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Adding Values as a Value Adding Technique

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ABSTRACT

Whilst a part of the global society is concerned with Agriculture's ability to provide enough food to nourish the world's population in 2050, another school of thought is more apprehensive of the ability of farmers to survive commercially. This argument is founded on the downwards trend in the global price of agricultural commodities over the last four decades. This paper provides a theoretical explanation for this trend and three potential responses that farmers may follow is suggested. The first response is for farmers to be at the forefront of new technology and to cut costs to the bare minim. The second response is to find alternative markets and the third response entails the development of luxury or value-added markets. However, it is also clearly indicated that the latter response would be eroded if a form of quality control is not included in the process.

The rest of the paper is dedicated to systems and examples. The first of these is the Wine of Origin System in South Africa where both a system and product exist. In the case of Rooibos, a tea brewed from indigenous plants in South Africa, a product with appropriate characteristics does exist but no institutional framework is in place. The process of describing the unique characteristics of Rooibos is subsequently explained. In the last Section of the paper an Africa-wide list of products with unique and origin-based characteristics is provided and the systems for the protection of these products in a number of African countries are summarised. It is clear from this paper that an abundance of unique products exist in Africa and the question is raised whether the African Union does not have a role to play in providing a framework for the protection and commercial exploitation of African agricultural products with a unique set of quality characteristics.

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1. INTRODUCTION

What is the place of agriculture in a 21st Century economy? How do we ensure profitable farming in an increasing globalised world? How do we create incentives underpinning responsible resource use? How do we protect our collective heritage from unscrupulous individuals?

These are some of the questions that we, as agricultural economists, grapple with on a daily basis; leading to a whole range of potential solutions being developed. The purpose of this paper is to advance one of these solutions into more detail. Departing from the statement that a problem is never solved at the same level it is observed, the first part of the paper will be devoted to determining why the prices of agricultural products remain under threat and how to address this problem. The second part of the paper will focus on an existing system to differentiate agricultural products through the certification of values after which a case study of another product will be developed. In the final instance this case study will be embedded in a continent-wide African context.

2. THEORETICAL BACKGROUND

Although the utility that various people (producers and consumers) extract from farming varies significantly from person to person, one basic role of the Agricultural Sector still remains; that of provider of food. In most countries of the world prices are the mechanism (albeit often somewhat distorted) through which consumers of food convey their preferences to its producers. These prices signal preferences in terms of product type, range, quality standards, embedded values, etc as well as changes in tastes, income and wealth over time. As certain factors such as the number of people and technology changes in conjunction with the aforementioned changes, prices will also change over time.

The relationship between the change in price and the change in the associated volume of a product demanded can be measured with a mechanism called price elasticity (Pe) of either demand (PeD) or supply (PeS). This measurement of sensitivity or responsiveness in the market place can be written as follows:

$$Pe = \frac{\% \text{ change in quantity}}{\% \text{ change in price}}$$

The implication of this formula is that if prices would change at the same rate as volumes, price elasticity would approach unity (in other words, 1). However, if the change in quantity

were to be relatively lower than the associated change in price, the Pe would be <1 and we would refer to an inelastic product. If the change in volume was to be relatively more substantial than the change in price, Pe would be >1 and reference would be made to an elastic product.

An overview of the price elasticity of aggregate demand and supply in the Agricultural Sector is provided in Table 1. According to most text books (in this case personified by Bonnen and Schweikhardt for global characteristics and Liebenberg and Groenewald for South Africa) the price elasticity of aggregate demand for agricultural products over the short term is less than one and carries a negative sign (as price increase the volume demanded would decrease and only in certain exceptional circumstances would both the price and volume demanded increase). The reason for this inelasticity of food is quite simple in that food is one of the “sanitary conditions” described by Maslow and Herzberg or, in other words, “man must eat”. A person will usually spend his/her first dollar on such basic requirements as food, shelter and safety, but consumption of food soon reaches an upper limit. This is clearly illustrated by income elasticity of demand that approaches unity in developing countries (every additional dollar is spent on food) while it is rather inelastic in developed countries. Over the long term the PeD approaches unity.

Table 1: Some characteristics of aggregate demand and supply in the Agricultural Sector.

Characteristics	Low Income “Developing” Economies	High Income “Developed” Economies	South Africa
Income Elasticity of Demand	0,8 – 0,9	0,1 – 0,2	0,7
Price Elasticity of Demand (SR)	-0,4	-0,3	-0,337
Price Elasticity of Demand (LR)	-1,0	-1,0	
Price Elasticity of Supply (SR)	0,1 – 0,2	0,1	0,28
Price Elasticity of Supply (LR)	0,4 – 1,2	0,8 – 1,0	1,34

Source: Bonnen & Schweikhardt (1998) and Liebenberg & Groenewald (1997)

The information in the table conveys a similar, but inverse, picture with respect to the price elasticity of the aggregate supply of agricultural products over the short term. The price elasticity of aggregate supply is smaller than one but carries a positive sign which indicate that aggregate supply of agricultural products is also relatively inelastic. Over the longer term price elasticity of supply approaches unity. The reason for this situation can be found in the sunken cost (barriers to entry) that is required before agricultural production can take place. For instance, once you have planted an orchard of Pink Lady apples you can only harvest Pink Lady apples from that orchard for the next couple of decades. Similarly, a milking parlour can only be used to milk cows and not even goats or sheep can be milked in it without significant capital investments. It follows that this short-term stickiness of response by farmers is often ascribed to asset fixity. Nevertheless, over the longer term change is more responsive and approaches unity.

