THE ECONOMICS OF DAIRY CATTLE BREEDING BY
SMALL SCALE FARMERS:
A CASE STUDY OF KIAMBU DISTRICT

BY

KARANJA, M.

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This Thesis analysis the economics of dairy cattle breeding in Kiambu district. The emphasis is on the socio-economic factors which influence farmers choice between the use of Natural Service (N.S.) and Artificial Insemination (A.I.) The first objective of the study was to describe natural service and A.I. service users in terms of their socio-economic characteristics. The second objective was to determine the extent of adoption and utilization of A.I. against N.S. Finally the study evaluated the economic performance of government A.I. scheme, co-operative A.I. scheme and natural service with the aim of coming up with the least cost method of breeding.

The sources of information used were secondary and primary data. Secondary data was obtained from various sources, while primary data was obtained using a questionnaire that was administered on a random sample of 54 farmers in Kiambu District. The analytical techniques included descriptive analysis and cost effectiveness (least cost) analysis.

The results of the study revealed that A.I. services in Kiambu district were being preferred by farmers over 50 years of age unlike natural service which was being preferred by farmers below 50 years of age. Ninety per cent of the farmers above 50 years used A.I. with only 10 per cent were using N.S., as compared to 76 and 24 per cent of the young farmers who used A.I. and N.S. respectively. The study further
revealed that the government A.I. service was the least cost effective method of providing genetic input both in terms of operational costs and the costs the farmers bear. A farmer using government A.I. service incurred Ksh. 317 more than a farmer using co-operative A.I. scheme per every pregnancy. The extra cost was Ksh. 938 when government A.I. user was compared to natural service user.

The study suggested that there was need to educate the young farmers on the demerits of using natural service. This should be done through more extension services and informal training courses. The study also found an imperative need for the government A.I. service to improve its technical as well as economic efficiency. This should be done by putting into place measures aimed at removing the impediments in the delivery system which in turn will ensure the service is more reliable thereby cutting down the timeliness related costs.

The study suggested that privatization of A.I. through dairy Co-operatives should be encouraged as a long-run alternative to government A.I. service. The government should provide the Co-operatives with technical manpower as well as subsidized lines of credit to enable them to start the A.I. schemes. Natural service should also be encouraged where A.I services are not available.