# Commercialisation of goat production in South Africa

M. Roets, J.F. Kirsten

#### 1. Introduction

South Africa has over 6 million goats that are owned by two distinct sectors, the commercial farmers and the small-scale, non-commercialised farmers. The commercial farmers keep Angora goats for mohair production with surplus stock being marketed in the goat meat sector and Boer goats specifically for meat production. Marketing of livestock for meat is done in various ways and the meat moves along different channels to consumers. Marketing of meat animals by commercial farmers is mostly through a well-organised system with capital resources, infrastructure, institutions, legal frameworks and markets. Mainly the non-commercial farmers use an informal marketing system, which is characteristic of developing economies. The informal marketing channel is more often the route of necessity than the route of choice. Informal markets hold potentially many risks to both the producer and the consumer. Despite existing international niche markets and potential local niche markets that remain to be exploited, shifts in global consumer preferences and demand have opened up the possibility of the development of "exotic" (read indigenous) products of interest to the discerning consumer (Farias, 2001; Mahlase, 2001).

In South Africa, the development of non-commercialised goat farmers and entrepreneurs and the transformation of the currently fragmented industry into a formal mainstream industry have been constrained by historical, institutional, market, information, and research factors. The goat resource in the country (mainly owned by non-commercialised farmers) is large enough to ensure a consistent supply of product to the market. Furthermore, several historical perceptions, marketing systems and the institutions that governed the industry in the past and constrained its development are of little consequence today. Interesting and innovative product development targeted at specific niche markets and based on sound market analysis is key to commercialisation. Infrastructure and institutional arrangements will have to be created to link primary producers to the markets. Throughout this development process strong technology transfer and information provision exercises should ensure that non-commercialised farmers are kept abreast of developments and are not excluded from participating fully in the new industry.

This paper proposes methods to link the non-commercialised sector with global markets, whilst creating new institutional arrangements of benefit to commercialisation.

# 2. Methodology

Agricultural economics, and specifically New Institutional Economics, has created a unique platform for the description and presentation of information related to non-commercialised farmers. New Institutional Economics (NIE) is a multidisciplinary field that includes aspects of economics, history, sociology, business organisation, political science and law (Kherallah and Kirsten, 2001). The NIE theoretical framework is quite similar to that promulgated by the Farming Systems Research and Development (FSRD) school of thought. Meindertsma (1994) stated that FSRD links specialised thematic and commodity research to real-

world agriculture with its concomitant socio economic and institutional environment. New Institutional Economics thus clearly resonates with the theories of FSRD and Systems Theory.

The main feature of NIE is its emphasis on transaction costs; institutions and institutional arrangements determine these. In this paper it is postulated that international trade opportunities and globalisation has created a niche for the commercialisation of indigenous South African goat resources. However, to successfully enter and occupy this niche, certain institutional arrangements, comfortable and culturally acceptable to non-commercialised farmers, need to be created, while at the same time, addressing the global challenges of quality, consistency and high standards. The development of these institutions requires attention to formal (contracts, organisations, markets) and informal (traditions, customs) institutions, both at macro (legal) and micro (organisational form) level.

### 3. Institutional innovation to commercialise the goat industry

Globalisation has brought with it new demands by retailers (following from direct pressure from consumers and consumer groups) for tractability, quality and consistency of supply. A consumer wishes to find the product he/she requires now (regularity of stocking), on the shelf where he/she found it previously, equal in appearance to the previous purchase (branded), equal in quality to the previous purchase (consistency), and feels satisfied that he/she can trust its safety for consumption. If proved unsafe, the consumer would wish to have some form of recourse, which is enabled through the mechanism of tractability back to source. Sporleder (1992) further mentions that consumers are demanding specialised and relatively low-volume food products.

These demands have led to the increased occurrence of vertical integration in agricultural food and nonfood product markets (Sporleder, 1992; Martinez et al., 1997; Gow et al., 2000; Engelbart et al., 2001; SAMIC, 2002; Singh, 2002). A supply chain created through vertical integration can be defined as an integrated process through which a number of firms co-operate in an effort to acquire raw materials, process these materials into another form, and deliver these products to consumers (Bearnon, 1998; Rehber, 1998). The terms vertical coordination, vertical integration and contract production are often used interchangeably (Cramer and Jensen, 1988) to describe the relationships between role-players within a production or supply and marketing chain. Vertical integration not only increases the efficiency and effectiveness of logistical operations with which a group of firms can deliver healthy, safe and desirable products to the consumer, but strategic alliances also ensure possibilities of strong market position due to critical mass (Downey, 1996).

