

LIVESTOCK DEVELOPMENT NOTES: NO. 9

MANAGEMENT AND OPERATION OF A CHICKEN DISTRIBUTION CENTRE

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ABSTRACT

A guide to managing and operating a small Chicken Distribution Centre is outlined. Development Cash Budget for 500 day old chickens per batch is also presented.

INTRODUCTION

Almost all village poultry producers rely on the supply of young chickens for their chicken projects. They place their orders either through their Agriculture Extension Officers or direct with the main producers of young chickens. The chickens are then either, sent to Extension Officer for redistribution to the farmers or directly to farmers. There are some problems associated with this method of distribution, mainly:-

1. - Some farmers are unable to handle the chickens properly when they are very young and therefore experience high mortality rates during early stages of growth, and lower performances when the birds have matured.
2. - Inability of Extension Staff to distribute the chickens speedily before their conditions deteriorate.
3. - Lack of facilities to hold chickens and give them feed and water until further transportation by road or air to other parts of the Province.

To solve this problems and service the farmers effectively, each Province should establish a small Distribution Centre. The function of this Centre is to brood day old chickens for 2 or 3 weeks and thereby increase their chances of survival in the villages. A Distribution Centre will encourage the farmers to collect their own chickens and give them the chance of observing how chickens can be looked after successfully.

1. MANAGEMENT AND OPERATION OF A DISTRIBUTION CENTRE

Housing: A house preferably made of native materials should be built near the Extension Office. The size of the house will depend on the maximum number of chickens the Province is likely to order, from the main distribution centre. One square meter should be allowed inside the house for every 12 chickens. This floor space should be sufficient for chickens up to 6 weeks of age. The house shown in *Figure 1* is recommended. Another house should be built for chickens of up to 5 weeks of age to make room for new batches of day old stock.

Brooder: A suitable brooder should be constructed inside the house. If the Province expects to order 200-300 day old chickens per batch, one of the brooders shown in *Figure 2* is recommended. For coastal areas the cold brooder should be used, and for the Highlands use the kerosene brooder.

The brooder house should be ready with clean litter, water and feed troughs, supply of kerosene and lamps (Highlands), before the expected time of arrival of day old chickens. Place the chickens inside the brooder and put the plastic sheet on top of the brooder (Coastal areas) all the time during the first two days. After two days, the plastic sheet should be put only during the night. The kerosene lamps (Highlands) should be lit all the time during the first week, and at night only, thereafter. Starter feed and