The implications of the relative inelastic demand and supply functions for aggregate demand and supply in the Agricultural Sector can be explained with the aid of the graphical representation in Figure 1. In this figure the demand function of agricultural products is represented by D_0 and the supply function by S_0 in the baseline. Economic theory dictates that, under these conditions, the optimum price will be where the supply and demand functions intersect (at P_0) and that the market will be cleared with quantity Q_0 of our product to be traded between producers and consumers.

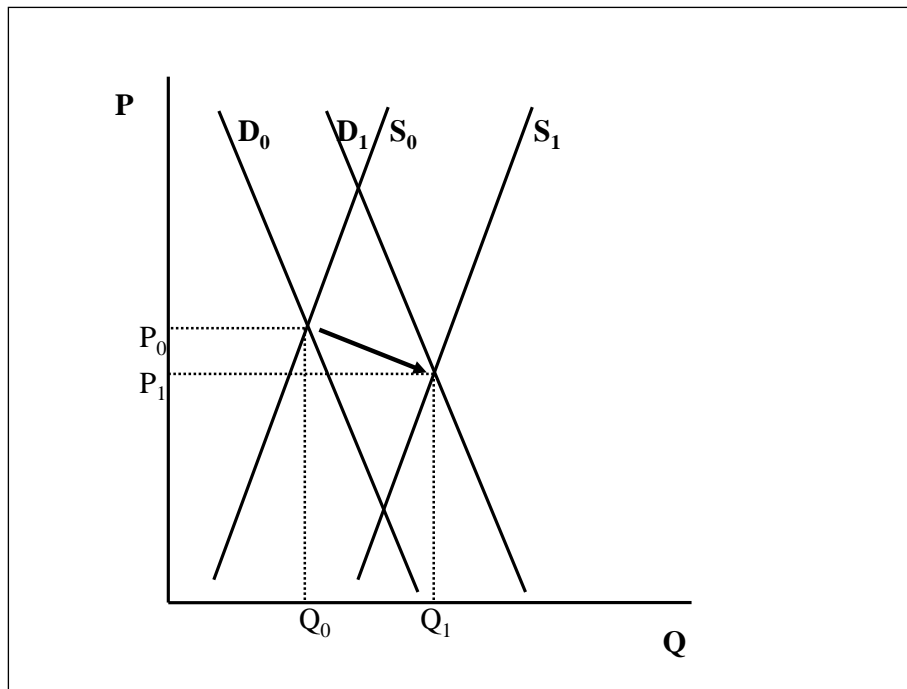


Figure 1: Graphical representation of the problem of low returns.

One of the factors that make farming unique is that it is totally dependent on nature and its vagaries. It follows that volume supplied will often be either higher or lower than expected by the market. This would result in a movement of the price on the demand and supply functions. However, over time other factors such as technology, the prices of other products, income, social factors, tastes, preferences and the number of people changes. As new agricultural technology is usually either yield increasing or cost decreasing (i.e. mechanisation, the green revolution, biotechnology), it follows that any new technology in farming will result in the movement of the supply function to the right (from S_0 to S_1). At the same time the demand function usually also move to the right (from D_0 to D_1) due to population and economic growth with the result that a new equilibrium develops at price P_1 and quantity Q_1 .

The implication of this movement is that downwards pressure exists on the prices of agricultural commodities, albeit that this long-term trend is usually hidden by short-term movements in prices. It follows that only the early adopters of a technology will reap any benefits as any substantial adoption of the technology will lead to a decline in the price that

producers receive. The result is that, in order to financially survive, the next set of technological advances needs to be adopted by farmers and similar benefits will accrue to the early adopters. Due to the fact that farmers need to be at the forefront of the technology to survive (they need to run flat-out just to stand still), this theory has been coined the Treadmill Theory (see *inter alia* Cochrane, 1958; Bonnen and Schweikhardt, 1998; Ritson, 1982; Gardner, 1992). This should not be construed as a plea to limit advances in agricultural technology as such advances add to the general social welfare (this is a debate for another day), but rather as an analysis of the farming reality to cope with.

It is now appropriate to turn to some ways of addressing the treadmill being faced by farmers in the Agricultural Sector. The first potential solution would be for farmers to always be at the top of the treadmill. These farmers would realise that they are competing in the global playing field and they will put all efforts in place to adopt cost decreasing and yield increasing technologies and systems. If this implies increasing the size of the business and adopting labour shedding technologies, so be it.

The second potential solution, developing an additional use for the specific commodity, is graphically represented in Figure 2. According to this approach the additional demand (for instance, the demand for maize as a feedstock in the newly created biofuels industry) would move the demand function of our product from D_0 to D_1 . The result would be that the price will increase from P_0 to P_1 and the quantity demanded from Q_0 to Q_1 .