Since the production and marketing envisaged for the Goat Industry requires a consistent flow of raw product into the chain, a possible mechanism to ensure this (without creating an employee-employer relationship) would be through formal vertical coordination within the industry. Rehber (1998) recognises four types of vertical coordination that can occur and Sporleder (1992) describes these as a continuum of exchange arrangements. These are:

- (a) Coordination without a contract: This is called a spot market or open market transaction since there is no written or oral contract between the firms in the production and marketing chain. Each player in the chain can buy or sell his/her inputs and outputs to whomever he/she pleases, often based on price. The disadvantage of this lack of formal relationship is that there is uncertainty regarding future successful transactions taking place. Spot markets drive the current goat industry.
- (b) Contract farming: This entails relationships between producers and private or state enterprises that provide processing, export or purchasing activities that regulate prices, production practices and product quality, which replace spot markets. Variations of contract farming have been called "out grower schemes", "nucleus-out grower schemes" and "satellite farming invarious parts of the world,

- and are generally promoted as an institutional innovation to improve agricultural performance, delivery of agricultural inputs and information in less developed countries.
- (c) Ownership integration: Here each individual firm loses its identity and becomes an entity within a larger company.
- (d) *Farmer co-operatives*: Here the emphasis is that the firm is owned and controlled by the producers, and operates for the mutual benefit of its members (producers or patrons).

It would be difficult to "own" each of the non-commercialised goat operations in South Africa so "ownership integration" is not an option to consider. The spot market system is the system in which the industry currently resides, but lacks in its ability to ensure the greater development of the goat industry, often excluding the smaller, less-informed role players, is inconsistent and unreliable as a production-planning tool, and prices are variable. It thus stands to reason that the formation of co-operatives and contract growing becomes the vehicles of choice to commercialise the goat industry. Contract farming refers to the system by which produce is supplied under a forward contract, where a commitment is expressed to deliver a commodity of a specific type, quality and quantity, at a certain time and price to a known buyer (Singh, 2002). Singh (2002) reports that farmers felt that contracting helped them become better farmers, gave more reliable incomes, generated employment, provided new skills in farming, and did away with patron-client relationships between large and small producers.

For the purchasing, processing or export enterprise the establishment of a contractual relationship becomes obligatory if they are to ensure consistency of supply to retailers and other clients (if all the products are to share a common brand (Raynaud, 1999)), and because of the high sunk costs and specificity of infrastructure and other relationship-specific costs (negotiating shelf-space, e.g. listing fees, organising transport and distribution, e.g. time-based contracts, etc.) (Sporleder, 1992; Gow et al., 2000) required in the process to get the product to the consumer. In this scenario, the goat resource is mainly in the hands of the non-commercialised farmer, thus contracts could ensure not only the critical mass required to enter the retail and international market place, but could also assist in "locking" the non-commercialised farmer into a formal industry. A "mutual dependency" is thus created between the producer and the processing, export or purchasing enterprise, and this relationship is best described by a legal contract since the number of parties involved would be too great for verbal assurances alone, and the risk of providing heterogeneous products to consumers would be too high.

The enforcement of contracts has often proved problematic in developing countries where the public law enforcement institutions are in disarray or in the process of formation (Gow et al., 2000). Although this is not necessarily the case in the South African situation with its sound legal system, public legal enforcement channels are expensive. Contracts and legal processes are also an unknown field for non-commercialised farmers, so private sanctions could be created to assist them in reducing the possibility that they could create a hold-up in the production and processing chain (Gow et al., 2000). Sanctions can include the termination or non-renewal of the relationship (or renewal of future contracts biased against the reneging party in terms of pricing or conditions), or damage done to the reputation of the party who caused the hold-up (Gow et al., 2000). However, Gow et al. (2000) describes several internal institutional innovations applied by a private company to increase contract compliance. Some may be applicable to the goat industry's production and marketing chain:

- Input provision and investment facilitation programmes for farmers that sign a long-term contract.
- A fixed base-price (slightly higher than the market price) and timely payment for deliveries bonuses and penalties for pre-set quality.
- Negotiated price reductions and guaranteed repayment of purchases with a select group of input suppliers that producers are encouraged to deal with.

