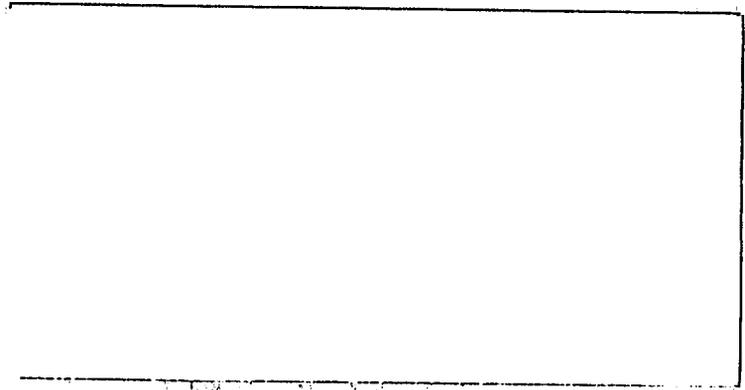
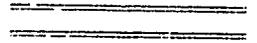


PA-ABR-723



Small Ruminant - CRSP



SUB-BALAI PENELITIAN TERNAK, SUNGAI PUTIH
BALAI PENELITIAN TERNAK
PUSAT PENELITIAN DAN PENGEMBANGAN PETERNAKAN

**CHARACTERISTICS OF THE INTERNATIONAL
MARKET FOR LIVE SHEEP AND POTENTIAL
FOR EXPORT FROM NORTH SUMATRA**

**I. Kartamulia, S. Karokaro, A. Misniwaty
J. DeBoer, H. Knipscheer**

Working Paper No. 149, November 1993

Winrock International, Morrilton, AR, USA

**SR_CRSP, SBPT, P.O. Box 1, Galang 20585
North Sumatra, Indonesia**

**CHARACTERISTICS OF THE INTERNATIONAL MARKET FOR LIVE SHEEP
AND POTENTIAL FOR EXPORT FROM NORTH SUMATRA**

Izuddin Kartamulia¹⁾, Setel Karo Karo²⁾,
Artaria Misniwaty³⁾, John De Boer³⁾ and Henk Knipscheer³⁾

ABSTRACT

Characteristics of international markets for live sheep and potential for live sheep export from North Sumatra were evaluated.

The cost-insurance-and freight (CIF) price of Indonesian fat-tailed sheep price in Saudi Arabia will be \$ 77 per head, just less than half the retail price of sheep in Saudi Arabia (\$ 150-180) and lower than the price of sheep paid by Islamic Development Bank for Hajj (\$ 86.67 per head). The CIF prices of sheep in Malaysia and Singapore are \$ 50 and \$ 60 per head.

Indonesia, North Sumatra in particular, has the potential to export live fat-tailed sheep to Saudi Arabia and sheep of any breed to Malaysia and Singapore.

**KARAKTERISTIK PEMASARAN INTERNASIONAL DOMBA HIDUP
DAN POTENSI EKSPOR DOMBA HIDUP DARI SUMATRA UTARA**

ABSTRAK

Telah dievaluasi karakteristik pemasaran internasional domba hidup dan potensi ekspor domba hidup dari Sumatra Utara.

Harga *cost-insurance-and freight* (CIF) domba ekor gemuk asal Indonesia di Saudi Arabia adalah \$ 77 per ekor, kurang dari separuh dari harga domba jenis yang sama di Saudi Arabia (\$ 150-180) dan lebih rendah dari harga yang dibayarkan Bank Pembangunan Islam untuk keperluan Haji (\$ 86,67 per ekor). Harga-harga CIF domba di Malaysia dan Singapura adalah \$ 50 dan \$ 60.

Indonesia, khususnya Sumatra Utara, mempunyai potensi untuk mengeksport domba ekor gemuk ke Saudi Arabia, dan domba dari jenis apa pun ke Malaysia dan Singapura.

