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**SOME RISK MANAGEMENT PRACTICES AMONG THE BEEF CATTLE
FARMERS OF THE NORTH WEST PROVINCE OF CAMEROON: EFFECT ON
TECHNOLOGY DISSEMINATION**

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Abstract

The North West Province of Cameroon is one of the four provinces that account for 90 % of Cameroon's estimated 5 – 6 million cattle heads. The cattle production in the area is predominantly based on traditional production systems which involve mainly rural population. These farmers suffer from various kinds of risk in the area, notably weather conditions, diseases and pests, especially ticks, seasonal price variability and uncertainty. These poor rural cattle farmers in the region, as is common in other developing countries, are associated with a reluctance to take risks, presumably because risk taking would jeopardize their subsistence. That being the case, it becomes imperative to know not only what the beef cattle farmers perceive as the source of risk, but what risk management methods they use. The overall objective of this study was to identify and examine the risk management practiced by the beef cattle farmers in the North West Province of Cameroon so as to determine their effects on technology dissemination. The North West province was divided into seven clusters based on the seven administrative divisions and a number of bench mark villages were selected based on accessibility of the villages, population of cattle farmers, and number of beef cattle producers. Within the selected villages, the choice of respondents was based on ethnic grouping, their involvement in beef cattle farming; their demonstrated interest and willingness to cooperate with the study, and their capacity to supply the required information. The researchers visited the selected farmers at their homesteads / farmsteads to collect the required information using a structured questionnaire. Quantitative data were analyzed using simple descriptive statistics while qualitative ones were analyzed using percentages and frequency counts. Eighty one percent of the respondents followed a mixed agro pastoral strategy in which cattle production was combined with crop farming. More than 90 % of the respondents had secondary economic activities other than crop farming. This is a major means of spreading risk across economic sectors and geographical space, and securing alternative sources of income. Sixty five percent of the respondents go on transhumance during the dry season for search of water and pasture for their animals. In order to further combat drought and diseases, the cattle farmers relied on the use of their traditional cattle species. All (100%) respondents had one or a combination of the local cattle species. The fact that all the cattle farmers had one or a combination of the local species implies that any introduction of breeding stock with the intention of displacing the local species is most likely not to succeed, except the new breed is disease and drought resistant. Cattle and small ruminants (mostly sheep) were kept by more than 60 % of the respondents. This equally implies that any project intervention with cattle to the exclusion of small ruminants will be a poor fit and an obvious point of friction. Cattle were subdivided into herds for risk avoidance, proper management and hand deticking. Forty seven percent of the respondents had their cattle in more than one herd, each herded by a herdsman.

INTRODUCTION

The North West Province of Cameroon is one of the four provinces that account for 90 % of Cameroon's estimated 5 – 6 million cattle heads. The other provinces are the Far North, North, and the Adamawa. The cattle production in the NW province is predominantly based on traditional production systems which involve mainly rural population. These farmers suffer from various kinds of risk in the area, notably weather conditions, diseases and pests, especially ticks, seasonal price variability and uncertainty. A four to five months (November to March) continuous period of dry weather is common in the province. This leads to lack of fodder and water for the animals during the period. This problem is further complicated by pasture burning at this drought period. Cattle theft is also a problem in the area. The poor rural farmers in the region, as is common in other developing countries, are associated with a reluctance to take risks from adopting new technologies, presumably because risk taking would jeopardize their subsistence. That being the case, it becomes imperative to know not only what beef cattle farmers perceive as the source of risk, but what risk management methods they use; for any new technologies and rural development programs tailored towards such farmers that overlook their existing risk management practices are most likely to fail.

Objective

The overall objective of this study was to identify and examine the risk management strategies practiced by the beef cattle farmers in the North West Province of Cameroon so as to determine their effects on technology dissemination.