- Formalised programmes with agricultural banks for the provision of financing for machinery investment and working capital, guaranteeing repayment and negotiating reduced interest rates for the producers.
- Technical support and extension programmes which also allow monitoring of farms.
- Media and public relations campaigns to further assist in the dissemination of these benefits to producers.

These contractual and institutional innovations may increase goat production and increase the building of trust between producers and a processing and marketing enterprise as these will be seen by producers as the enterprise being willing to put its reputation on the line to back their contracts with timely payments at a good price.

Where contract growing has been established in developing countries several lessons have been learned and these should be kept in mind when implementing such as system. Singh (2002) describes some reasons for contract default by chilli, tomato and potato contract producers and their contracting companies in India. Some of the reasons for disenchantment with the contract growing system included: companies became more strict on quality when they had over-contracted or when yields were good (the contracts are based on acreage planted and not necessarily on weight delivered), trust was reduced when the companies (who supply seedlings to contract producers) sold off excess seedlings to non-contracted producers, some of these seedlings were reported to be of poor quality, farmers felt that the companies had corrupt arrangements with the fertiliser and pesticide companies whose products they recommended to their farmers, poor coordination of activities, poor technical assistance, delayed payments, and manipulation of norms by the companies. However, although these problems occurred, most producers (from 62% to 80%) wanted to continue with contract farming, and felt benefited by the arrangement. Further benefits in the development of contractual farming operations is that such arrangements can allow the purchasing, processing or export enterprise to access government and international funding agency investments or incentives since it is assisting in the development of noncommercialised farmers. Additionally, farmers become more "visible" to other development agencies, government programmes, financial service providers and providers of input supplies (Singh, 2002).

# 4. Implementation: case studies

# 4.1. Umzimvubu goat production and processing facility

The Umzimvubu Goat Production and Processing Project combines elements of infrastructure development, social facilitation, institutional development, and technology transfer and training. This project started as an initiative of a Member of Parliament who became interested in the possibility of goats for Eastern Cape rural development after viewing a Goat Product exhibit in Parliament in 1999. This illustrates the importance of linking innovative research outputs with potential beneficiaries of the knowledge (Eponou, 1990). An NGO in the area organised a series of goat production and product demonstrations at several villages in the area and following the positive sanction of interested goat farmers of the region, the idea of a Goat Production and Processing Facility was born.

Almost immediately linkages with the Local Governance structure of the region and the District Municipality were formed. The District Municipality took ownership of the concept, and assisted in the design of a funding proposal to National Government. In this case specifically, funding was obtained from the Integrated Sustainable Rural Development Programme, managed by the Independent Development Trust, and granted via the Department of Local Government and Housing. Spending occurs through the Local Economic Development Programme of the Alfred Nzo District Municipality. Villagers also listed "Goats" as a priority during the process of priority setting that informed the Integrated Development Plans of the region. Thus, the

importance of grass-roots sanction, local government and national government support should be highlighted here.

Most non-commercialised farmers have small herds varying in size from 10 or 20 animals (Eastern Cape), although herds as large as 300 animals can be found in the Northern Cape. Small herd sizes increase the transaction costs for the individual farmer. Inputs required can be prohibitively expensive. For example: medicines and ear tags (small pack sizes cost more), management tools (dosing guns, ear tattoo machines, ear tag applicators are expensive), transport facilities, and holding pens. Also, herd structures are often incorrect. Only one buck is needed for every 40 does. Most farmers have their own buck and does, but the bucks are largely unproductive whilst utilising expensive resources (feed, management time, medicines etc.).

These obstacles can be overcome through the collective action of Goat Farmer Co-operatives. Each farmer becomes a member of the co-operative, and receives a membership number. Through these co-operative groups costs of medicines and ear tags can be reduced when bought in bulk, and management equipment and marketing infrastructure can be shared. Group formation also ensures that those farmers who are interested in becoming commercial goat farmers are identifiable, and can receive targeted support. This support may include the provision of marketing infrastructure, transport assistance, training and technology transfer and financial services. Co-operatives can reduce the cost of registering brands or tattoos in the case of goats and sheep by registering a single brand/tattoo for the co-operative with the National Department of Agriculture's Registrar of Livestock Improvement. Although the co-operative brand then appears as an ear tattoo on each goat, the ear tag can include the membership number of the member farmer, and the animal number. This will assist in complying with the tractability requirements of the retail and international markets. To establish a consistent supply of raw product, farmer groups can plan and define their production and delivery capabilities together, and provide this information to the next link in the chain (the transporters or the processors). A group thus achieves consistency of supply where different owners can present their animals for sale at different times, but the supply generated by their group activity is consistent.

