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**“Quel devenir pour l’agriculture caribéenne ?  
Qualité, économie, progrès social, environnement”**

**“What is the future of Agriculture in the Caribbean ?  
Quality, Economy, Social Progress, Environment”**

**“¿ Cuál es el futuro de la Agricultura en el Caribe ?  
Cualidad, Economía, Progreso Social, Medio ambiente”**



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## **CARIBBEAN LAMB: CAN WE COMPETE IN A GLOBALISED ENVIRONMENT?**

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### **RESUME**

Une revue d'information sur une période de plus de cinq ans fut conduite pour déterminer les paramètres de la politique, de production, de marché et de prix qui caractérisent la petite industrie caribéenne des petits ruminants, en utilisant l'agneau comme principal indicateur de l'activité économique. Les données furent analysées afin de déterminer si l'industrie était en train d'obtenir une compétitivité dans l'environnement mondial. Il fut trouvé que la contribution des importations par rapport à la demande totale de viande rose, atteignait presque 20 % de 1990 à 2000, et que le prix au détail de l'agneau local demeurait significativement plus élevé que celui de l'agneau importé dans la plupart des îles. En dépit du fait que l'agneau ne soit pas compétitif en terme de prix, il fut trouvé que les préoccupations écologiques, socio-économiques et de sécurité alimentaire étaient suffisantes pour garantir un investissement continu dans l'industrie régionale des petits ruminants.

### **ABSTRACT**

A review of data over a five-year period was conducted to determine the policy, production, marketing and pricing parameters that characterise the Caribbean small ruminant industry, using lamb as the main indicator of economic activity. The data was analysed to determine whether the industry was achieving competitiveness in the global environment. It was found that the contribution of imports in meeting total demand rose by nearly 20 percentage points from 1990 – 2000, and that the retail price of local lamb remained significantly higher than that of imported lamb in most territories. Despite being uncompetitive in terms of price, it was found that socio-economic, ecological and food security concerns were sufficient to warrant continued investment in the regional small ruminant industry.

### **INTRODUCTION**

Agriculture continues to be a vital source of employment and income in the region, although farm output from the Caribbean is insignificant in world markets (Ballve, 2002). In the region, the small ruminant industry is regarded as an “important socio-economic asset that has a special role in the efforts towards the diversification of export-crop agriculture, poverty alleviation, rural development and the nutritional well-being of the people of the region” (Asiedu, 1999). In essence, small ruminant production has been largely confined to subsistence producers who traditionally employ a minimum input system to rear animals for the domestic market. FAO (1999) reported that in the four territories - Antigua/Barbuda, Barbados, Jamaica and Trinidad and Tobago - the percentage contribution of imports to total supply of small ruminant meat in 1990 was 37, 92, 66 and 62% respectively. This is a clear indication that approximately ten years ago, imports contributed significantly to meeting the demand for small ruminant meat in the Caribbean.

The Regional Transformation Programme (RTP) of the Caribbean Community (CARICOM) lists transforming the sector to international competitiveness as one of its goals. Additionally, the policy of most governments in the region is to increase local production, thereby reducing dependence on imports in an effort to save vital foreign exchange. The question this paper attempts to answer is whether these objectives can be achieved in the context of free trade within a globalised environment, in which barriers are erected against exports from developing countries. Fraser (2002) for example has noted that developed countries have been increasing the range and levels of subsidies to their farm products, while refusing to remove protectionist measures on what are perceived to be 'vulnerable' sectors. It has been estimated that such trade-distorting policies practised by developed countries amount to US\$ 300 billion, a figure that is six times more than the US\$ 50 billion set aside for assistance to help poor nations tackle poverty. In the US for instance, 25% of the products of farmers is subsidised by the Government, in the European Union 40%, and in Japan the figure is over 60%.

