



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

**CARIBBEAN**

**FOOD**

**CROPS SOCIETY**

**31**

**Thirty First**

**Annual Meeting 1995**

**Barbados**

**Vol.XXXI**

# **EXPLOITING NICHE MARKETS FOR DOMESTIC PRODUCE: - A CASE FOR LAMB IN TRINIDAD AND TOBAGO**

*Aman A. Hosein, Kelvin Craig, Randolph Hickson, Harold Patterson  
and Rishi Basdeo*

*Caribbean Agricultural Research and Development Institute  
University Campus, St. Augustine, Trinidad and Tobago*

## **ABSTRACT**

Recent competition in the agricultural sector due to trade liberalization dictates that there should be innovative approaches to marketing local produce. An alternative marketing strategy has been proposed to expand the marketing of locally produced lamb in Trinidad and Tobago. This paper discusses the existing marketing arrangements for the niche marketing of lamb. It examines the pre-conditions for entering the market. These preconditions include the assessment of consumer demand for the primary product, market studies, product handling and quality as well as consumer surveys of the market. The logistics involved in organising producers, processors and retailers in a 9-month pilot project to market local lamb is reviewed. The future of this cooperative marketing arrangement and the application of this model to other agricultural produce is also discussed.

## **INTRODUCTION**

A major weakness of Caribbean agriculture is the widespread non-integration of marketing with the production processes. Institutions have mainly attempted to address production problems without considering the marketing situation, constraints and opportunities. Farmers, researchers, extensionists, planners and agencies in agriculture have proceeded to increase production and efficiency of production and have assumed that this increased capability will be able to meet a range of market situations. That this approach may have been satisfactory is a moot point. Increased competition from cheaper imported agricultural products in a scenario where subsidies and protection for local produce are being removed will of necessity, force a revision of this approach.

The Caribbean Sheep Production and Marketing (CSPM) project was initiated by the Caribbean Agricultural Research and Development Institute (CARDI) in 1990 with funding from the Canadian International Development Agency (CIDA). The overall long-term goal of the project was to improve the welfare of low-resource farmers in the Caribbean. The short-term objective was to improve the production and marketing capabilities of selected farmers in Barbados, Guyana and Trinidad and Tobago. With a focus on the development of sustainable systems for the local sheep industry, the project at inception set about integrating production and marketing as well as considering gender another social concerns.

This paper reviews the details of a niche market initiative that has been developed to supply fresh chilled local lamb to supermarkets in Trinidad and Tobago. The economic conditions that are influencing our agricultural markets will then be discussed and a case for the applicability of this model to the marketing of other agricultural commodities will be presented.

## METHODOLOGY

### History of the market

The first task of the CSPM project was to assess the market demand for local lamb in Trinidad and Tobago. An omnibus survey in 1992 indicated that 11% of households purchased local lamb. Over 71% of consumers made these purchases because of the taste of the product while only 48% purchased the imported product for the same reason. Twenty-two per cent of consumers purchased imported lamb because of its availability. At the same time almost 50% of the consumers stated that they could not differentiate between local and imported lamb.

The marketing opportunities for local lamb in Trinidad and Tobago were identified. The primary source of supply was based on the trafficking trade which involved the purchase of live sheep on sight by middlemen at the farm-gate. The majority of the animals came from rural areas to the urban and suburban centres for slaughter and sale as fresh hot lamb by the trafficker/butchers in municipal markets or roadside stalls. The animals purchased in Tobago were shipped to Trinidad by the inter-island ferry. Craig (1992) identified from a survey that no less than 90% of Tobagonian farmers sold live animals to traffickers. Similar observations have been made by Neptune et al. (1993). Farmers were also dissatisfied with the existing opportunities at that time and the pressure being placed on them to accept lower prices as a result of the competition due to large quantities of lamb and mutton being imported into the country (Aziz and Bennet, 1993).