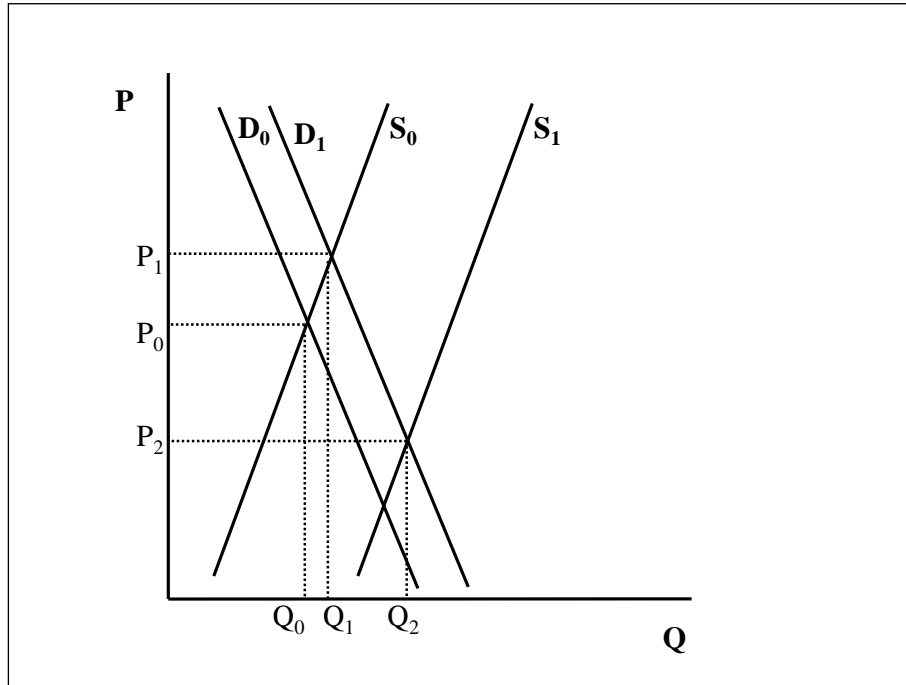


Figure 2: Solution to the farm problem: move the demand function.

However, one could expect that producers would react to this increase in the price of the commodity. One reaction that is currently being experienced is that new land is being cleared for the production of feedstock for the biofuels industry and, due to the higher price, another

reaction is that marginal land is being brought into production. The result would be that the supply function will move to the right (from S_0 to S_1) and that the price of our commodity would actually decline to P_2 albeit at the higher quantity of Q_2 .

The third potential solution would be to change the slope of the demand function or, in other words, to re-focus the product on a different part of the market. In selecting a different market the producer of agricultural products is faced with a totally new demand function with new characteristics, opportunities and means of market penetration. The effect of such a situation on the prices of agricultural products is illustrated in Figure 3. Over time the demand function would still move to the right (change in population, income, etc.) from D_0 to D_1 and the supply function would move from S_0 to S_1 . However, this movement of the supply and demand functions will lead to upwards pressure on the prices of the specific product from P_0 to P_1 .

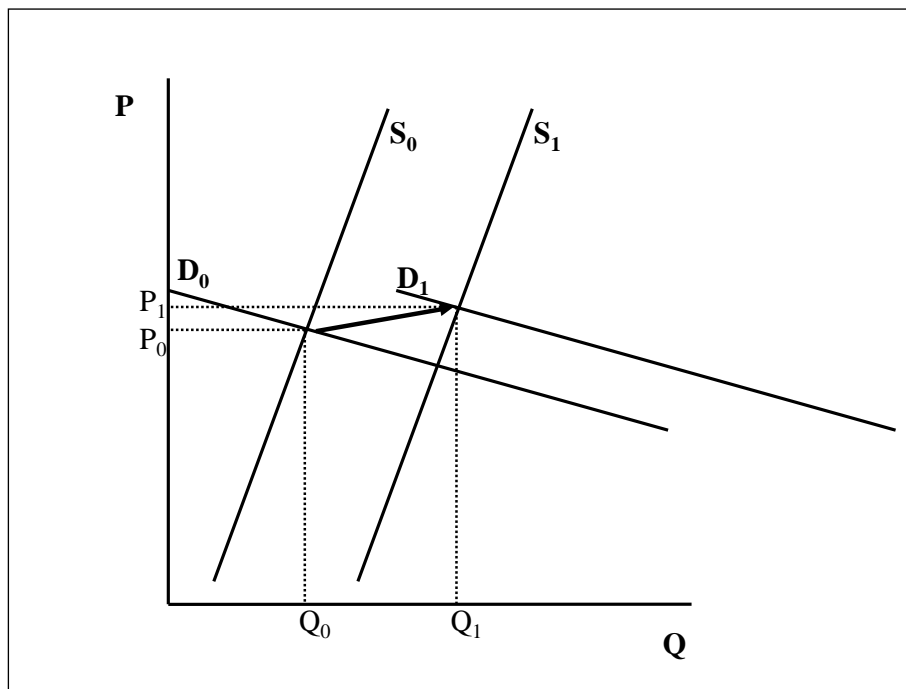


Figure 3: Solution to the farm problem: change the slope of the demand function.