Umzimvubu Goats was developed to consist of a central "Umbrella" farmer co-operative (Umzimvubu Goats), managed by a board of nine directors. The members of this co-operative are currently six (6) regional co-operatives operating in Wards within the Alfred Nzo District Municipality. Each of these regional co-operatives has their own identity, are legally registered, have their own boards of directors, and member farmers drawn from the villages within each ward. Membership varies amongst the regional co-operatives (300–750 farmers), and members are drawn from a varying range of villages in each case (7–15 villages). Membership has been voluntary, and guided by a step-by-step social facilitation process described for project beneficiaries and service providers in a "Farmer Facilitation and Co-operative Development Process<sup>©</sup>," manual (Roets, 2004a). A "joining fee" is an internal initiative taken by the cooperatives to ensure that members are indeed interested in being part of the venture. This demonstrates that the Co-operatives are entirely self-governing, and are developing their own systems of managing moral hazards and free riders.

Historically, indigenous goats were primarily utilised for traditional and religious purposes and emphasis was not placed on maximising the commercial potential of the animals. The quality required by the traditional and religious markets is based mainly on colour patterns and size; larger animals often being preferred, and, depending on the ceremony, male or female goats may be required. In the process of changing the indigenous goat into a consumer product, and in order for the non-commercialised farmer to survive in the modern competitive market, he/she needs to be assisted to understand the importance of age, body conformation score, weight, accurate record keeping and animal identification. In practical terms, farmers must be taught how to judge an animal's weight, must be shown how to use a scale (and must be provided access to a weighing scale on a continuous basis) (weights under 35 kg being preferred), must learn how to tell the age of a goat (goats under one year of age being preferred), be able to judge the body condition score of an animal (body condition scores of 3 or 4 being preferred), must begin an accurate record keeping system for his/her herd, and must

apply ear tattoos and ear tags to each of his/her goats. This new knowledge will ensure that the product meets the required product quality specifications.

An obvious omission here is any discussion of superiority of or preference for specific breeds. This is based on the results of the market surveys and knowledge of the goat resource in general. From the surveys it becomes clear that the consumer requires tasty, safe, nutritious products. The consumer is less inclined to demand particular breeds. Furthermore, with the emphasis on value-adding, the importance of size of the carcass is reduced. It is felt that as the industry develops non-commercialised farmers will intuitively seek faster growing and more fertile breeds that can produce multiple offspring in a shorter period of time. For the interim however, emphasis need only be placed on the provision of young, healthy goats into the marketing chain.

Technology transfer activities have followed a trial-and-error process in the Umzimvubu case. Initially, involvement of the Eastern Cape Department of Agriculture Extension officers was pledged to support the farmer training drive. Approximately 25 Extension officers were trained in the project concept, goat management practices, value-adding opportunities, and farmer facilitation and co-operative development processes. However, the differences between the institutional cultures of the District Municipality (which are under obligation to perform to performance contracts) versus the Regional Agricultural Department (with their limitations in vehicle resources, level of competence of the Extension officers, poor supervisory arrangements) soon became apparent, and little or no activity was observed from the side of this group of Extension officers (apart from the work of two individuals who were very active and very successful in their regions despite the same constraints as their colleagues). The limitations of agricultural extension services are a matter often commented on in development literature.

Because of these limitations, it was decided that farmer training should be handled internally. To effect this, a "Regional Co-operatives, Membership, Goat Production and Delivery Guidelines<sup>®</sup>" manual was developed (Roets, 2004b). This manual is available in the local language, Xhosa, and is made available to each member of each co-operative when he/she joins the co-operative and pays their "joining" fees.

