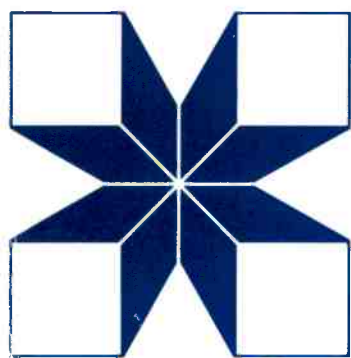


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**SMALL RUMINANTS
RESEARCH
AND DEVELOPMENT
IN THE NEAR EAST**

PROCEEDINGS OF A WORKSHOP

HELD IN CAIRO, EGYPT,

2-4 NOVEMBER 1988

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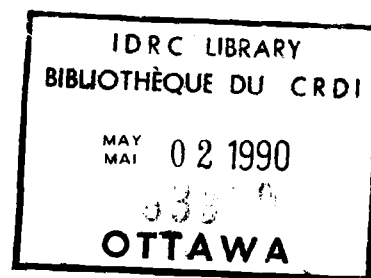
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SMALL RUMINANTS RESEARCH AND DEVELOPMENT IN THE NEAR EAST

**Proceedings of a workshop
held in Cairo, Egypt, 2-4 November 1988**

Editor: A.M. Aboul-Naga



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"Working Paper for Round Table 1"

**IMPLEMENTATION OF INTENSIVE LAMB PRODUCTION SYSTEM IN THE
NEAR EAST REGION**

A. M. ABOUL-NAGA

Animal Production Research Institute, Ministry of Agriculture,
Dokki, Cairo, Egypt.

Intensive lamb production in the dry-subtropical NE can be recommended only under the following conditions:

- * Availability of feed resources; forages and locally produced concentrates.
- * High demand and good market for the produced lambs (early fattened).
- * Reasonable level of hygienic conditions.

Elasticity of different production elements for intensive lamb production under the dry-subtropical NE conditions can be summarized as follow :

- a) Accelerated lambing Implementation of two crops a year / ewe is usually accompanied with hormonal treatment and artificial rearing of the lambs. The first is usually expensive and may need skilled breeder, while the second need high level of hygienic measurements, or it will result in high lamb losses, and expensive milk replacers. Producing crop each 7-9 months have the advantage of using no hormonal treatment and natural suckling is applied for lambs rearing lambs and first of all, it needs relatively unexpensive hygienic precautions.
- b) High prolificacy, high litter size (over 2 lambs) can hardly be provided by the native sheep, unless high proportion of prolific temperate genes is introduced. Such high level of lamb production need, unlikely, artificial rearing of the lambs with some of uncontrollable measures under the prevailing subtropical conditions. High lamb losses in such high litter size is usually expected. Moderate litter size (1.5 - 2 lambs) can be produced by

the prolific dry-subtropical genotype, their first cross with native sheep or by the introduction of low percent of temperate prolific genes, (Finn, Romanov), all showed some success in the region.

- c) Low lamb losses, native subtropical sheep and their crosses are usually well adapted to the prevailing conditions and of low lamb losses. On the other hand, temperate breeds are less adapted, especially the highly prolific ones and can not be recommended under arid-subtropical condition.

Artificial rearing and high litter size (over 2) is another cause of high lamb losses and should be avoided.

- d) Fast growing lambs: native sheep breeds are generally not fast growing animals. Creep feeding and early fattening on whole concentrate diet, are reported to give good results with some native breeds. Crossing with other native subtropical breeds, as a sort of stratification system, or with temperate breeds which proved to be adapted to the region, could produce fast growing lambs.

- e) Early fattening: Generally late fattening is followed in most of the NE countries due to customs devolves and or religious traditions. Socio-economic aspects of this points need more understanding as it is an important element in the implementation of intensive lamb production in the NE.

- f) Ewe feeding: With the low body size of native ewes, their maintenance requirement is generally low. Supplementary feeding is required: 2 weeks before mating, during the last 2-4 weeks of pregnancy and the first 2 weeks of lactation. Also, a balanced mineral supplement during lactation is needed.

- * Output from an applicable intensive lamb production under NE condition can be as follows:

kg marketed/ewe/year = 0.8-0.9 (conception rate)
* 1.4-1.6 (crop/year)
* 1.5-2.0 (litter size)
* 0.85-0.90 (lamb vitality)
* 25-30 kg (weight at 4 months of age)
~ 55 kgs annually (vs. 15-20 kgs under the prevailing systems).