This category of products is typically your differentiated, value added or luxury products. Price usually becomes a less important product characteristic and other attributes, such as non-tangible characteristics and the transformation of the product usually plays a more important role. An added benefit is that an agricultural product with a more elastic price elasticity of demand usually tends to have a higher income elasticity of demand. The income elasticity of demand is typically measured as the average for a specific product while the wide variety in quality and therefore prices within the product group is ignored. An increase in the income within a population would normally lead to a greater than proportionate increase in the expenditure on the higher quality products. Within a product group the income elasticity of demand therefore tends to be higher for the higher quality or

differentiated part of the product group than for the bulk or so-called commodity part of the product group.

Nevertheless, it is important to provide one word of caution. It is illustrated in Figure 4 that the price elasticity of demand is very seldom constant across the entire demand function. The demand function usually consists out of certain segments that are more elastic and other parts that are more inelastic. It follows that, once supply is allowed to move out of the relatively elastic part of the function, the typical problems associated with the inelastic demand of agricultural products are encountered again. An excellent example of a product that moved from the elastic part of the demand curve into the inelastic part of the demand curve is provided by the global increase in the production of Kiwifruit. It is not that an overproduction of Kiwifruit developed, but rather that the demand function its producers face moved from the elastic part of the demand function into the more inelastic part of the function. The speed with which the inelastic part of the demand function is reached is usually exacerbated by the prevalence of imitations or similar products. It is for this reason that it is often proclaimed that “Reputation without protection is a recipe ripe for disaster”.

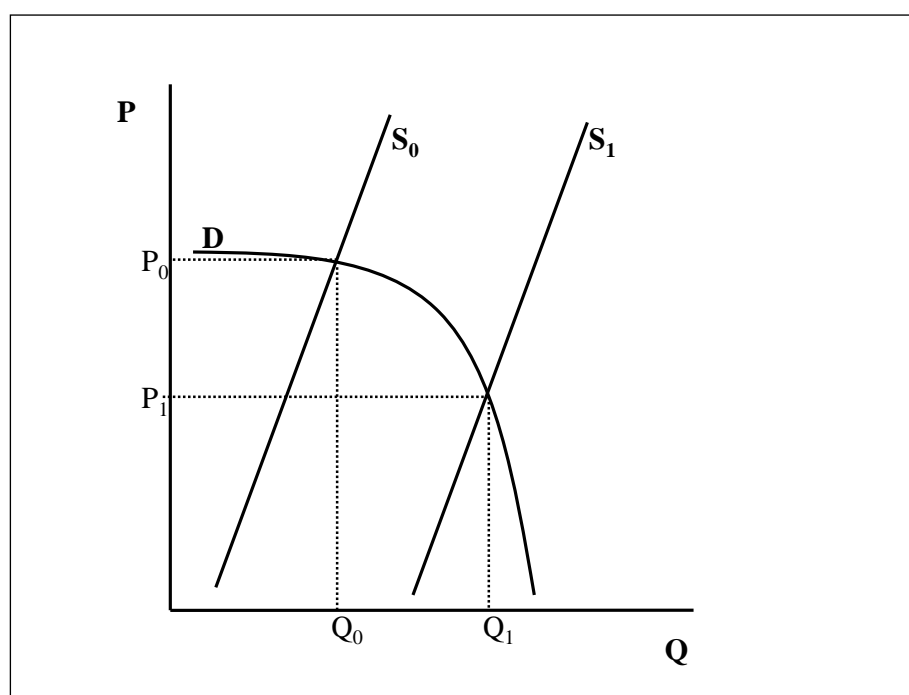


Figure 4: Elasticity of demand is seldom constant over the entire demand function.

One final consideration in this part of the paper, and of special relevance to conditions in developing countries, is the possible effect of product differentiation on the affordability and availability of food to the poor in society. It is clear from the discussion that the objective of the product differentiation is to increase the stability and level of the price of agricultural products. What then of food security? The answer to this question is twofold. In the first instance it must be kept in mind that in all probability only a fraction of the produce can be differentiated through the proposed means. It follows that the net effect on food security will

be close to zero. The second statement is that lucky is the region that exports high value and value added agricultural products while importing cheap agricultural commodities.

This then provides a very sound argument for not only the limitation of the supply of a differentiated product, but also the need to prevent imitations of the differentiated product to reach the market. In other words, some form of certification is required. One avenue of achieving this objective is to link a particular product to the area where it produced, or, in the common vernacular, Geographical Indicators (GI). In South Africa the Wine of Origin System is a successful way in which GI has been facilitated, but, unfortunately, the same cannot be said for products other than Wine. In the next Section this dualistic South African System will be investigated in more detail..

3. GEOGRAPHICAL INDICATIONS IN SOUTH AFRICA

The history of wines in South Africa dates back to Sunday 2 February 1659 when the then Governor of the Cape, Jan van Riebeeck, made the following famous inscription in his diary “...today, praise be to God, wine was made for the first time from Cape grapes ... very fragrant and tasty” (Riebeeck, 1659). From 1726 the Constantia-wines were very prominent and the wine culture became a very special element in the cultural and social life of the population, but especially the rural people, of the South-Western Part of South Africa (Brink 1974). At a very early stage South Africa acknowledged the linkage between the product of the vine and its origin by entering into the Crayfish Agreement with France in the 1930’s. At the basis of this Agreement is the fact that South Africa relinquished the use of the term “Champaign” on the condition that France would open up its market for South African crayfish. A more formal indigenous system for managing and certifying the link between the product and its specific environment was created with the establishment of the Wine and Spirits Control Act in 1970 (Act 47 of 1970).