A third development has occurred due to the formation of the National Qualifications Authority in South Africa (an initiative of the Department of Labour), the development of the Sector Education and Training Authorities, and specifically, in the case of primary agriculture the formation of the Primary Agriculture Education and Training Authority. This body is mandated to assist in the training and development of adults within an "employer–employee" relationship. However, the contract-growing model has drawn interest since it encourages learning within the sector, but caters for a different form of "employer–employee" relationship. Within this system a full N1 level qualification, the "Contract Grower Goat Management Learner-ship Programme<sup>©</sup>" has been developed (Roets, 2003). This 10-month training programme teaches the non-commercialised goat farmer all the intricacies of goat contract growing to market specifications and entails 25% theory and 75% practical assignments. Aside from ensuring total understanding of the principles of goat farming for market requirements, it also provides adult learners with a formal tertiary qualification that could assist the individual in obtaining employment in other sectors. Funding for this training is provided by PAETA and the Mineworkers Qualifications Authority (MQA) through their National Skills Fund Programme.

In an attempt to move the goat industry from a commodity (live animals) into a consumer product, processing or value-adding becomes a necessity. Value-addition by firms with producer integration will also allow a greater share of the ultimate value of the product to be returned to the producer. However, value-adding can be of different forms and at different levels depending on the requirements of the market. Some markets may require whole carcasses, whereas others may prefer ready-to-cook or microwaveable "T.V." dinners. Leather and cashmere products require a substantial amount of processing before they reach the consumer. However, the processing procedure should always address the needs of the consumer.

One such consumer need, which is of particular relevance here, is the production of "Halaal" products for the

Muslim market. Goats are particularly suited to this market both in South Africa and the Middle East. In such cases, the slaughter and processing of goats in a Grade A, EU certified abattoir is of little consequence if the requirements of the Halaal Authority of South Africa are not adhered to.

Thus, it is clear that there is certain specificity in terms of the infrastructure that is required to produce the goat products for which markets have been identified. This specificity entails that abattoirs currently slaughtering swine cannot be used, Halaal practices must be in place, the infrastructure should be centralised within the production areas, and as close to major road infrastructure as possible to allow transportation to major urban retailers or export avenues (shipping and airfreight).

Furthermore, the current tannery industry, which is currently producing under capacity (Manie Booysen, personal communication), could be utilised for the tanning of skins. It appears that the tannery industry is somewhat of a monopoly, and it is doubtful whether the non-commercialised farmer will be able to realise the true value of his/her skins if he/she were to follow this "formal" marketing route with single skins. This again illustrates the importance of goat co-operatives, where skins from domestic slaughter could be warehoused for sale in bulk along with skins generated from the exclusive slaughtering of goats at dedicated abattoirs to tannery operations. A further possibility is that the skins generated by these two routes could be tanned at smaller "boutique" style tanneries specialising in hair-on and hair-off goat skins using particular finishing techniques which could add substantial value, and return these skins to crafting co-operatives where leather craft manufacture could take place.

Thus, at Umzimvubu the central infrastructure of the facility has been designed to include:

- 560-goat feedlot and infirmary
- Feed, equipment and medicine stores
- Goat abattoir (maximum 40 goats per day)
- · Meat processing plant
- 40-skins a day hair-on tannery
- · Leather craft workshop Labelling and packaging facility and cold storage area
- Effluent treatment plant
- · Administrative buildings and shop
- · Ablution facilities
- · Security housing
- Fencing around perimeter
- Water (reservoir, pipeline and pump), electricity (stand-by generator), sewerage (pipeline) and road infrastructure

In this venture all the raw products will be drawn from goats that are owned by non-commercialised member farmers in the Alfred Nzo, Oliver Tambo and Central Regions of the Eastern Cape. The business will entail the manufacture of goat leather products for local and international markets, and fresh and processed goat meat products such as various retail cuts (vacuum packed, spiced and labelled) and cabanossi, dry sausage (Afrikaans: droë wors) and salami. It is envisaged that the facility will produce to Halaal specifications.

Due to the specificity of the infrastructure, vertical integration with goat producers in the region becomes a necessity (Sporleder, 1992). Indefining the relationship between the central "umbrella" co-operative and the regional co-operatives a contract was designed. Some factors of this contract are discussed here.