CHARACTERISTICS OF THE INTERNATIONAL MARKET FOR LIVE SHEEP AND POTENTIAL FOR EXPORT FROM NORTH SUMATRA

Izuddin Kartamulia¹⁾, Setel Karo Karo²⁾,
Artaria Misniwaty²⁾, John De Boer³⁾ and Henk Knipscheer³⁾

INTRODUCTION

The Government of Indonesia has been vigorously promoting non-oil exports. This thrust has been included in Indonesia's Agency for Agricultural Research and Development (AARD) policy, for the next 5-year plan, and government-sponsored agricultural research will focus on commodities with potential for export as raw, semi-finished and final products.

The sheep population in North Sumatra has increased from 30,795 in 1969 to 94,923 in 1992 at a rate of 5.2 % per year. The increase will be higher in the coming years as smallholders produce more sheep on a commercial basis with better management. The possibility for rapidly increasing sheep production in North Sumatra has generated interest in exploring possibilities for developing an export market from this province.

In the framework of the Indonesia-Malaysia-Thailand Northern Growth Triangle, the Directorate General of Livestock Service (DGLS) is encouraging the private sector to export live sheep from North Sumatra and Aceh to Saudi Arabia. In this regard, the private sector requires market information and therefore research on the live sheep market is necessary.

¹⁾ SR-CRSP Sei Putih, Indonesia and Winrock International, USA.

²⁾ AARD Sei Putih, Indonesia

³⁾ Winrock International, USA

The first step in this process is to focus this research on the most promising markets based on several criteria. A second step of research would then carry out detailed analysis of these promising markets and possibilities for increasing production to meet these export markets.

A preliminary descriptive report of the international market for live sheep was prepared including some of the key prices, costs, and markets. The second part of the report will carry out a more detailed feasibility study of the most promising markets.

RESEARCH METHODOLOGY

The first stage of this research focused on descriptive aspects of the trade in live sheep. This is the most lucrative market and the export of chilled, frozen or processed meat from small ruminants was not considered at this stage. International prices, transport and handling costs were used to assess farm-level prices that North Sumatran farmers could obtain by supplying export-quality sheep for a specific export market. Institutional support and policy changes needed to develop this market were then examined as well as the potential foreign exchange that could be generated from these exports.

The data were collected during interviews with a sheep exporter from Australia, livestock importers in Malaysia, Singapore, and Saudi Arabia, heads of Indonesian Trade Promotion Centers in Singapore and Saudi Arabia, Indonesian Embassy (head of

trade section) in Kuala Lumpur, Department of Trade Republic of Indonesia in Jakarta, and personnel of Islamic Development Bank in Jeddah, Saudi Arabia.

RESULTS AND DISCUSSION

1. Existing Patterns of Trade

a. Sheep Trade to Saudi Arabia

Current trade, primarily to the Middle East, is about 10 million live animals per annum. Saudi Arabia is the prominent sheep importing country and imported 6.5 million sheep in 1986.

The sheep supply has been dominated by Australia (4.5 m head) and New Zealand (1.5 m head) with the balance from Turkey, Somalia, Sudan, Ethiopia, Eastern Europe and other residual suppliers. However, during the last two years Australia did not export live sheep to Saudi Arabia due to dispute on the protocol of health clearance.

About 1,000,000 intact rams are required annually for Haj (Adnam 1988) of which 500,000 should be provided by Islamic Development Bank. New Zealand supplies 400,000 annually for the bank, while the remaining are supplied by Turkey, Syria and Sudan. The Islamic Bank will pay \$ 86.67 (SR 325) per sheep for Haj sacrifices, including slaughtering cost.

There are six major classes of sheep in Saudi Arabia, namely Nuamei (local fat tail), Nazdie (local fat tail), Awassy or Twuoss or Syrian sheep (imported from Syria), Caraman (Turkish fat tail, imported), Sawaknee (Sudaneese fat tail, imported) and Australian

and New Zealand sheep (Merino, imported). Nuamei sheep are the most expensive with a retail price of up to \$ 180 followed by Nazdie, Awassy and Caraman (\$ 150-160). Merino (Australian and New Zealand sheep) retail for \$ 45-50.