This system was refined with the establishment of the Liquor Products Act of 1989 (Act 60 of 1989). In this Act a number of elements are relevant for this paper:

- a) In Section 2 of the Act it establishes a Board that will be responsible for the development of policy and the appropriate systems.
- b) However, in Section 3 it allows for the delegation of the Administration of the System to another party that may be better suited for the administration of this system. At this stage the Administration of the Wine and Spirits Scheme is delegated to South African Wine Information and Systems (SAWIS, 2013).
- c) It makes provision for the establishment of the Wine and Spirits Scheme in Sections 14 and 15.
- d) As it is acknowledged that we are living in a fast changing environment, the Act provide in Section 27 for the majority of the details of the scheme to be proclaimed by Regulation.

As part of this System 22 Regulations have been published to date. The most important one that provided the foundation for the Wine and Spirits System was Regulation 1434 of 1990. This Regulation provided *inter alia* for:

- a) The details of the Scheme
- b) Delimitation of the Geographic Areas
- c) Prescripts for cultivar wines.
- d) Vintage wines
- e) Prescribe the conditions for the use of certain terms and prohibits the use of some other terms.
- f) Prescribe bottling, sampling, certification and the requirements for seals and labels.
- g) Payment of fees.

It is clear that this scheme is an absolute success. From 1998 to 2011 the volume of wine certified under this scheme has increased from 128,1 million litres to 440,1 million litres (an increase of 244%) and the share of the harvest being certified increased from 24% to 53% of total grapes harvested (SAWIS, 2012). It must be remembered that certification comes at a cost in terms of both direct cost (e.g. payments of about R0,06 per litre to SAWIS) as well as indirect administrative costs. As this system is voluntary it follows that producers will not support it if they are of the opinion that it does not add value to their businesses.

This System allows for the formalisation of the linkage between the geographical area and a particular wine. To this end it makes provision, in an overlaying order and in declining order of size, for:

- a) 5 Geographical units
- b) 6 Production areas
- c) 25 Districts
- d) 66 Wards
- e) 129 Estates
- f) Single vineyards (SAWIS, 2013)

This means that a producer may, according to individual needs, decide where to source the grapes for the wines. In practice it means that certain entrepreneurs would decide to produce Estate Wine of Origin, of course sourcing all grapes from the specific estate. In other instances an entrepreneur may decide it is more appropriate to have a Wine of Origin from a bigger delimitation, allowing him to source grapes from a number of farms. In this case it allows the co-existence of trademarks and GI.

Finally, the System is very rigorous in terms of the Certification procedures and the latest technologies are being used. On the neck of each bottle a certification seal is attached. As each bottle has a unique number and the consumer can in real time query the number on the website, this allows for consumer participation and confidence.

This System has been long established, globally recognised and is flexible in allowing the entrepreneur to decide what is appropriate for the specific circumstances. At the same time it ensures that the correct information is conveyed to the consumer.

It is now appropriate to move the attention from the Wines and Spirits System to the System for non-alcoholic products. With this transition the real meaning of South Africa's duality is revealed. Whereas the Wine System has been long established, the System for products other than wines and spirits has been designed to be just compliant with South Africa's international commitments and, more specifically, the TRIPS Agreement. Grant (2005) indicates that it uses a combination of the Trade Marks Act, Unfair Competition Regulations and Consumer Protection Laws to be TRIPS compliant. Finally, an Amendment Bill on Intellectual Property is in the process of being finalised by the Department of Trade and Industry. It is clear that this Bill will address some of the Intellectual Property concerns that are currently on the table.

4. FROM THEORY TO PRACTICE: ROOIBOS

This discrepancy between the two systems did receive some attention in the South African agricultural economic fraternity. Mendes and Troskie (2001) argued from a New Institutional Economics perspective that a South African *sui generis* system for Geographical Indications would lower transaction costs in the value chain through defining intellectual property rights. This would especially be to the advantage of smaller industries with a significant exposure to the world market. The economic raison d'être for Geographic Indicators was further explored by Bramley and Kirsten (2007) who came to the conclusion that a good motivation for GI exists from the perspective of information transmission, the creation of niche markets, club forming, value adding and rural development. Daya and Vink (2006) evaluated the ability of the current intellectual property protection regime in South Africa to protect the traditional knowledge as embedded in an indigenous plant. They used *Sutherlandia Frutescens*, also commonly known as Kankerbossie (Afrikaans), Phetola (Setswana), Lerumo-lamadi (Sotho) or Insiswa (Zulu), as a case study and came to the conclusion that the creation of a *sui generis* system would provide a more appropriate protection regime than the current patent rights and trademark systems. Grant (2005) investigated the appropriateness of two Tea Industries (Rooibos and Honeybush) as well as Klein Karoo Ostrich to register a Geographical Indicator. It was found that Rooibos and Honeybush may be ideal Geographical Indicators, but the Klein Karoo Ostrich lack specificity. Another project was the so-called Duras project funded under the Johannesburg Declaration of the WSSD. This project, with the name "*Linking farmers to markets through valorisation of local resources: the case for intellectual property rights of indigenous resources*" was a multi-stakeholder project with participants from South Africa, Namibia and France. Six different case studies in South Africa and Namibia were investigated (see Bienabe *et al*, 2008) and one of these case studies will form the basis for discussion in the rest of this Section.