METHODOLOGY

The study area

The area for the study is the North West Province of Cameroon, specifically Mezam, Menchum, Bui, Donga-Matung, Boyo, Momo, and Ngoketunjia Divisions of the province. These divisions were chosen based on their active involvement in beef cattle production. The vegetation of the province is savannah with altitudes ranging from 1000 – 3008m above sea level. The highland has 8 months of rainy season (march/April –

Oct/Nov). Its agro-climatic conditions are favorable for cattle rearing and that explains why the province is one of the most important cattle production areas in Cameroon.

Sampling procedure

The sampling procedure adopted by the survey was as follows. The North West province was divided into seven clusters based on the administrative divisions, namely, Mezam, Menchum, Bui, Donga-Matung, Boyo, Momo, and Ngoketunjia; a number of bench mark villages were selected based on accessibility of the villages, population of cattle farmers, and number of beef cattle producers. Within the selected villages, the choice of respondents was based on ethnic grouping, their involvement in beef cattle farming, their demonstrated interest and willingness to cooperate with the study, and their capacity to supply the required information. In effect, the sampling procedure was purposive. With the collaboration of MINEPIA Divisional delegates and staff of the divisions, the research team visited 51 villages, interviewing 281 selected beef cattle farmers. Random sampling would have been preferred but the total number of beef cattle producers in each of the divisions is not known nor is there a list of cattle farmers for the province.

Data collection

Secondary data was collected by reviewing of existing literature. Reports of MINEPIA were consulted in order to know the farmers and their locations, and estimated cattle populations. As for the primary data collection, the researchers visited the selected farmers at their homesteads / farmsteads to collect the required information using a structured questionnaire. The study was carried out in April and May 2005. In all data was collected from 281 respondents in 51 villages of the 7 divisions of the province.

Data analysis

Quantitative data was analyzed using simple descriptive statistics while qualitative data was analyzed using percentages and frequency counts. Graphic was equally used.

RESULTS

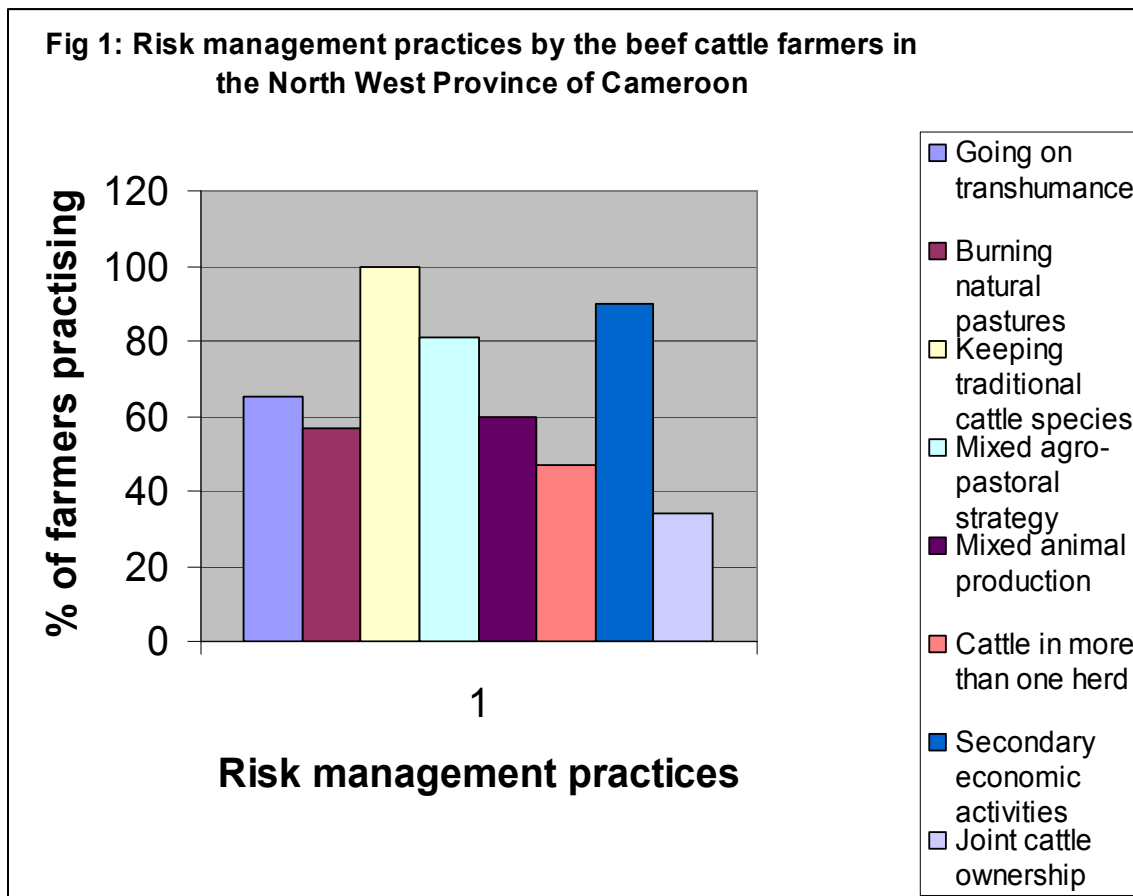
Figure 1 shows the risk management practices of the beef cattle farmers in the North West Province of Cameroon.