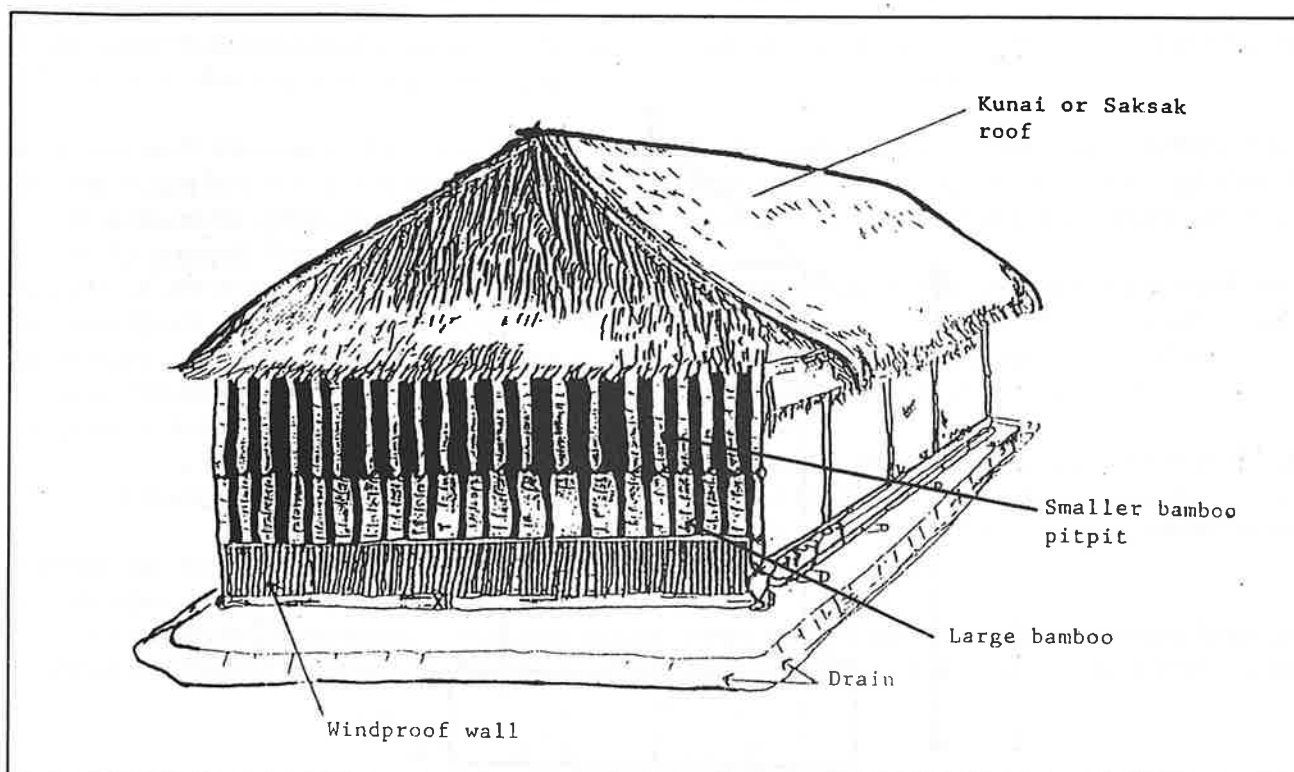


Figure 1. House for housing and brooding day old chicken at distribution centre to increase the chance of survival till village farmers buy them.