Around the turn of the Century the so-called “Rooibos case” captured the headlines in South Africa. The essence of the case is that Forever Young, a South African Company specialising in pharmaceutical and skin care products, registered the “Rooibos” trademark on 12 August 1992 in the United States (USPTO, 2004). When the owner of the Forever Young neared retirement age, she sold the Rooibos trademark in 2001 for \$10 to her long standing US business partner, a company with the name of Burke International (Cape Argus, 2005). Although cancellation procedures was started by Rooibos Ltd (the major Rooibos processor in South Africa) soon after the registration by Forever Young (USPTO, 2004), the whole problem only reached the front pages of the popular press in South Africa when the Wupperthal cooperative (representing the resource poor farmers in Wupperthal) ran into legal problems while exporting their product to the US. During the process Burke International claim to have spent quite a considerable amount (\$250 000) on policing and protecting its trademark (Tralac, 2007). However, probably one of the most insulting incidents was when Burke International demanded royalties from South African companies for using the term Rooibos in the US (Sunday Times, 2004). Further, it must be remembered that Burke International use Rooibos as an ingredient in their skin care products with the result that their imports of Rooibos amounts to less than 1 ton per year. Fortunately (from a South African perspective) a number of the coffee houses in the US wanted to sell Rooibos and thus joined the litigation process (Cape Argus, 2004). The case has since been settled out of court following a ruling in February 2005 by a district court in Missouri in favour of a US company (Republic of Tea) (Tralac, 2007). Nevertheless, this was done at the cost of about \$1 million for the Industry.

Partly as a result of this specific case some insights took place in South Africa. These include:

- a) We should not only be afraid of other countries trying to protect their own, but we also have a heritage that is at risk.
- b) The cost of the case represented quite a substantial amount for a small industry.
- c) The responsibility to protect our heritage should be allocated. Is this the function of government or of the (private) role-players in the industries? This is especially a problem for the smaller industries without a substantial economic base, multiplied by the number of countries where protection is sought.
- d) It is necessary to embark on a serious quest in search of solutions.
- e) Even South Africans cannot be trusted, but may for financial or other personal reasons exploit the collective heritage if it is not protected adequately.

One of the results that came out of this whole case is the establishment of the South African Rooibos Council (SARC). Although it is still in its infancy, it represents the whole industry (small and commercial producers, labour, processors, etc.) and is an ideal vehicle for collective action. Another result is that, since this case reached the headlines, various government institutions (Department of Trade and Industry, National Agricultural Marketing Council) started showing interest in the problematique surrounding this case. At the same time, and providing a link between policy development and research, a number of research projects surrounding Geographical Indicators were launched. These included a collaborative

project between four of the nine Provinces of South Africa, the multi-stakeholder (Universities, Research Institutions, Government Departments) and multi-country (South Africa, Namibia, France) Duras Project as well as the Biodivalloc project. Finally, an Amendment Bill on Intellectual Property is in the process of being finalised by the Department of Trade and Industry. It is clear that this Bill will address some of the Intellectual Property concerns that are currently on the table.

The process to develop a Geographical Indication for Rooibos was described in Bienabe and Troskie (2007), Rooibos is a fairly small industry localised in the arid parts of Western South Africa. About 350 farmers are involved in the production of Rooibos and the majority of these farmers are commercial farmers. However, there are specific communities of resource poor farmers such as Wupperthal and Heiveld where the production of Rooibos is indelibly linked to the culture as well as the economic and social life of the individuals. It is significant to note that there is a significant price difference between ordinary Rooibos and Rooibos with attributes such as originating in the mountain, wild harvested and organically or fair trade certified.

On the processing side there are 8 processors, of which one dominates the market with approximately 75% of the market share. Close to two thirds of the Rooibos is exported and in the export market Rooibos is distinctly recognised as a uniquely South African product. The current boom in the export demand for Rooibos is closely related to its health attributes. A major problem is that the majority of the product is currently exported in bulk and it follows that a significant opportunity for down-stream value adding exists. Another opportunity or problem, depending on your specific point of view, is that Rooibos is not only used as a tea, but also forms a significant ingredient in certain pharmaceutical and skin-care products. This property was exactly at the basis of the trade mark dispute with Forever Young.

It is important that the SARC has fully accepted ownership of Rooibos as a potential GI, and the whole case study with its potential future registration as a GI is being driven by this body. At the centre of the Rooibos as a GI is the product specification and the Industry is in the process of finalising this specification. On the one hand this specification is based on consensus whilst on the other hand the need for good scientific evidence for each of the elements is also recognised. The first part of the specification is the delimitation of the areas and the industry has identified five conditions that need to exist for the successful production of Rooibos. These are:

- a) It must in the winter rainfall area.
- b) The substrate must be a derivative of Table Mountain Sandstone.
- c) It must be deep, well drained sandy soils.
- d) The ph of the soil must be below 7.
- e) It must be in the Fynbos biome.

