

38) Brink, F - Reserve bank's policy is irrelevant, Agric Africa Faming Portal, 18 January 2018.

https://farmingportal.co.za/index.php/press-promo/press-release/item/12219-reserve-banks-policy-is-irrelevant-fanie-brink-independent-agricultural-economist

39) Statistics South Africa – Quarterly financial statistics (QFS), June 2016 - Selected income an expenditure items: All industries covered by the quarterly financial statistics survey. Table 1.

http://www.statssa.gov.za/publications/P0044/P0044June2016.pdf

- **40)** Brink F, Constitution cannot be so prescriptive Farming portal. 21 June 2017. http://www.farmingportal.co.za/index.php/press-promo/press-release/item/10685-constitution-cannot-be-so-prescriptive-fanie-brink-independent-agricultural-economist
- **41)** Bureau for Economic Research, University of Stellenbosch. http://www.sun.ac.za
- **42)** Brink F Back to economic basics Article written July 2017 (Copy available on request) *

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