### Conception of the marketing initiative

In 1993 at a workshop on Marketing Strategies for the Survival of the Livestock Industry in 1993, it was recognized that there was a demand for a reliable, regular, timely supply of good quality meat, including specialized cuts, at reasonable prices to supermarkets (CARDI, 1993). Entry into this market required an adequate supply of sheep to meet such a demand on a sustained basis and that the existing stock could provide the quality of meat that the consumers demanded. There was no doubt that the coordinators of the project could meet both requirements as a study of the traffickers and trafficker/butchers in Trinidad indicated that there was a high demand for fresh lamb. In addition, though the demand for their product and price had remained fairly static since the late 1980s, there were no complaints about the quality of the lamb that the butchers had to offer (Craig et al. 1993).

The trafficker/butchers, through roadside stalls and municipal markets, had a market unto themselves but it was evident that a niche existed for consumers who wanted fresh

lamb but were unwilling to patronize the butchers because they were sceptical of the standards of hygiene under which the animals were slaughtered and the meat sold. This niche market was not seen to be constrained by price of the lamb but demanded high hygiene standards, meat that was fresh, possibly chilled, easily available and cut and packaged in reasonable sized quantities for easy and fast consumption. Investigations revealed that local lamb was, at times, available in the supermarkets but never on a sustained basis.

The CSPM project studied the composition of local lamb carcasses. The work indicated that local carcasses from lambs 30-40 kg liveweight were lower in fat than imported carcasses. The acceptable breeds of sheep were Barbados Blackbelly, West African, Virgin Island White and their crosses. The animals with the Persian Blackhead blood tended to be too fat. These acceptable local carcasses were competitive, or even superior, when compared with the imported carcasses in terms of dressing percentage and proportions of whole-sale cuts. However, the legs tended to be thinner, longer and less stocky than those of imported carcasses.

#### Development of the niche market

The largest supermarket chain in Trinidad was approached to collaborate with CARDI and the farmers in a project to supply fresh chilled local lamb to some of their 17 outlets. This chain had the largest share of the local retail food market and while catering for all consumers, attracted a significant proportion of the more affluent customers in Trinidad. Meetings with the supermarket chain, the producers and the processor led to the development of the Guidelines for the Placement of Fresh Local Lamb in the Hi-Lo Supermarkets (Craig and Hosein, 1994). These guidelines indicated the responsibilities of each party in the arrangement.

The project was divided into phases to facilitate efficient coordination, to allow for the implementation of new ideas, and to allow producers to incorporate the new marketing strategy into their production systems. Producers were not asked to forgo their traditional marketing arrangements with traffickers but they were required to commit a quantity of animals that they would be able to supply per month. The supermarket chain was informed of the available monthly supply and had to indicate the number of carcasses to be delivered weekly to each of their participating outlets. The producers were then informed of the date on which they were required to deliver their animals to the processors, the Sugarcane Feeds Centre (SFC).

The live sheep were delivered to the abattoir at the SFC on a Monday evening, fasted overnight, slaughtered on Tuesday and chilled and delivered to supermarket outlets on Wednesday and Thursday. The slaughter was done in a 'halal' manner. All the animal byproducts were cleaned and offered for sale in three packages: the skin; head and feet; tripe with liver, lite (lung) and kidneys.

The carcasses were cut into retail cuts in-store and these included whole legs, leg chops, shoulder chops, loin chops, lamb ribs and lamb stew. Payment for the meat was based on

the weight of the cold plastic-wrapped carcasses delivered to the supermarket outlet. The delivery notes were sent by the outlets to the chain's head office which paid initially a price of US\$3.42/kg to the farmers within 2 weeks of delivery.

## RESULTS

A summary of the supply data of this project is shown in Table 1:

The animals were received in both phases from eight producers who were responsible for transporting animals to the abattoir. The farmers were able to meet their commitment for over 90% of the animals. Shortfalls in supply were met by using a reserve of producers who came into the project late.

The processing and handling was expertly done. The carcasses were well trimmed, chilled and covered in plastic for transport to the supermarket. The skins were all sold to a tanner at US\$0.52/skin in Phase 1 and US\$0.69 in Phase 2. The head and feet were all sold at US\$2.59/set in phase 1 and US\$2.93 in phase 2. The offal was sold at US\$2.59/set in Phase 1 and at US\$3.10 in Phase 2. Table 2 gives a breakdown of the revenue from the sale of by-products in both phases.

