

# Research on Pig Production

G. L. MALYNICZ,

Veterinary Officer (Pig Production)

*The Pig Section of the Department of Agriculture, Stock and Fisheries is carrying out research work to assist the growth of the pig industry in Papua and New Guinea. The main base for this work is at the Tropical Pig Breeding and Research Centre at Goroka, with further work being carried on at Erap in the Markham Valley and Kurakakaul in New Britain. Vudal Agricultural College and the Popondetta Agricultural Training Institute also have their research programmes.*

IN the South Pacific area, pigs have always been the most important domesticated animal, and in many areas, a pig feast is still a traditional part of any celebration or ritual. This is certainly true in Papua and New Guinea, especially in the Highlands.

Pigs in the Territory have always been produced by subsistence methods, the pigs usually grazing during the day and being fed food scraps at night. There are usually plenty of grasslands and old gardens for the pigs to



Plate I.—Pig house made entirely of bush materials



Plate II.—Pig house with bush material walls and roof, and concrete floor

graze, and food scraps do not cost anything. This way of keeping pigs is cheap, but it has its problems.

The greatest problem is that unless the farmer grows special food for his pigs, he does not have enough food for more than two or three pigs. If he tries to keep more, but does not feed them adequately, they may run off into the bush and become wild.

Another problem is that the local pigs are slow-growing and do not have many piglets. When fully grown, they are still quite small compared with imported breeds. Even when they have plenty of food, they are still slow to develop. A third problem is that because they are grazing so much, they pick up parasitic worms from the ground, and from eating earthworms and beetles. For all these reasons, it would be difficult for the subsistence farmer, using traditional methods, to expand and produce more pigs.

For an increase in growth rate and litter size, more food has to be grown for the pigs,

especially protein foods such as soyabeans. To get the most out of the extra food that is being fed to the pigs, it is best to use breeds such as the imported Tamworth or Berkshire, which, if well-fed, will grow very quickly. Such pigs can weigh 300 lb at an age of one year, compared with only 100 lb for the local pigs. The imported pigs also have more piglets per litter.

The use of improved breeds is, however, dubious unless it is supported by a general improvement of feeding, housing, management and disease control. Research is directed to improving techniques in these fields, giving results which can be applied at the village level by people with limited technical skills. Research staff are always looking for methods of pig management which use local foodstuffs or local building materials. This means that the farmer will not have to waste money on buying food or materials which he could grow or make himself.



Research on feeding is concerned mainly with finding ways of using crops which can be grown by the farmer himself. These include kaukau, tapioca, corn, sorghum, soyabean, or green feed such as kau kau leaves or pasture legumes. Housing research is directed towards developing the use of local materials such as bush timber, bush rope, bamboo, sago palm and kunai. Floors using dried kunai or sawdust or coffee hulls instead of cement are also being investigated. The manure falls into the litter where it produces heat which kills the parasite worm eggs. Such a system also saves water, as, unlike cement, the floor does not have to be

washed every day. On the breeding side, the performance of improved local and half-bred pigs under modern conditions is being studied.

All this research has an economic aim. Its purpose is to give the village farmer an increased cash return for his investment in the purchase of stock, materials and feed, and for his labour in the management of the animals.

Results of the work are passed on to the Livestock Officers and Rural Development Officers who, in turn, pass the information on to the farmers. These officers are always available to assist with the pig farmer's problems.

---

## Cattle Slaughtering

DURING the last 6 months of 1970, 2,011 cattle were processed through Administration killing facilities and a further 1,113 at privately-owned licensed slaughterhouses—a total of 3,124 cattle, which is double the figure for the last 6 months of 1967.

The Administration now has slaughtering facilities at Lae, Port Moresby, Goroka and Mount Hagen. The slaughterhouse at Madang has been completed and one at Wewak is being built and expected to be operational before the end of 1971. A slaughterhouse at Rabaul has been included on the draft works programme for 1971-1972.

The policy of building central killing facilities in areas of cattle development is beginning to pay dividends. They are proving a boost to the cattle industry as farmers can see an orderly market developing which should expand rapidly. Butchering businesses are springing up around the slaughterhouses and offering customers a regular supply of fresh beef which will lead to increased consumption of fresh meat replacing imported frozen meat.

The Administration is encouraging private persons and Local Government Councils to build small rural slaughterhouses in areas where there is not a large cattle population, and the cattle cannot economically be moved to a central killing facility. Detailed plans of a suitable slaughterhouse have been prepared by the Public Works Department and are available through D.A.S.F. offices. Koroba is already proceeding with a building while at Kundiawa, Alotau, Tapini and Kavieng there is interest in erecting slaughterhouses. The Administration has offered to train slaughtermen to kill, dress and butcher the meat if an accompanying butcher's shop is envisaged. Anybody contemplating building a private slaughterhouse in which cattle will be killed and the meat sold are warned that the building must be licensed and has to conform to standards laid down in the Slaughtering Ordinance. They are advised to discuss all aspects with Animal Industry Division officers before proceeding.