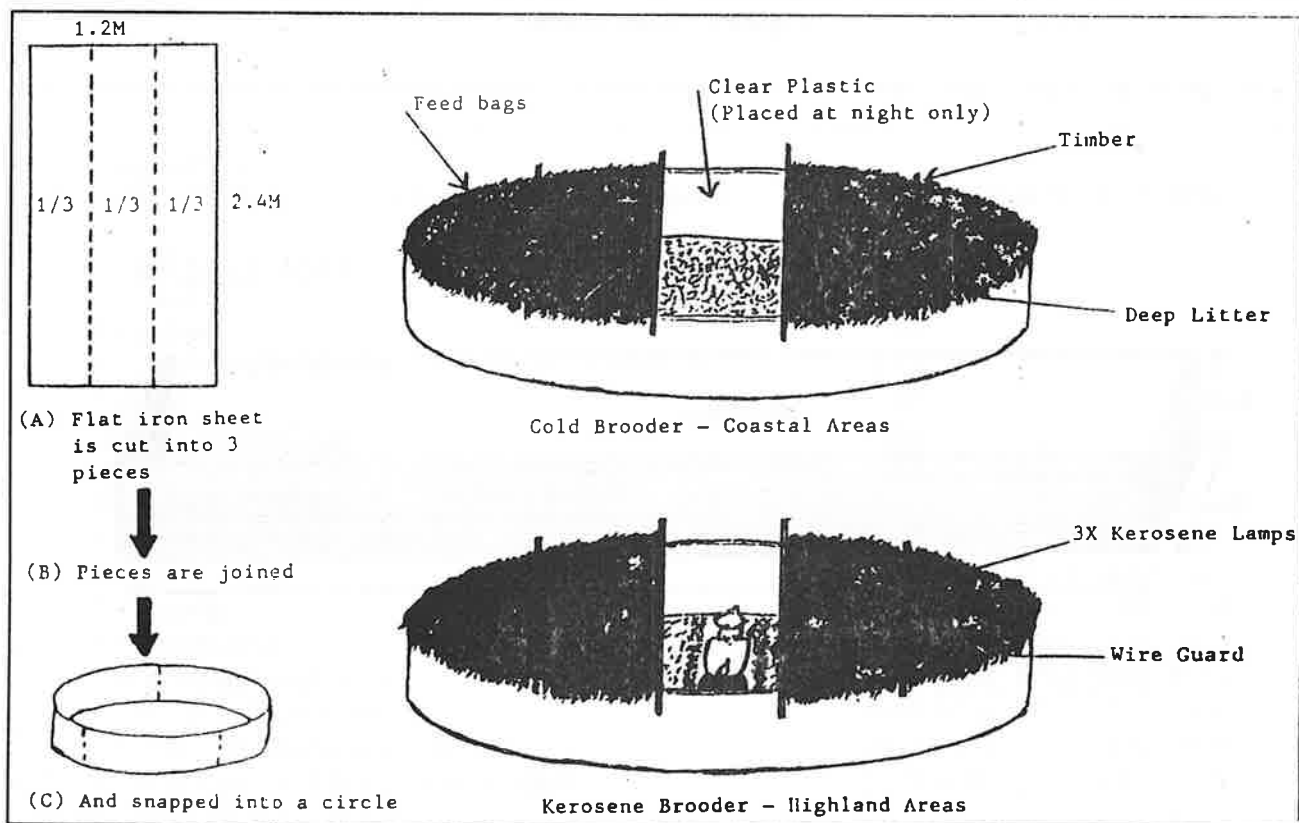


Figure 2. Recommended brooders for 200-300 day old chicks. For coastal areas the cold brooder should be used, and the kerosene brooder should be used for the highland areas.