Table 1 Summary of supply data for two phases of the promotion of fresh chilled local lamb to Hi-Lo supermarkets, Trinidad

	Phase 1 Jul-Oct '94	Phase 2 Nov '94-Mar '95	Total
Total no. animals supplied	141	177	318
Total liveweight (kg)	4,114.60	5,568.30	9,682.90
Average liveweight (kg)	29.20	31.50	30.40
Total hot carcass weight (kg)	1,870.90	2,518.20	4,389.10
Avg. hot carcass weight (kg)	13.30	14.20	13.80
Average hot dressing (%)	45.50	45.20	45.30
Tot. cold carcass weight (kg)	1,799.20	2,391.50	4,190.70
Avg. cold carcass weight (kg)	12.80	13.50	13.20
Average cold dressing (%)	43.70	43.00	43.30
Shrinkage (%)	3.80	5.10	4.50
Price of meat (US\$/kg)	3.42	3.42	3.42
Total revenue (US\$)	6154.50	8188.68	14335.18
Avg. revenue/carcass (US\$)	43.65	46.22	45.07
Avg. revenue liveweight (US\$/kg)	1.50	1.47	1.48

Table 2 The revenue from the sale of by products in phase one and phase two of the promotion of fresh chilled local lamb in Hi-Lo Food Stores

	Phase 1 Jul–Oct '94	Phase 2 Nov' 94–Mar' 95	Total
No. of animals supplied	141	177	318
Total receipts from sale (US\$)	803.28	1,110.76	1,914.04
Average revenue per animal (US\$)	5.71	6.28	6.02
Cost of slaughter and handling (US\$)	6.03	6.03	6.03

Eight outlets sold the local lamb in Phase 1. Only six of the eight were involved in the second phase. Table 3 indicates the location of outlets and the proportions of lamb sold by each outlet. Approximately 50% and 80% of all lamb was sold in the west of Trinidad in Phase 1 and Phase 2 respectively. At the same time while 44% of carcasses were sold in the east in Phase 1 only 13% was sold in Phase 2 as sales tended to be slower in the east and central Trinidad.

Table 3 Location and proportion of lamb sold by each outlet

Outlet	Location in Trinidad	Phase 1 (%)	Phase 2 (%)
Westmall	West	26	30
Maraval	West	13	19
Diego Martin	West	10	20
St Anns	West	0	10
St Augustine	East	15	6
Arima	East	7	0
Trincity	East	9	7
Barataria	East	2	0
Chaguanas	Central	11	0
Other	—	7	8

## DISCUSSION

### Trade liberalization and marketing local lamb produce

Economic liberalization has been referred to as the measures taken to reduce state intervention in the economic process (Evans and Ganteaume-Farrell, 1993). The aim of

liberalization is to sharpen domestic and international competition to achieve more efficient use of scarce resources through the medium of the market. The underlying argument for economic liberalization is that governments of developing countries have distorted production structures due to subsidies, import duties, taxes and direct controls, and the removal of these barriers will permit undistorted prices and facilitate a return to more and 'fairer' competition with imports. The latter will make it possible to overcome such ills as chronic balance of payment problems, insufficient investments, and unsustainable jobs.

The effects of economic liberalization in the livestock sector are expected to be increased prices for imported feeds as well as some increases for imported meats. The reduction in local subsidies will force Caribbean farmers to achieve a greater level of productive efficiency. This may cause many producers who cannot adapt to go out of business (Dookeran 1995, Blades et al. 1995). The ruminant subsector may be able to utilise a larger quantity of local resources in the production process. The comparative advantage of this sector would be in the exploitation of niche markets which would be able to provide high quality, hygienic, organically reared, fresh products to satisfy the consumer demand. The government of Trinidad and Tobago has adopted a policy of economic liberation and instituted a common external tariff (CET) of 15%. But the price of imported meat, including lamb has not fallen as a surcharge has been introduced to protect the local producers in the short term. The surcharge will be reduced from 20 to 0% between 1995 and 1998.