The combination within households of several forms of productive activity in addition to the classical “beef cattle production” was common in the study area. **Eighty one percent** of the respondents followed a mixed agro pastoral strategy in which cattle production was combined with crop farming. More than 90 % of the respondents had secondary economic activities other than crop farming. These activities included artisan, trading, butchery, rural handicrafts, tailoring, and a host of other small-scale activities. Feder 1971 termed this aspect of production “polyvalence”. This is a major means of spreading risk across economic sectors and geographical space, and securing alternative sources of income.

Burning of natural pastures in the dry season was practiced by 57 % of the respondents who used the method as a means of destroying pests, especially ticks, though many do it to encourage the regrowth of fresh grass for their animals. The drought escape measure taken by most cattle farmers of the province is transhumance. Sixty five percent of the respondents go on transhumance during the dry season for search of water and pasture for their animals. In order to further combat drought and diseases, the cattle farmers relied on the use of their traditional cattle species (Goudali, Red Fulani, White Fulani, Djafoun, Bakaledji, etc.) which are more drought and disease resistant. All (100%) respondents had one or a combination of the local cattle species. Cattle and small ruminants (mostly sheep) were kept by more than 60 % of the respondents. This mixed animal production system allows for better disease and pasture management. Cattle were subdivided into herds for risk avoidance and spread. The herd-size during the survey ranged from 52 – 80 cattle heads per herd, which means that producers with more than 80 cattle heads had their cattle in more than one herd. Forty seven percent of the respondents had their cattle in more than one herd, each herded by a herdsman. For proper management, theft prevention and hand deticking in cases of no spraying facilities, one herdsman can effectively control the above number of cattle heads in a herd. Thirty four percent of the farmers jointly owned cattle, mostly with family members, and this is a way of spreading risk, especially of animal death and theft, among many persons.

To overcome the problem of seasonal price variability and uncertainty, some of the farmers sell their animals during the transhumance period which happens to be the Christmas and New Year period when the demand for beef is high.

Generally, the risk management strategies used by the farmers work out well for now, but the continuous use of same breed of cattle will in the long run reduce production and productivity, and continuous burning of the natural pastures will surely degrade the pasture lands.



POLICY IMPLICATIONS AND CONCLUSIONS

The failure of a lot of development activities in the farms is due to the fact that often the farmers’ risk management practices are not taken into account.

The fact that all the cattle farmers had one or a combination of the local species implies that any introduction of breeding stock with the intention of displacing the local species is most likely not to succeed, except the new breeding stock is drought and disease tolerant.

The fact that 60 % of the farmers keep both cattle and small ruminants implies that any project intervention with cattle to the exclusion of small ruminants will be a poor fit and an obvious point of friction.

To discourage transhumance, which is the main source of agro-pastoral conflicts; farmers should be encouraged and trained to grow improved grasses such as Bracharia, Guatemala, and leguminous plants. They should equally be trained in fodder preparation and preservation, especially hay and silage.

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