The contract makes provision for the processing enterprise (Umzimvubu Goats Co-operative), the individual farmer and the regional co-operatives' obligations and responsibilities. On the one-hand Umzimvubu is created to promote goat farming in the area, will ensure tractability, quality and consistency of supply to various markets, and will provide several services to regional co-operatives (on payment of a membership fee) such as

on-going advice on the management, breeding and caring for goats, will assist producers in producing goats to the required standards (as set out in the Contract Producer's Manual), will ensure a sustained, consistent, reliable and efficient market for goats from member producers, will hold shares of the member co-operatives in trust and assist in the collection and distribution of any dividends from the operation, implement a system of training, advise on preferred feed and pharmaceutical products to use, purchase all goats that meet the required standards, shall pay out a 2% annual bonus if the regional co-operatives meet their production targets, will assist in the establishment of regional cooperatives, and will pay for all purchased animals within 7 days of acquiring the stock from the regional co-operatives.

The individual producer is required to submit an annual production estimate, indicating the number of goats and the times at which these would be available to be delivered to the central cooperative, must deliver the numbers of goats pledged, must apply the recommended record keeping and numbering system to the goats, must produce goats of the quality specified in the Contract Producer's Manual, and must have a bank account.

The regional co-operatives are established to plan delivery dates with their members, provide a collection point to which all animals to be sold should be brought, arrange with the central cooperative for the transport of the animals to the abattoir, must assist in ensuring the tractability, quality and consistency of supply to the central cooperative and must have a bank account.

The contractual innovations of importance here are those that attempt to reduce hold-ups, build trust between the central and regional cooperatives, and improve the producer's access to inputs. The reason for this is of course the necessity of the central infrastructure to provide processed products to further markets on a consistent basis, but also to utilize the infrastructure most efficiently, since a large capital investment was made to build these specific assets. To ensure the supply of goats to the facility Umzimvubu Cooperative has pledged to provide training and advisory services (an Agricultural Officer will be appointed at the central facility), has negotiated special services and products with a pharmaceutical company (Virbac), and is in the process of negotiating a finance warehousing scheme with the Land Bank, in an effort to bring much needed finance to non-commercialised farmers in the project. Furthermore, Standard Bank is assisting the members of cooperatives and the cooperatives themselves with the opening of banking accounts. These innovations are similar to those adopted by Juhocukor in Slovakia, when repositioning themselves towards their sugar beet producers (Gow et al., 2000). It is felt that these contract innovations will greatly assist in the viability of the venture.

As can be seen above, co-operatives have been chosen as the legal entity, and aside from being members of a central processing and marketing cooperative they have contractual obligations towards that cooperative. This thus creates a "Co-operative Contract Growing" enterprise. Umzimvubu Goats will negotiate shelf space with various retailers utilizing its own brand name (and logo), but may also co-brand or package and brand under other brand names (e.g. Kalahari Kid), as explained later.

# 4.2. The Laphum'ilanga Goat Project

The Laphum'ilanga Goat Project is similar in size and scope to the Umzimvubu Goat Project and is wned and managed by the Ntinga O.R. Tambo Development Agency, which has been created to assist the O.R. Tambo District Municipality in its Local Economic Development drive. Funding for the project was also sourced from the ISRDP.

#### 4.3. The Kalahari Kid Corporation

The Kalahari Kid Corporation is a public company registered on the 3 October 2002. This company was created to develop the goat industry in South Africa, and has as its core functions the branding, brand

management, quality control and marketing of goats and goat products from the entire South Africa. The company is a joint initiative between private sector commercial partners (5%) and the Northern Cape Provincial Government (95%) where funding is channelled to the project via an Economic Development Unit established to assist in the economic development of the Province.

Its main goal is to establish goat meat in the local retail and international export markets. To do this it is building the brand name "Kalahari Kid", negotiating shelf-space with various retailers (Checkers Hypermarket, Pick 'n' Pay, Spar), paying listing fees where necessary, presenting the product to the public through various publicity campaigns (such as up-market lunches with radio, T.V. and "foodie" personalities), food exhibitions and magazines, pamphlets, posters, and international exhibitions (utilizing funding from the Department of Trade and Industry SMME Export Support initiatives)), developing a reliable distribution network, soliciting the support of several key, high grade processing centres (abattoirs), and building a client base (both in South Africa and abroad). These activities are required for the establishment of the brand.