There is a strong consumer preference for fat-tailed sheep (Nuamei, Nazdie, Awassy and Caraman) as sheep are served in prestigious parties conducted by princes. The barbequed sheep are usually served whole and the fat-tail should be displayed as evidence of a high quality sheep, by which a respectable host honors his distinguished guests. On the other hand, Merino sheep are used for both Haj sacrifices and daily consumption, but are regarded as low-quality.

b. Market Potential to Malaysia and Singapore

Malaysia and Singapore are importers of sheep and goats. Imports of live sheep in 1991 and 1992 into Malaysia and Singapore are depicted in Table 1 and Table 2, respectively. Here, the majority of the sheep are imported from Australia.

Sheep meat demand in Malaysia is growing, where the meat is used in the preparation of satay. In Singapore, sheep meat is popular to the Malay and Indian ethnics.

Table 1. Imports of live sheep of Malaysia in 1991 and 1992

<u>Country of Origin</u>	<u>Heads</u>	
<u>1991</u>		
Australia	15,542	
Germany, Fed. of Rep.	50	
Thailand	<u>15,974</u>	
Total	31,566	Price per head: n.a.
<u>1992</u>		
Australia	9,294	
Singapore	60	
Thailand	<u>2,898</u>	
Total	12,252	Price per head: n.a.

Source: Malaysia External Statistics 1991, 1992.
Dept. of Statistics, Malaysia

Table 2. Imports of live sheep of Singapore in 1991 and 1992

<u>Country of Origin</u>	<u>Heads</u>	
<u>1991</u>		
Australia	27,110	
Malaysia	<u>6,973¹</u>	
Total	34,083	Price per head: S\$ 103.51
<u>1992</u>		
Australia	36,815	
Thailand	<u>2,808</u>	
Total	39,623	Price per head: S\$ 96,16
		Average weight per head: 50 to 60 kg

¹Transshipment cargo from Australia via Johor Baru
Source: Indonesian Embassy, Singapore

2. Shipping Methods and Costs

Commercial large scale trade from Australia and New Zealand relies on 18 specialized ships ranging in capacity from 20,000 to 131,000 head. Thus existing specialized ships are far too large to serve the Malaysia-Singapore market which together only require about 4,000 head/month. Both markets would take more live sheep from Australia but cannot because of surface transport constraints.

For Australian exports to Middle East Markets, the market standard is a 55 kg wether costing* \$ 8.00 at the wharf. The costs free on board (FOB) adds another \$ 7.00, shipping is \$ 12.00, insurance adds \$ 1.40., profit at \$ 1.00 per head making landed cost in the Middle East of about \$ 30.00. This cost-insurance-and freight (CIF) price of \$ 30.00 provides \$ 15.00 of marketing margin for wholesaler and retailer. Mortality in shipping is about 1.8%.

Current prices in North Sumatra are about \$ 1.2/kg liveweight. For a 50 kg ram, the local cost would be \$ 60 which is already well above the landed cost in Saudi Arabia of larger (55 kg) sheep from Australia and New Zealand. However, assuming that the costs FOB adds another \$ 1.00, shipping is 10.00, insurance is \$ 1.00 and profit at \$ 5.00 per head, making landed cost in Saudi Arabia of \$ 77.00 which is just half the price of fat-tailed sheep price in

* The following figures are estimates only, in US\$ per head.

Saudi Arabia (\$ 150-180) and lower than the sheep price for Haj (\$ 86.67). Therefore, exporting live fat-tailed sheep from Indonesia is quite feasible.

It appears that Indonesia, which is deficient in red meat, will not be able to export sheep profitably to the Middle East market unless the fat-tailed sheep population be increased dramatically. This may happen if government-owned estate companies in North Sumatra, for example PTP III and PTP IV, are willing to rear the fat-tailed sheep integrated with oil palm or rubber trees. The fat-tailed perform satisfactorily in North Sumatra. The average increase in weight of the crossbred of fat-tailed and local Sumatra thin-tail was 7% over pure local Sumatra thin-tail (Gatenby et al 1993).