## Supply

The concept of logistics has been identified as critical to the effective functioning of the project. The fact that we were dealing with a perishable product whose competitive advantage is based upon quality and freshness, mandated effective coordination from production to consumption. The following issues were considered: quality, consistency, timeliness, transport and shrinkage.

**Quality:** The quality of the carcasses delivered to Hi-Lo ultimately depended on the quality of the live animal as well as the subsequent pre- and post-slaughter handling. Specific parameters for supply, with respect to breed/ type, weight and age of the live animal were adopted in an attempt to standardize the quality of the final product. This final product has been well received by the consumers.

**Consistency:** To maintain a consistent supply of carcasses, CSPM asked farmers to inform CARDI of their ability to supply live animals over a 3-5 month period. The producers at times were not able to meet their commitments which indicated that producers needed to improve their planning process as part of improving their business approach.

**Timeliness:** This refers to the specific issue of the date of delivery of live animals to the abattoir. The producers delivered animals late on eight of the 34 weeks of the project and the retailers refused some of the late deliveries. For these, alternative markets had to be found. Emphasis is again placed on the business approach of producers.



**Transport:** The live animals were transported to the abattoir by the producer on the prescribed day. In exceptional cases arrangements were made for alternative transport. This increased costs for farmers and the transportation of small numbers of animals did not prove to be economical. Producers whose farms were great distances from the abattoir found it economical to transport 15-20 sheep per trip.

**Shrinkage:** This issue has to be critically considered. Animals shrank at two stages of the process: (a) in transit from farm to abattoir due to urination and evaporation, and (b) in the process of chilling through evapo-transpiration. CARDI encouraged the abattoir (SFC) to exercise a greater level of flexibility with respect to the time of day the animals should be delivered to the abattoir in an attempt to minimize transport shrinkage. Animals delivered in the early morning or later afternoons experienced lower levels of shrinkage due to reduced dehydration. The shrinkage arising from the chilling process was approximately 4% and found to be higher with smaller animals. Shrinkage reduced farmer revenue.

**Payment:** Payments were made to suppliers within 2 weeks of delivery based on cold carcass weights taken at the outlets. Producers found this very acceptable. This delayed system of payment differed from the traditional systems of farmers receiving payment 'on the hoof' from traffickers.

**Price:** The costs associated with animal transportation and shrinkage of the carcasses were a serious source of concern to the farmers. They indicated that the price of US\$3.42/kg was acceptable before these additional costs were deducted. The supermarket chain has increased the buying price to US\$3.76/kg for phase 3 of the project, which should alleviate the farmers concerns.

#### Sale of by-products

The sale of the by-products covered the cost of slaughter and handling of the animals. The payment for the meat therefore went directly to the producers. The prices of all the by-products were increased over the life of the project and this market should be able to absorb a further price increase.

#### Consumer demand

From the inception of the project the retailers always indicated that there was a demand for the product and discouraged active promotion of the local lamb on the grounds that the project would not be able to respond to the increased demand. It is noteworthy that this activity took place in the supermarkets without any promotional activity and demand has still increased over time. As a result, a consumer study was conducted to assess the consumer trends and demand over time. The study indicated that a market for fresh local lamb existed. There was a significant number of repeat (regular) purchasers and 30% of consumers were first time buyers. The lamb was being bought for the reasons that we identified, i.e. freshness, taste, tenderness, low fat, and basic presentation. At the same time the relatively high price was not seen as a major deterrent by many consumers. The availability of

the meat in specialized cuts made the product accessible to most consumers. The health-conscious consumers were attracted to the product. Importantly, the survey indicated that the influence of family income on the consumer purchasing of the product was not significant. The survey gave impetus to the activity and it is believed that this market is sustainable.

#### Future of the market

The fact that consumers were willing to purchase the lamb at the existing prices is possibly an indication of the good quality service and product which has been supplied. The retailers believe that they can sell more fresh chilled local lamb, noting that significant market potential exists.

Producers need to expand their production base and address the issue of meat quality by improving the breeding capacity and quality of their flocks. They should also seek to increase their production efficiency and reduce the cost of production, particularly feeding costs. They should maintain their traditional marketing arrangements in addition to the existing niche.