By using these criteria the delineation of the production area of Rooibos can be delimited.

The second leg of the product specification is production practices. The main elements of the agreed upon production practices include:

- a) Production must take place in the delimited area.
- b) Biodiversity standards were developed. The reason for this is that due to wild harvesting, production expansion and changes in the crop patterns, biodiversity and the well-being of natural resources are under threat.
- c) It must be produced under dryland conditions.
- d) However, irrigation is allowed on the condition that no irrigation takes place within the two months prior or during harvesting.

The third leg of the product specification is the harvesting standards. Only two important elements were identified, namely:

- a) It must be annually harvested.
- b) At least 20% of the leaves must be retained.

Probably the most important part of the product specification, and also the part containing the most sensitive elements, is the processing part of Rooibos. The main elements include:

- a) It must be delivered to the tea court within a specified time.
- b) The green material must be cut to a specified length.
- c) It must be placed in a specified manner in the sun and wetted to aid fermentation.
- d) The leaves must be bruised for fermentation.
- e) No catalysts may be added to the product in order to facilitate fermentation.
- f) Odour and colour codes have been agreed upon for the fermented product.
- g) Following the fermentation the product must be spread in the sun for drying. Due to the specific harsh conditions in this area, the exposure to the sun provides a further link to the specific delimited area.
- h) It must be dried in the sun to a moisture content of less than 10%.
- i) It must be stored in a cool, dry place.
- j) All health regulations must be adhered to.
- k) The tea court itself must be in the delimited area.

With the exception of the delimited area, a separate and distinct product specification has been developed for Rooibos as a green tea. Certain key elements of the product specification have not been completed yet. These include the social elements of the specification as well as how inspection and certification will take place. As soon as these have been agreed upon, a more detailed cost/benefit analysis can be completed.

Although certain questions and challenges still remain in the Industry, it is clear that there is a momentum in the Industry for the valorisation and protection of Rooibos. This momentum is not only at producer level, but also on an institutional and consumer level. It follows that it can be expected that, once the product specification is completed. For this reason domestic and international registration as a GI will be sought by the Rooibos Industry.

5. GEOGRAPHICAL INDICATIONS IN AFRICAN CONTEXT

Up till now this paper had a very clear bias towards South Africa and its systems. However, in Africa a range of products with the necessary geographical and quality characteristics to differentiate it from other products does exist. These products were identified during a workshop in Kampala in 2011 and a summary of the products is provided in Table 2. It is evident that all African countries does have some products that are unique and in which its specific origin can be used to differentiate it from other products.

Table 2: Potential Geographical Indications in some African countries.

COUNTRY	PRODUCT	STATUS / COMMENTS
Burkina Faso	Massina Kwite butter Beurre de karité de la Sissili Souflou green beans	Candidate for GI protection in OAPI
Cameroon	Miel d'Oku Njombe pepper	Candidate for GI protection in OAPI
Côte d'Ivoire	Atcheke of Grand Lahou Khorogho	Non-agricultural (garments) Candidate for GI protection in OAPI
Ethiopia	Sidamo Yigacheffe Harrar Limu Jimma Lekempt Ghimbi	All coffees; Sidamo, Yigacheffe, Harrar registered as trade marks in main markets (EU, US, Jpn). No intellectual property protection in Ethiopia.
Gabon	Oukoume timber	Wood product
Ghana	Ghana Cocoa Ghana Fine Flavour Cocoa Kente Cloth (non agricultural)	
Guinea	Diama coffee Mafeya pineapple Café du Mont Ziama	Candidate for GI protection in OAPI
Kenya	Kenya Tea Mount Kenya Roses Kenya Coffee Masai coffee Arusha Coffee Ngorongoro Mountain coffee Cut flowers Wild silk	
Madagascar	Vanille du Madagascar	
Mali	Échalote Dogon	
Mauritius	Mauritius Demerara Sugar	

COUNTRY	PRODUCT	STATUS / COMMENTS
	Rodrigues Limes Baie Topaz Red Beans Piment Rodrigues Bois Cheris Tea Rodrigues Honey	
Morocco	Huile d'olive Tyout Chiadma AO Safran de Taliouine AO Argane IG / Huile d'argan Dattes Majhoul de Tafilalet IG Clémentine de Berkane IG	Registered under sui generis GI system Argane: applied to EU as PGI
Nigeria	Pepa Yam	
Rwanda	Rwanda Mountain Coffee	
Senegal	Senegal Yett	
South Africa	Rooibos Heuningbos Karoo Lamb Camdeboo Mohair Swakara Kalahari Melon Seed Oil Klein Karoo Ostrich South African Olive Oil Boland waterblommetjies Wine of Origin	Application for certification mark Application for certification mark Trademark Trademark Trademark Voluntary certification scheme <i>Sui generis</i> system
Tanzania	Zanzibar Cloves Rift Valley Coffee	
Uganda	Bark-cloth textiles of central Uganda West Nile district cotton West Nile district sesame	Non-agricultural product West Nile cotton and sesame are the subject of "regional branding" project by WIPO

Source: AU/EU (2011)

However, there is often a significant disjuncture between the availability of a unique product and the institutional means to protect it. Table 3 provides a summary of the institutional frameworks in various African countries to protect products with unique characteristics.