## **MATERIALS AND METHODS**

A review of the literature was undertaken to determine the core policy positions of five key CARICOM states in respect of small ruminant production and marketing. Data from these states covering a five-year period detailing the production and imports of small ruminant meat, was also reviewed to assess the changes occurring in production and import parameters. An assessment was also undertaken of the retail price situation of locally produced lamb when compared to imported lamb. Finally the industry development model being used by CARDI and its partners was applied as a tool to assess whether local small ruminant producers, in the context of the global environment in which they are forced to operate, could realistically meet the goal of international competitiveness.

## **RESULTS**

Asiedu (2001) indicated that there was a general absence of clear-cut policies on small ruminants and that where such policies existed, there was no discernible implementation. However, the same author noted that there was some level of government support for genetic improvement (most often by providing breeding stock at subsidised prices), research (training for personnel involved in small ruminant research), post-harvest (the provision of abattoir facilities) and incentives related to land preparation and duty and tax concessions on farm equipment and machinery. Cohesive policies were lacking in the areas of land tenure, praedial larceny, dog predation, credit, fair trade and pricing, some of which are critical issues facing the industry today. It was noted that one of the most limiting factors affecting small ruminant production in CARIFORUM states was dog predation, an issue that was being inadequately addressed by policy makers.

### **Production and import data**

Table 1 shows the number of head of sheep and also gives an idea of the mutton and lamb production in each of the five selected CARICOM countries for the year 2001. Whereas Guyana has the largest sheep population, as well as the largest meat production, Jamaica records the lowest values in both instances, something that is directly related to the preference for goat meat as against mutton and lamb in that country.

**Table 1. Livestock and meat production by country (2001)**

Country	No. of sheep	Lamb/mutton production (MT)
Antigua	12,000	32
Barbados	41,000	136
Guyana	130,000	520
Jamaica	1,500	8
Trinidad and Tobago	12,200	90

Source : FAO (2002)

Production statistics for small ruminants are not as accurate as they should be since they depend to a large extent on estimates of small farmer activity that is often difficult to verify. Nevertheless, available data indicate that local production of mutton and lamb has not kept pace with the demand for this commodity (Singh, 1995).

## Trade

Tables 2 and 3 provide information on the quantity and value of mutton and lamb imports into the region for the period 1996 – 2000 in the five selected CARICOM countries.

**Table 2. Quantity of mutton and lamb imported by selected countries (1996 – 2000)**

Country	Quantity (MT)				
	1996	1997	1998	1999	2000
Antigua	40,000	50,000	50,000	30,000	85,000
Barbados	1,815	2,308	1,462	1,986	1,845
Jamaica	2,661	3,800	5,400	4,900	4,800
Trinidad and Tobago	472,000	949,000	658,000	728,000	1,010

Source : FAO (2002)

**Table 3. Value of mutton and lamb imports by selected countries (1996 – 2000)**

Country	Value ('000 US\$)				
	1996	1997	1998	1999	2000
Antigua	80,000	140,000	140,000	40,000	85,000
Barbados	3,676	4,498	1,309	3,457	2,255
Jamaica	3,985	6,500	10,000	8,100	7,700
Trinidad and Tobago	984,000	1,425	1,429	1,258	1,524

Source : FAO (2002)

## Current retail price of local and imported lamb

Table 4 details the retail price of lamb in selected territories.

**Table 4. Current average retail price of lamb in selected countries**

Country	Average price per kilogram US\$*		Differential
	Local Lamb	Imported Lamb	
Antigua	2,59	2,20	0,39
Barbados	8,73	5,45	3,28
Guyana	4,81	NA	
Jamaica	5,50	7,15	(1,65)
Trinidad and Tobago	4,00	2,10	1,90
Mean	5,13	4,23	0,90