Consumers could be motivated to maintain and even increase demand for fresh chilled locally produced lamb over the frozen imported product by being made aware that the latter may contain steroids and other chemical additives which could be hazardous to their health.

#### Proposed model for marketing other commodities

The following is a model proposed for the production and marketing of other agricultural commodities for which niche markets can be identified:

- Determine the demand for the commodity.
- Identify existing marketing opportunities.
- Determine strategies for exploiting the opportunities.
- Identify alternative marketing strategies.
- Determine the role of the marketing functions.
- Identify the marketing support system required.
- Access and develop the production system and link to the selected market.
- Test and validate the production and marketing system.
- Select appropriate models to service specific market needs.
- Develop an integrated production and marketing system.
- Apply tested and validated production and marketing systems to the development of commercial enterprises.
- Monitor the system.

The model should serve to utilize the market for the introduction of special products that are required by special consumers. Satisfying this special market should stimulate the production process and not compete with existing primary products. The logistics of the

integrated production and marketing system should be detailed but flexible enough to allow for revision and development of marketing functions. The logistics should also take into consideration the contingencies associated with common shortfalls associated with agricultural production.

## CONCLUSION

The competition from low-priced imported products and the reduction of support for local production compel the agricultural sector to explore alternative marketing strategies for products for which the sector does not have a price advantage. Niche markets can be sought that serve to satisfy a specific segment of the population who are not price-conscious but have a priority for easily available products with high standards of quality, hygiene and presentation. These consumers can also be influenced to consume the local agricultural products for reasons of health, improved taste and flavour and for alternative cooking opportunities. The agricultural sector must explore the opportunities to provide sustainable markets of this type for this type of local consumer.

## REFERENCES

- Aziz, M. and Bennett, S. 1993. Meat purchase and sale: The farmers perspective. Proceedings of a workshop on Survival of the livestock industry: marketing strategies. St Augustine, Trinidad and Tobago, 24 June 1993, pp. 75-78.
- Blades, H., Dookeran, W., and Melville, G. 1995. Trade policy agenda and implications for agriculture with reference to the livestock sub-sector in the Caribbean. A paper presented to the CTA/CARDI seminar on Livestock Policies for the Caribbean. Port of Spain, Trinidad and Tobago, 29-31 March 1995.
- CARDI 1993. Survival of the livestock industry: marketing strategies. St Augustine, Trinidad and Tobago, p.85.
- Craig, K. and Seepersad, M. 1993. Marketing functions and the consumer. Proceedings of a workshop on Survival of the Livestock Industry: Marketing Strategies. St Augustine, Trinidad and Tobago, pp. 25-34.
- Craig, K. 1992. Marketing survey of target farmers. St Augustine, Trinidad and Tobago: CARDI, 25 pp.
- Craig, K. and Hosein, A.A. 1994. Guidelines for the placement of fresh local lamb in Hi-Lo supermarkets. St. Augustine, Trinidad and Tobago: CARDI. 5 pp.
- Craig, K., Hosein, A.A. and Lutchman, B. 1993. The role of traffickers and roadside vendors. Proceedings of a workshop on Survival of the Livestock Industry: Marketing strategies. St Augustine, Trinidad and Tobago, 24 June 1993, pp. 63-66.

- Dookeran, W. 1995. Developing a trade negotiation agenda for Caribbean agriculture. A working document for the CTA/CARDI seminar on Livestock Policies in the Caribbean. Port of Spain, Trinidad and Tobago, 29-31 March 1995.
- Evans, E. and Guantaume-Farrell, J. 1993. Economic liberalization and its likely impact on cost of production and returns in the livestock sector. Proceedings of a workshop on Survival of the Livestock Industry: Marketing Strategies. St Augustine, Trinidad and Tobago, 24 June 1993, pp. 41-55.
- Neptune, M., Braithwaite, O. and Hosein, A.A. 1993. Marketing Tobago's livestock (sheep, goat and cattle). Proceedings of a workshop on Survival of the Livestock Industry: Marketing Strategies. St Augustine Trinidad and Tobago, 24 June 1993, pp. 55-62.