Table 3: Systems to protect Geographical Indications in African countries.

COUNTRY	SYSTEM	INTERNATIONAL AGREEMENT
Algeria	Specific GI system	
Angola	Trade mark law	
Benin	Specific GI system	Bangui agreement (OAPI), March

COUNTRY	SYSTEM	INTERNATIONAL AGREEMENT
		1977, and amended 1999
Botswana	Trade mark law	
Burkina Faso	Specific GI system	Bangui agreement (OAPI), March 1977, and amended 1999
Burundi	Trade mark law	
Cameroon	n/d	
Cape Verde	n/d	
Central African Republic	Specific GI system	Bangui agreement (OAPI), March 1977, and amended 1999
Chad	n/d	
Comoros	n/d	
Congo (Kinshasa)	Specific GI system	Bangui agreement (OAPI), March 1977, and amended 1999
Congo (Brazzaville)	Specific GI system	Bangui agreement (OAPI), March 1977, and amended 1999
Côte d'Ivoire	Specific GI system	Bangui agreement (OAPI), March 1977, and amended 1999
Djibouti	n/d	
Egypt	Trade mark law	
Eritrea	n/d	
Ethiopia	Trade mark law	
Gabon	Specific GI system	Bangui agreement (OAPI), March 1977, and amended 1999
Gambia	Trade mark law	
Ghana	Trade mark law	
Guinea-Bissau	Specific GI system	Bangui agreement (OAPI), March 1977, and amended 1999
Guinea Equatorial	Specific GI system	Bangui agreement (OAPI), March 1977, and amended 1999
Guyana	Specific GI system	Geographical Indications Act (proposed)
Kenya	Trade mark law	
Lesotho	Trade mark law	Banjul Protocol (ARIPO), 1997
Liberia	Specific GI system	
Libya	n/d	
Madagascar	Trade mark law	
Malawi	Trade mark law	Banjul Protocol (ARIPO), 1997
Mali	Specific GI system	Bangui agreement (OAPI), March 1977, and amended 1999
Mauritania	Specific GI system	Bangui agreement (OAPI), March

COUNTRY	SYSTEM	INTERNATIONAL AGREEMENT
		1977, and amended 1999
Mauritius	Specific GI system	Geographical Indications Act N. 23, 8.8.2002
Morocco	Specific GI system	Geographical Indications Act
Mozambique	Specific GI system	Industrial Property Code, Decree 18/99, 4.5.1999
Namibia	Trade mark law	
Niger	Specific GI system	Bangui agreement (OAPI), March 1977, and amended 1999
Nigeria	Trade mark law	
Rwanda	Trade mark law	
Senegal	Specific GI system	Bangui agreement (OAPI), March 1977, and amended 1999
Sao Tome & Principe	n/d	
Senegal	Specific GI system	
Seychelles	Trade mark law	
Sierra Leone	Trade mark law	
Somalia	n/d	
South Africa	Trade mark law and specific GI system (wine and spirits)	
South Sudan	n/d	
The Sudan	Trade mark law	
Swaziland	Trade mark law	
Tanzania	Trade mark law	
Togo	Specific GI system	Bangui agreement (OAPI), March 1977, and amended 1999
Tunisia	Specific GI system	
Uganda	Trade mark law	Banjul Protocol (ARIPO), 1997
Zambia	Trade mark law	
Zimbabwe	Specific GI system	Geographical Indications Act No 24/2001

Source: AU/EU (2011)

The information provided in this Section clearly illustrates that a number of products, with unique characteristics, does exist in Africa. With a little bit of effort each country would be able to field a number of unique products. However, although a number of countries does have the appropriate systems in place, the appropriate institutional systems is lacking in a number of other African countries. It follows that, despite good intentions, very little progress has been made to protect the underlying values embedded in these products and to

allow its producers to extract the potential value added rents. The creation of a Pan-African institutional system may be one area to be pursued by the African Union.

6. CONCLUSION

In the first part of this paper the economic rationale behind product differentiation was investigated. It was found that commodity producers in the Agricultural Sector are faced with a specific set of circumstance flowing from the particular price elasticity of both the supply and demand functions for agricultural commodities. These specific set of circumstances leads to downwards pressure on the prices of agricultural commodities and to a phenomenon known as the Treadmill Theory. A number of interventions are possible to address the Treadmill, but care must be taken that subsequent commoditisation of niche products does not undermine the original intention.

In the second part of the paper it was argued that two very distinct systems for the protection of Geographical Indications do exist in South Africa. The one system is very sophisticated and is designed to convey information to the consumer and to cultivate confidence in the system. The second system, applicable to non-alcoholic agricultural products, has been designed to be barely TRIPS compliant.

In the third part of the paper one product, Rooibos Tea, was used as a case study to determine whether it contains the appropriate characteristics to be differentiated by linking it to a specific geographic area. The necessary value elements were provided.

In the last Section the web was extended to include the African Continent. It was found that an abundance of differentiated products does exist in a number of African countries and that this list can probably be expanded through a concerted effort. However, although the necessary institutional systems do exist, a number of African countries do not have the appropriate system in place. The development of a Pan-African system may be an area where the African Union may take the lead.

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