The perception of quality is strongly associated with brand recognition. A brand is the main communication between "sellers" and consumers (Raynaud, 1999). Often, when a single firm is too small to establish its reputation in the market, a shared brand name may substitute for a single producer brand. This allows a group of smaller players to take advantage of economies of scale in establishing a reputation and sharing the costs of establishing a reputation. In the highly competitive agro-food industry, a shared brand may be an important differentiation strategy for small firms. Thus, within a shared brand name, there may be several "products" but a single promise of quality (Raynaud, 1999). Successful branding of goat products is essential to ensure that goat products can be recognized, requested, and chosen. Branding also assists in negotiating shelf space with retailers, since the consumers' affinity towards the selected brand and its packaging can be demonstrated quantifiably. Aside from the quality control measures to assist the building of the image of the brand name, other national structures such as the Department of Veterinary Public Health, and SAMIC are included to assist with quality control at the abattoir level.

On the side of supply the Kalahari Kid Corporation is also working at grass-roots level building a supply base from emerging goat producers (currently in the Northern Cape, but with plans to expand to other parts of the country). To build trust and secure contract growers the Kalahari Kid Corporation is also providing certain services to emerging farmers as a means of self-enforcement of contractual obligations. These are similar to those described for Umzimvubu goats. Thus, as with the other projects, the Kalahari Kid Corporation must in some way work with the supply side of the vertical chain to influence quality and timing of deliveries (Sporleder, 1992).

The key difference between the Kalahari Kid Corporation and the previous projects described is its emphasis on the down-stream market linkages (as well as production and processing in some cases) whereas the other projects are concentrating more on the production and processing side of operations. This thus lends itself perfectly for these two types of operations to combine forces in creating a completely integrated marketing chain from producer to consumer (both local and foreign) or to enter into a strategic alliance (Sporleder, 1992), where each firm would offer specific inputs that would be complementary within the production, processing and marketing chain.

Thus, whereas the Kalahari Kid Corporation, like Umzimvubu and Laphum'ilanga, has a standard "Contract Grower's Agreement" where benefits and obligations of goat producers and the purchasing company are described, it is clear that at the current stage of development of the industry, the Kalahari Kid Corporation possesses the most "marketing power" (Sporleder, 1992) and if it continues its strong marketing activities will soon also possess "referent power", i.e. the brand will be so strong that others will want to be associated with it. Thus, if the other goat production and processing operations want to share in some of this "power" a further contractual relationship will need to be designed between the Kalahari Kid Corporation and processing enterprises such as Umzimvubu (leather and meat products), Picardy (milk and leather products) and

Laphum'ilanga (leather products and live goats). That is, if these enterprises are interested in making use of the marketing expertise of this company and provides products under the brand name "Kalahari Kid". This "shared branding" could culminate in a semi-franchise operation (Raynaud, 1999) or other forms of strategic alliances (Sporleder, 1992) (such as contracts). For this to be achieved, standard operating, production, and processing systems need to be in place, and strictly monitored (Raynaud, 1999).

The production and processing centres also possess power due to the resource dependency of the Kalahari Kid Corporation (Sporleder, 1992). The Kalahari Kid Corporation requires their produce, and where infrastructure investment has been made by other parties (District Municipalities), the Kalahari Kid Corporation may be sore pressed to make similar investments themselves. Thus, a situation of mutual dependency and mutual obligation (Sporleder, 1992) is created. However, it is doubtful whether the marketing function will also be entrusted to the processing centres (which is common practice in such franchise operations (Raynaud, 1999)) in the short term, and this will in all likelihood be the greatest cause of conflict and opportunistic behaviour in the future. This is because the industry is only just developing and the creation of competition at this stage will do little to build a strong client base from which to grow. It is of course, likely, that as skills in this sector develop, that splinter companies capable of doing their own marketing will appear.

#### 5. Conclusion

The National Commercialisation of Indigenous Goats Project currently entails the establishment of goat production and processing units and goat farmer co-operatives at various locations around South Africa. The Umzimvubu, Laphum'ilanga and Kalahari Kid developments are described. Raw products will be drawn from goats that are owned by currently non-commercialised goat farmers in the regions surrounding each project. Some projects include value-adding operations including the manufacture of goat leather products such as handbags, slippers and key chains, goat meat products such as spiced and vacuum packed meat cuts, salami and cabanossi, and drinking yoghurt and amasi. The primary market for these products are tourism facilities on-site, and marketing activities to national retailers. An opportunity to effect strategic alliances with a new marketing company, the Kalahari Kid Corporation, and the possibility of a "shared brand" can extend the marketing power of grass-roots projects to include wider national distribution and export sales.