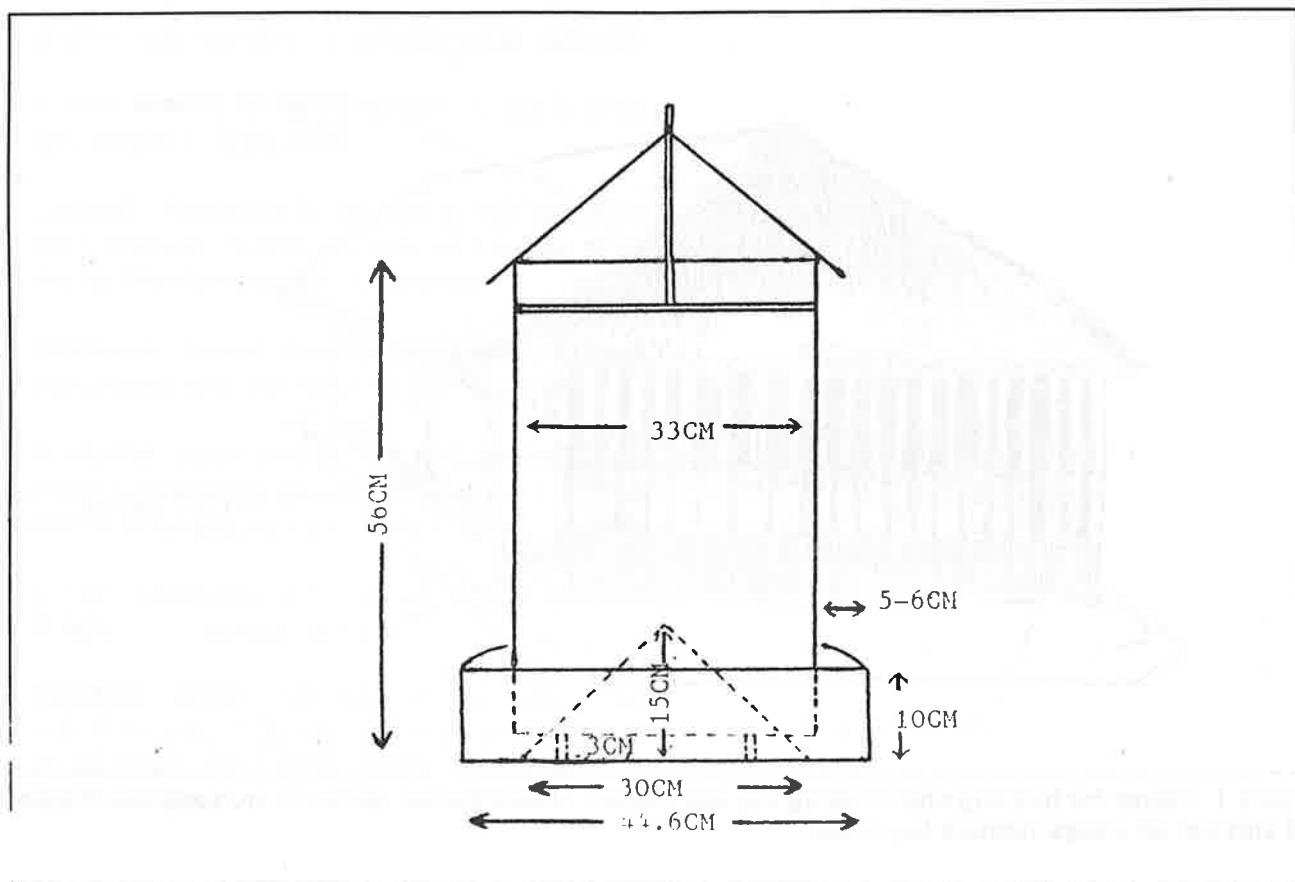


Figure 3. Tube Feeder

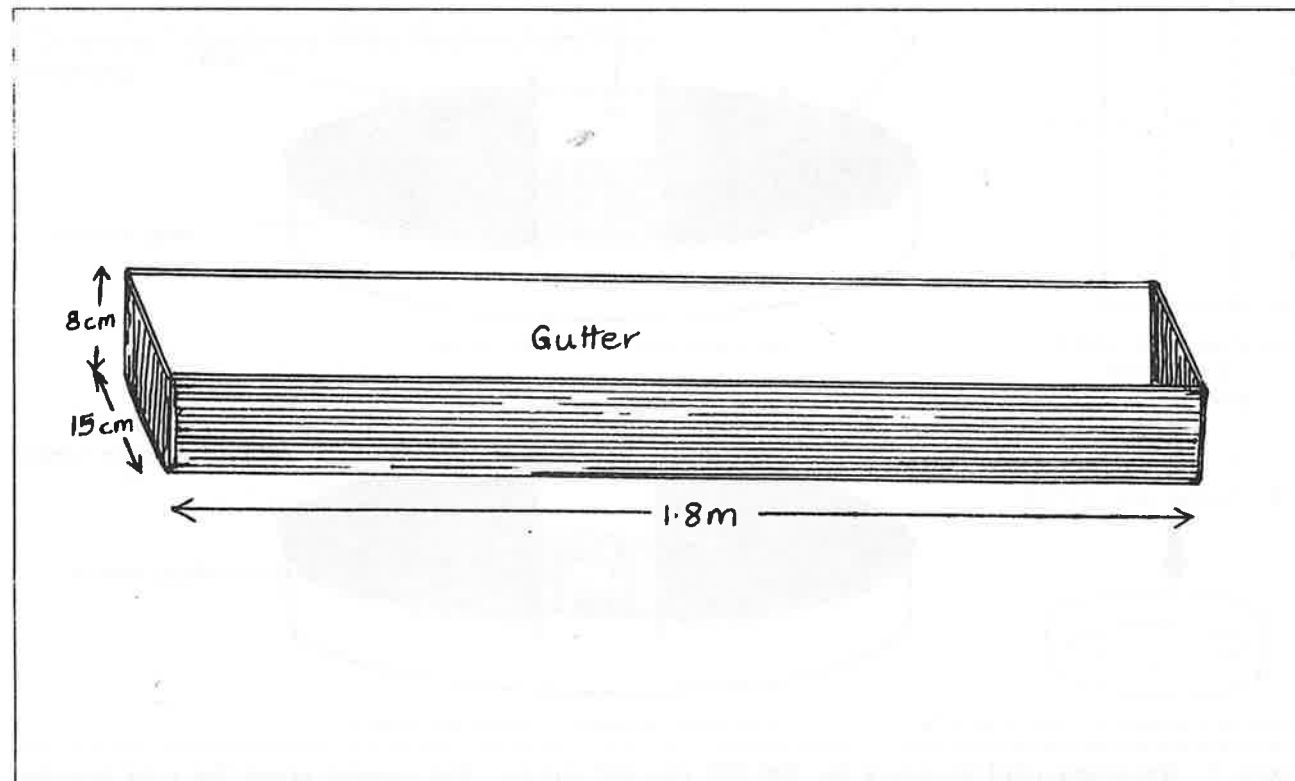


Figure 4. Water Trough

fresh water should be available to the chickens all the time. Record mortality every day.

Feeders and Waterers: Bamboo feeders and waterers can be used inside the brooder. Use small bamboo for waterers and put small stones inside to prevent the chickens jumping in the water and drowning. Allow 1 cm of feeder and waterer space per bird. The gutter can be used as troughs after the brooding period. The gutter or tube feeders should be used for the feed (Figures 3 and 4).

2. FINANCIAL IMPLICATION

Budget for Running the Centre: The cost of construction of the Centre should be met initially by the Provincial Government Funding or such Sectoral or Village Development Programs. The

sale of chickens should cover the initial capital and the running costs.

Basic Assumption: Example - Chicken Distribution Centre of capacity to handle 500 day old chickens per batch and 8.6 batches per year.

Houses: Two houses will be needed each measuring 4 meters wide and 11 meters long, mostly of bush materials. Labour cost and other materials estimated at K400 per house.

Brooders: Two brooders will be needed. Estimated total cost of material and manufacture K80.00 (Figure 2), 3 kerosene lamps estimated at K20.00.

Feed and Water Troughs: Bamboo feed and water troughs for the brooders at no cost. Gutter

DEVELOPMENT CASH BUDGET (in Kina)					
