



SHEEP UNDER COCONUT¹

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This brief article on basic practices in shepherding in the coconut belt has been prompted by the writer's experience (when he first started) of the absolute dearth of a "primer" for anyone interested in venturing out on this newest form of animal husbandry in this country. I do not pretend to any degree of expertise in the field of sheep farming but I do hope that what I set down will be of interest and practical use to the 'tyro'. More than this I cannot aspire to.

Firstly, you'll need animals and here it has been fairly well established that the most economic start you could make would be with a flock of indigenous ewes and a good quality ram with a percentage of "exotic" blood. The ideal would perhaps be a flock of Indian ewes—Nellore, Mercheri and Lohi come to mind—with a pure bred Australian, American or European breed ram; but the current foreign exchange crisis and the prohibitive cost of importing animals in any event would make such a scheme well nigh impossible today. Your flock of ewes will have to be purchased from the Jaffna, Batticaloa, Mannar or Puttalam areas and prices could be anything from Rs. 40/- to Rs. 80/- per animal. Pick young sturdy animals. Any good book on sheep, or animal husbandry generally, will

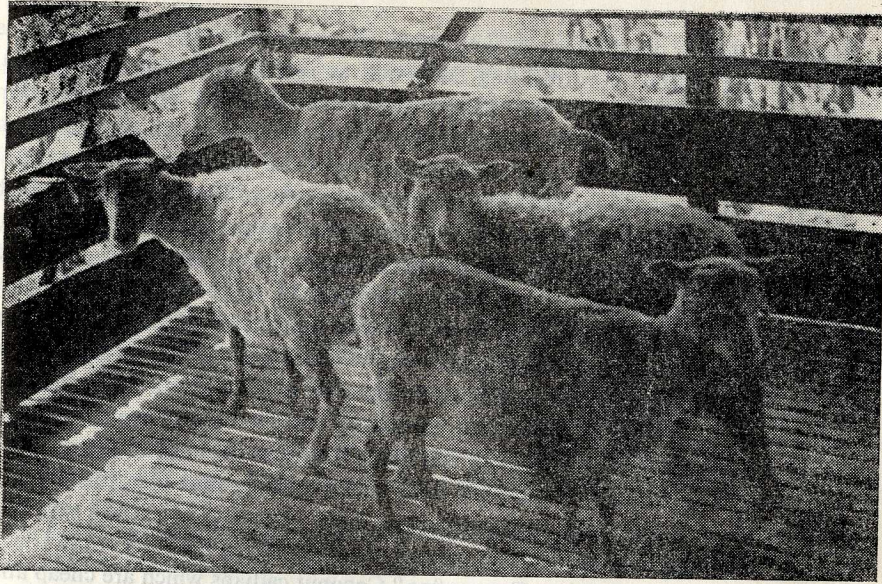
1. This article is reproduced from Kurunegala Planters Association—Annual Report 1970.

2. Proprietor Planter, Galagedara, Ceylon.

carry diagrams explaining how age can be calculated by the teeth. Make sure the animals are free of serious diseases such as Foot and Mouth or Footrot. You will doubtless be horrified by the appearance of the average local sheep but don't let this worry you—these ewes, put to a good ram, will produce surprisingly good off-spring. No matter how sure you are of your source of supply, quarantine your animals for 2 or 3 weeks and worm them with one of the proprietary anthelmintics available on the market—"Nilverm" and "Phenovis" (among others) are effective against roundworms and there are other preparations which will assist you in ridding your stock of the less common tape and hookworms. Get the droppings checked by your Vet, about a week after the first worming and repeat (on the advice of your vet.) if necessary.

Having obtained your ewes you'll now want a ram so you can get your flock into production. Your choice here is fairly limited due to the dearth of producers of breeding rams. However, the government farms and some private farmers as well have breeding rams to sell from time to time and your requirements might be secured from them. A conservative ratio of rams to ewes would be 1:30. Try and get a sire of proved capacity and breeding as buying a cheap inferior animal would set you back in your breeding programme at the time you can least afford it. Criteria in the choice of a ram would be swift growth economic feed conversion and prolificacy in the progeny. Hardihood would be less important because your first generation of lambs will be pretty tough by virtue of the fact that they will have 'hybrid vigour' in ample measure. Given unrestricted grazing and this would be true on the average coconut estate—feed conversion too would not be as important as it would be under other circumstances. We are therefore restricted in our choice by three really important considerations swift growth, early maturity and prolificacy. The writer himself believes that prolificacy and early maturity are the most important factors and has geared his own unit towards increasing his lambing percentage while maintaining hardihood and swift growth. At time of writing there seems little reason to doubt the success of this scheme though his farm is admittedly 'young'. Apart from prolificacy in the accepted sense—multiple births at each lambing there is also the very interesting possibility, in our climatic conditions, of breeding an ewe twice in the year or three times in two years. More experience has to be gained in this field, however, before I would venture an opinion as to its feasibility as a flock practice.