The main feature of this work has been its emphasis on the reduction of transaction costs for the non-commercialised farmer. These costs can be reduced with the initial accurate identification of interested farmers, assistance provided to them to form self-governing institutions, providing them with market information and specifications through training and technology transfer, including several options of production and use (different products for different markets), utilising local government organisations to effect the delivery of required infrastructure, and the formation of institutions which link them to the market place.

# References

Bearnon, B.M., 1998. Supply chain design and analysis: models and methods. Int. J. Prod. Econ., 55.

Cramer, G.L., Jensen, C.W., 1988. In: Agricultural Economic and Agribusiness, fourth ed. John Wiley and Sons, Inc.

Downey, D.D., 1996. The challenge of food and agri-products supply chains. In: Proceedings of the Second Conference on Chain Management in Agri- and Food Business, Department of Management Studies, Wageningen Agricultural University.

Engelbart, R.B., Frank, W.G.A., Rijswijk, L.W., 2001. Planta-nia. Business Case Description. ACC. KLICT Project "Ver-duurzaming ketenkennis". Eng Dnk 2001389. August 2001, <a href="http://www.ak-acc.org/frame.html">http://www.ak-acc.org/frame.html</a>.

Eponou, T., 1990. Informal Linkage Mechanisms and Technology Transfer: The PACO Project in Co^te d'Ivoire. RTTL Series No. 5. ISNAR: The Hague.

Farias, L.R., 2001. Globalisation and livelihood diversification through non-traditional agricultural products: The Mexico case. ODI Natural Resource Perspectives: 67, June 2001. Department of International Development.

Gow, H.R., Streeter, D.H., Swinnen, J.F.M., 2000. How private contract enforcement mechanisms can succeed where public institutions fail: the case of Juhocukor a.s. Agric. Econ. 23, 253–265.

Kherallah, M., Kirsten, J.F., 2001. The New Institutional economics: Applications for agricultural policy research in developing countries. MSSD Discussion Paper No. 41. Markets and Structural Studies Division. International Food Policy Research Institute. <a href="http://www.ifpri.org">http://www.ifpri.org</a>.

Mahlase, E.M., 2001. Overview of Agrobiodiversity in South Africa. In: Proceedings of Promoting Rural Livelihood through Agrobiodiversity Seminar, held at Kupala Game Ranch, Brits, South Africa, Hosted by IUCN-SA, 7–8 March.

Martinez, S.W., Smith, K., Zering, K., 1997. Vertical coordination and consumer welfare: the case of the pork industry. Food Consumption and Economics Division, Economic Research Service, U.S. Department of Agriculture. Agricultural Economic Report No. 753.

Meindertsma, J.D., 1994. Setting Research Priorities. Towards effective farmer-oriented research. Development Oriented Research in Agriculture. A Royal Tropical Institute series. Royal Tropical Institute: Amsterdam.

Raynaud, E., 1999. The contractual design of governance structure to manage shared brand name. In: Third Conference of the International Society for New Institutional Economics, Washington, DC, 16–18 September, p. 29.

Rehber, E. 1998. Vertical integration agriculture and contract farming. Working paper no. 46. Working paper series. NE-165. Private Strategies, Public Policies and Food System Performance. AJoint USDA Land Grant University Research Project, p. 31.

Roets, M., 2003. Goat Management Learnership Programme<sup>®</sup>. Scientific Roets (PTY) LTD, Accredited by PAETA.

Roets, M., 2004a. Farmer facilitation and co-operative development process<sup>©</sup>. Scientific Roets (PTY) LTD.

Roets, M., 2004b. Regional Co-operatives, membership, goat production and delivery guidelines@. Scientific Roets (PTY) LTD.

SAMIC, 2002. Global Meat Market Overview. South African Meat Industry Company.

Singh, S., 2002. Contracting out solutions: political economy of contract farming in the Indian Punjab. World Dev.30(9), 1621–1638.

Sporleder, T.L., 1992. Managerial economics of vertically coordinated agricultural firms. Amer. J. Agric. Econ., 1226–1231.