	YEAR				
	1	2	3	4	5
RECEIPTS					
Sale of 6 weeks old chickens 3870 x K2.35 each	9090	9090	9090	9090	9090
CAPITAL EXPENDITURES:					
Houses	800	-	-	-	-
Brooders	80	-	-	-	-
Feeders and Waterers	200	-	-	-	-
Lamps	20	-	20	-	20
Total Capital Cost	1100	-	20	-	20
RUNNING COSTS:					
Day old chickens	4300	4300	4300	4300	4300
Feed	3870	3870	3870	3870	3870
Kerosene	90	90	90	90	90
Miscellaneous	500	500	500	500	500
Total Running Costs	8760	8760	8760	8760	8760
Total Cash Payments	9850	8760	8760	8760	8760
Annual Cash Surplus or (Deficit)	(760)	330	310	330	310
Cumulative Cash Surplus or (Deficit)	(760)	(430)	(120)	(210)	520
The project will start to show cash surplus in the fourth year of operation.					

and/or tube feeders - estimated cost K200.00.

Houses and equipment estimated to last 5 years, and lamps 2 years only.

Labour: Assumed to be part of the activity of the Extension Centre (no cost as it is part of the day to day running of the Centre).

Chickens: Cost of day old chickens K1.00 each, vaccinated and delivered to the Province.

Mortality: Estimated at 10% to 6 weeks of age.

Feed Consumption: Estimated at 2 kg per bird to 6 weeks of age.

Sales: Estimated at K2.35 per bird at 6 weeks of age.

Batches: Initial - 500 day old chickens. Second, third etc - 500 day old chickens to be ordered when the earlier batch begins its sixth week of age.

FURTHER READING

Farming Notes No. 29, Poultry: Australorp Chickens, Department of primary Industry, Port Moresby.