

A SURVEY OF DAIRY PRODUCTION PRACTICES IN THE DERIVED SAVANNAH OF OYO STATE SOUTH WESTERN NIGERIA

B.G. OLADUNJOYE¹, A.A. BUSARI^{3*}, A.W. ADEKOYA¹,
V.O. OKORUWA² and J.A. OLANTE⁴

¹Department of Agricultural Extension Services

²Department of Agricultural Economics, University of Ibadan, Ibadan, Oyo State

³International Livestock Research Institute, PMB 5320, Ibadan, Oyo State

⁴Department of Pasture and Range Management, University of Agriculture,
PMB 2240, Abeokuta, Ogun State

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ABSTRACT

The study was conducted to find out dairy production practices among Agro-pastoral Fulani women in the derived Savannah of Oyo State, Southwestern Nigeria. Data were collected, using structured questionnaire from 120 Fulani women in three Local Government areas namely: Oyo West, Atiba and Ogbomosho North respectively. The study revealed that the main dairying activities are milking of cattle, processing and marketing of dairy products. The most preferred dairy products are wara (local cheese), ghee and butter. Marketing was done exclusively by self or in combination with intermediaries ("middlemen"). Main reasons for engagement in dairying activities are: Income generation, cultural and husband's wish. Constraints mostly encountered are bad roads, inadequate transport facilities and inadequate supply of raw milk from the cattle in dry season. Sources of agricultural information include; friends/neighbours, radio broadcasts, and International Livestock Research Institute (ILRI) Programme, Ibadan.

Keywords: Fulani women, milk processing, Wara, Ghee, Butter.

*Corresponding Author

INTRODUCTION

The importance of domestic livestock, such as cattle, sheep, goats and poultry as sources of income and animal protein supply cannot be over-emphasized. Cattle and to a lesser degree, goat and sheep production, are generally associated with the pastoral Fulani, who are reputed to own approximately 90% of the national herd (Suleiman, 1988). Nigeria's dairy industry is based largely on milk production from an estimated national herd of 12.2 million cattle (F.A.O., 1988). Hence, it can be inferred that domestic milk production is largely derived from these cattle.

The dairy herds are kept primarily by pastoral Fulani families, who process the milk before selling it. Cattle management, herding and milking of cattle are mainly male tasks, while the women are involved in processing and marketing, within numerous small independent dairy enterprises (Water - Bayer, 1988). Hence, one can appreciate the fact that the women by their dairying activities make this form of animal protein available to the general populace in forms which conform to local tastes and at cheaper prices than the "modern" imported milk products.

The purpose of this study was to find out the practices of Fulani women in rural dairy production in the derived Savannah of Oyo State. Specifically, the objectives were:

1. To identify the various dairying activities and products.

2. To identify the channels, the agropastoral women employ in marketing their dairy products.
3. To find out the main reasons for engagement in dairy activities and constraints encountered in dairy production.
4. To determine the sources of agricultural information to the respondents.

These were achieved by identifying; the various dairying activities and products the women engaged in, the channel for marketing the products, the constraints encountered in dairy production and sources of information necessary to improve the productivity of the women.

MATERIALS AND METHOD

The study was conducted in the derived savannah of Oyo State in the South-Western Nigeria where pastoralists practice mixed farming. Data were collected between February and April, 1998 by a multiple visit survey from 120 Fulani women agropastoralists, who were selected based on adaptable previous surveys and past classifications of cattle agropastoralists conducted around the study areas by the International Livestock Research Institute (ILRI), Ibadan, Nigeria. Agropastoralists selected included 40 households from each of the three (3) Local Government Areas; Oyo West, Atiba and Ogbomoso North respectively.

A structured questionnaire designed around the objectives was used to elicit responses

from the respondents. Questions were formed on both demographic and non-demographic variables. Data collected were analysed by using SAS (1987) for calculating frequencies and percentages.

RESULTS AND DISCUSSION

Dairy Activity engaged in by respondents

All the respondents engaged in both processing and marketing of dairy products but none was involved in milking. The respondents indicated that milking of cattle was done exclusively by the household head or other male members of the household. This is probably due to the fact that it is a laborious and time-consuming activity. Moreover, it has been regarded as a tradition that men collect the milk, which is to be shared among wives.

Dairy Products Produced by the Respondents

Dairy products mostly produced by the respondents is wara (100%). This is followed by Ghee (52.5%) and Butter (30%) (Table 1).

Generally, more than one by-product was produced by most of the respondents from raw milk. None of the respondents indicated producing Nono or Yoghurt which are also other milk by-products. They stated that they produce whatever product is in high demand. This probably explains why wara (local cheese) is most commonly produced in these areas. However, findings by Waters – Bayer (1988), in the northern part of the country

TABLE 1: DAIRY PRODUCTS PRODUCED*

Product	Respondent	
	Frequency	Percentage
Wara (local Cheese)	120	100
Ghee	63	52.5
Butter	36	30.0

*Multiple responses

Source: Field Survey 1999

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TABLE 2: MARKETING CHANNEL UTILIZED

Response	Respondent	
	Frequency	Percentage
Self and intermediaries	61	50.9
Self	58	48.3
Intermediaries	1	0.8
Total	120	100

Sources: Field Survey 1998

showed that Nono is the most common product.