\* prices as of May 2002

## The industry development approach

This approach is premised on the identification of constraints to industry development using participatory methods that involve all stakeholders. This was done for the Caribbean small ruminant industry in March 2001 at a meeting convened by the Caribbean Small Ruminant Network (CASRUNet), in Mandeville, Jamaica, at which nine countries were represented. At that meeting, the small ruminant industry was subjected to careful analysis by the stakeholders, utilising production and marketing data from their respective countries and expert opinion. Priority areas were identified for strategic interventions. These included issues of policy, production systems, marketing, genetic resources, husbandry, information and communication, human resource development and post harvest systems. The analysis revealed that there was great uncertainty with respect to the competitiveness of the small ruminant industry and that considerable data collection and research was needed to elucidate the true cost factors, and to place Caribbean small ruminant production on a sustainable footing. The constraints identified were thought to militate against the achievement of international competitiveness in the current economic environment

## DISCUSSION AND CONCLUSIONS

Singh (1995) lamented that local small ruminant production had not kept pace with demand, despite the implementation of several projects to stimulate the regional industry. To date, this has remained largely unchanged. Like the local industry, the regional industry faces a number of challenges that have been enumerated by Asiedu (2001). Included among these are:

- ✓ Low productivity in small ruminant meat, milk and by-product production.
- ✓ Insufficient genetic resources to satisfy the demand for foundation stock.
- ✓ Lack of adequate financing for small ruminant research and development.
- ✓ Difficulties in meeting meat and milk quality assurance standards for entry into local and regional markets.

The same author also indicated that in terms of threats to the regional industry, there was strong competition from extra-regional sources for small ruminant meat, coupled with the fact that all small ruminant products can be easily substituted.

According to Stewart (2001), any approach to industry analysis should consider three factors:

1. Competitiveness (production and marketing factors).
2. Food security and socio-economic factors.
3. Ecological and environmental factors.

This is because these are the principal factors that contribute to sustainable industry development. In describing the regional small ruminant industry, the same author also pointed out that with respect to these three factors, the following weights could be applied, based on the relative importance of each factor's impact on industry development. These are as follows:

✓ Marketing	-	40%
✓ Production	-	30%
✓ Food security and socio-economic factors	-	20%
✓ Ecological and environmental	-	10%

The highest weighting of 70% is given to competitiveness, whereas food security and the environment account for the remaining 30%.

It seems clear from the available data that small ruminant meat production has remained uncompetitive over the last 10 years. There is no suggestion that this is likely to change in the near future. The Caribbean is a high cost producer of small ruminant meat and in a liberalised environment cannot compete with lamb and goat meat imported from Australia and New Zealand. Policy makers in the region may therefore wish to consider giving more weight to indices such as food security and socio-economic factors when determining what resources should be allocated to small ruminant research and development. If one were to embrace a purely economic standpoint, then it would be difficult to justify why the region continues to produce meat at such high cost for local consumption. However, by bringing the issue of food security and socio-economic benefits into the equation, one can achieve the paradigm shift envisioned. Not only would we be able to provide some of our protein requirements from indigenous materials, but benefits will also accrue to rural farm families, which can derive economic advantages by utilising low input systems to produce small ruminant meat.

In some economies of the region, small ruminants may also have an important role to play in the area of agro-tourism. Market forces will determine whether this is in terms of what may be viewed as 'exotic' meats by foreign guests, or the aesthetic appeal these animals may have for visitors who constantly seek out a more diversified tourism product. In these cases, tourism revenues can pay for the local product either in up-scale restaurants or on eco-tourism reserves. In some countries like Trinidad and Tobago, some ethnic and religious populations demand local animals and price is not a deterrent. There is therefore a clear case of supplying this unmet demand from local production at what can be described as competitive market prices. Additionally, local meat does have superior quality and flavour characteristics (Hickson, 1997) and is preferred by some segments of the local population that are willing to pay a premium for a quality product. Even though lamb from the Caribbean may remain uncompetitive for the foreseeable future, the imperatives of food security, socio-economic and ecological factors are important enough to warrant continued investment in the sector.

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