Because of a lack of large-scale vessels for shipping live sheep to the Singapore-Malaysia market, Indonesia is in a good position to supply live sheep to this market. Both Singapore and Peninsular Malaysia prefer live rams to other classes of sheep. Singapore is currently air freighting rams from Perth, Western Australia at a cost of about \$ 70/head for freight. The rams cost about \$ 15/head in Perth for a total delivered cost of \$ 85. In Peninsular Malaysia prices are somewhat lower but good rams bring at least \$50. Given the local costs in North Sumatra for somewhat smaller rams, live sheep exported from North Sumatra in smaller local ships should be competitive in the Singapore market but would probably not be profitable in Malaysia based on a cost/kg basis.

Since Malaysia and Singapore accept rams of any breed with an average live weight of 50-60 kg, hair sheep (Virgin Island and Barbados) are appropriate breed to be developed for Malaysia and Singapore markets as the hair sheep growth rate is superior to fat-tail and local Sumatra thin-tail (Gatenby et al. 1993).

3. Problems of Marketing

There have been no sheep imported by Malaysia and Singapore from Indonesia for several years as 1) Singapore bans the importation of sheep from Indonesia due to foot and mouth disease and 2) Indonesia bans the exportation of live sheep due to shortage of domestic supply. The foot and mouth disease issue should be clarified as the disease is no longer apparent in Indonesia, particularly in North Sumatra. On the other hand, the ban on exporting sheep from Indonesia should be re-evaluated as sheep raising in North Sumatra is becoming more popular and bringing about an increase in sheep population. As the foregoing issues are resolved, Indonesia live sheep exports will emerge.

Another problem in marketing live sheep is meeting the veterinary and quarantine protocols of some countries (Macleod 1989). For example, Saudi Arabia requires that veterinary-health clearance should be performed by its veterinary authorities at the point of the entry. This condition has caused problems to Australian exporters when Saudi Arabia's veterinary health authorities declared that the sheep should be rejected as they did not meet Saudi's requirements. Further, the health clearance

protocols appear to change frequently and without notice (Macleod 1989). An example was the Malaysian government requiring vaccinations and blood tests not listed on the Australian authorities' latest file copy (Macleod 1989).

CONCLUSION

The cost-insurance-and freight (CIF) price of Indonesian fat-tailed sheep price in Saudi Arabia will be \$ 77 per head, just less than half the retail price of sheep in Saudi Arabia (\$ 150-180) and lower than the price of sheep paid by Islamic Development Bank for Hajj (\$ 86.67 per head). The CIF prices of sheep in Malaysia and Singapore are \$ 50 and \$ 60 per head.

Indonesia, North Sumatra in particular, has the potential to export live fat-tailed sheep to Saudi Arabia and sheep of any breed to Malaysia and Singapore.

REFERENCES

- Adnam, A. 1988. Export of livestock and meat to Asian and Middle East countries, their prospects and constraints. Paper presented at the Seminar on Export of Livestock, September 2-3, 1988, Jakarta, Indonesia. Directorate General of Livestock Service, pp. 1-20.
- Gatenby, R.M., G.E. Bradford, M. Doloksaribu, E. Romjali, A.D. Pitono and H. Sakul. 1993. Growth, mortality and wool cover of Sumatra sheep and crosses with three breeds of hair sheep. In Annual Report 1991-1992. Small Ruminant Collaborative Research Support Program Sungai Putih, Indonesia.
- Macleod, L. T. 1989. The marketing and international movement of sheep within Asia. In C. Devendra and P.S. Faylon (Eds.). Sheep production in Asia. Proceedings of the workshop on sheep production in Asia, April 18-23, 1988. International Development Research Center, Los Banos, Philippines, pp. 68-78.