Your next problem will be housing for your flock. You will require night housing, though this is something practically unheard of in other countries which have a long tradition of sheep husbandry. There are a variety of reasons why you will have to house your flock at night and the reader need not be burdened with a long list of these. The floor should be slatted and the slats placed far apart enough to let the droppings through while ensuring that the feet of sheep (and, particularly lambs) cannot get through. Arecanut slats from mature trees, well dazed to ensure that all the pulp is removed, would be ideal. I think I need hardly add that the convex surface should be uppermost. The frame carrying the slats must be rigid



Imported Finnsheep in slat floor sheep shed



The Benefits of cross breeding - From left to right - Pure Finnsheep ram,
adult indigenous ewe of 2 months old cross bred lamb

enough to ensure the firmness of your floor. Give this as many vertical supports of brick and mortar or rotresisting hardwood as necessary to achieve this end. Bore your slats before you nail them to the frame. This is a simple precaution that is essential, otherwise the slats will split when you drive a nail through them and one can well imagine your predicament when the slats start coming adrift in a short time. The sides of the house should also be of slats ensuring enough ventilation while keeping the animals in. Remember ventilation is very important since your animals will only have about seven square feet of floor space each and because the heat generated by your flock, when housed, will be quite considerable. Make provision for a feed trough running on the outside of the shed so you can conveniently stall feed your flock in very wet weather with the minimum wastage of fodder. Have containers for mineral bricks and rock salt and have plenty of water available at all times. Locate the containers outside the shed proper, if possible, in such a manner that the sheep can reach them but cannot soil the contents with dung or urine. Wire brush your floor each morning after first sprinkling a quantity of quick lime on it. This is a simple, quick operation which will save you a great deal of trouble in trying to control other problems resulting from a lack of cleanliness in your housing. For roofing? Coconut cadjans which are cheap and cool, of course.

Place some absorbent material-sawdust, or paddy husks under your floor and you will have a fine source of organic manure which will comprise not only the droppings but also the urine that has been absorbed. Another tip: cut a drain around the periphery of your shed to make sure that rain water from the roof or from the surroundings doesn't get to your droppings and make a filthy mess of them.

Where feeding is concerned you will have few problems. Utilise whatever pasture you have available, though cultivated pastures such as *Brachiaria Milliformis*, if available, will be excellent. Eschew the use of concentrates unless your Vet. advises this under particular circumstances. Your stocking densities will depend on the pastures available and the rate of regeneration of it. Remember that sheep are not naturally browsers and will not normally touch coconut seedlings. There is however, the occasional 'bad egg' so look out for such when purchasing fresh stock. You will find your animals will feed most during the cooler hours of the day and rest up when it gets very hot. Keep this in mind at all times, and send your animals out early in the morning and keep them out as long as possible in the evening.

Having painted such a seemingly rosy picture you'll probably want to know where the problems arise with sheep. There certainly are several diseases, ecto- and endoparasites that effect them. In the first category the most serious would be Foot and Mouth. Have your Vet. vaccinate your flock if you are in an area subject to outbreaks of this disease. Footrot (infectious or otherwise) would be a rare phenomenon in the coconut belt given good management and housing and the same may be said of Infectious Dermatitis ("Sore Mouth").

Of the endoparasites, roundworms, particularly, are the scourge of sheep-men in this country as elsewhere, but these can be effectively controlled by a variety of anthelmintics. The frequency of administration will depend on the preparation used and the extent of infestation both of the animal and the land on which it grazes. Your local Vet. will be able to advise you in this regard though I might add that flocks let out on land previously grazed (and infected) by cattle appear to need treatment more often than otherwise. Buy a drenching gun— this is probably your most important piece of equipment— and keep it in good working order. You will need it not only for worming operations but also for the administration of raw linseed oil, turpentine, epsom salts etc. which are specifics in the treatment of diarrhoea which is another common problem with sheep. Here again, your local Vet. will be the best judge of the necessary treatment though I have found a liquid ounce or two of raw linseed oil works wonders with diarrhoea cases. Watch for coccidial infections and 'Pulpy Kidney' disease if the diarrhoea doesn't respond quickly to simple treatment. (Both these diseases can be fatal).

Of the ectoparasites, ticks can be the bane of a herd if neglected. Preparations such as 'Asuntol' are very effective and frequency of application would depend on the level of re-infestation.

I think I've now given you all the required basic 'gen' to get started with your project but remember always that, as with all livestock, personal observation, interest and regular handling of your animals can teach you a great deal more than the most learned treatise on the subject.

WHEN ALL THE WORDS HAVE BEEN WRITTEN . . .

When all the words have been written, the historical generalizations derived, and the potentials for, and resistances to, change in agriculture listed and evaluated, the job has still to be done. It has to be done not in the study of the theorist, or in the laboratory of the research workers, but in the real world, with sweat and toil in sun, wind and rain, by real farmers and their families, who bear the heat and burden of the day. In this, all the rest of us—ministers, administrators, planners, teachers, research workers, extension agents—should be no more than their humble servants.

Bunting, A. H. 1970—*Change in Agriculture*
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Gerald Duckworth & Co. Ltd.