Moreover, there has been a change in some of the socio-cultural set-up of the agropastoralists due to their integration or interaction with the local indigenes (i.e. Yoruba people). Hence the change from the type of dairy products produced (Nono) to that often demanded in the study area.

Marketing Channels Utilized by the Respondents

Majority of the respondents market their dairy products either by self or in conjunction with intermediaries (50.9%) or solely (48.3%) by self (Table 2). Intermediaries ("middlemen") are usually women who have a low level of production and need extra to meet the demand of their customers.

Only a respondent (0.8%) indicated selling solely through intermediaries. This could probably be due to old age or being in "purdah" (an Islamic practice whereby a woman is kept in seclusion in the home by her

husband, and prevented from going outside the home to work).

Income generation (93.3%), cultural (45.0%) and husband's wish (22.5%), were given as reasons for involvement in dairy activities. It is not common to find a respondent who got involved in dairying activities due mainly to her husband's wish. If mentioned, it was in addition to other reasons. Income generated is used for making purchases for self and children or for purchasing food items such as vegetables and food seasonings to supplement what is provided by the husband.

Constraints Encountered in Dairying Activities

Constraints mostly encountered are bad roads (86.7%), inadequate transport facilities (85.0%) and inadequate supply of raw milk from the cattle at times (78.3%) (Table 3). Most of the households are dispersed and located far from each other or from the main roads. Most of the roads were observed to be bad and unmotorable, only accessible by foot or motorcycles. However, motorcycles are sometimes available in these areas though very expensive.

TABLE 3: CONSTRAINTS ENCOUNTERED IN DAIRYING ACTIVITIES*

Constraint	Respondent	
	Frequency	Percentage
Bad roads	104	86.7
Inadequate transport facilities	102	85.0
Irregular supply of raw milk from the cattle a times	94	78.3
Lack of clean water	33	27.5
Lack of appropriate small-scale technology	4	3.3

*Multiple responses

Source: Field Survey 1998

Inappropriate supply of raw milk from the cattle, usually occurs in the dry season. The feed supply (forage) is inadequate due to the prevailing harsh weather conditions. The cattle have to be grazed far and wide to get enough forage. The men, in this period, are more concerned with conserving the available raw milk from the cattle for the young calves, for necessary and proper growth. Hence, they ration the milk supply to the women. Lack of clean water (27.5%) was also a constraint especially in the dry season. The women need water for dairy and other household activities. In the dry season, some of the rivers, wells and streams dry up. The women have to walk long distances on foot to get available water to use.

Unavailability of appropriate small-scale technology (food-processing) and equipment (3.3%) was the least mentioned by the respondents. This is probably due to the fact that no research institute or organization has made efforts to introduce them to any. Hence, they normally use their locally available utensils. However, some respondents indicated that if they could get appropriate and affordable equipment, they would appreciate them.

Sources of Agricultural Information

Table 4 shows that majority of the respondents receive information from many sources. The most common sources are ILRI (International Livestock Research Institute) programme (93.3%) and Friends/Neighbours (87.5%).

This could be explained by the fact that all the respondents have been involved in previous/on-going research surveys conducted by ILRI. Friends/Neighbours serve as sources of information by virtue of continuous interaction with one another.

For those who receive information from the mass media (25.8%), it is specifically from the transistor (battery operated) radio which is affordable by some of the respondents. None of these areas had electricity supply, hence no television. Information obtained from agricultural programmes are conducted in Yoruba language of which all the respondents understand. Due to the fact that none of the respondents had any form of formal education, they could not obtain information from the print media. The respondents receive limited information from the Agricultural Development Programme such as ADP (11.7%), as a result of the non coverage or visitation of many of the respondents by the ADP's extension agents.

CONCLUSION AND RECOMMENDATIONS

The importance and contributions of Fulani agropastoral women in the promotion of rural dairy production activities, necessitated the conduct of this study to access their roles in the immediate Fulani economy, local and national economy, with specific emphasis on the derived Savannah of Oyo State.

TABLE 4: SOURCES OF AGRICULTURAL INFORMATION*

Information source	Respondent	
	Frequency	Percentage
ILRI programme	112	93.3
Friends/Neighbours	105	87.5
Mass media	31	25.8
Agricultural Development Programme extension agents	14	11.7

*Multiple responses

Source: Field Survey 1998

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The study revealed that, while processing and marketing of dairy products was common amongst the respondents, milking of cattle was an exclusively male activity. Marketing of dairy products was done solely by self or in conjunction with intermediaries ("middlemen"). Dairy products commonly produced are wara (local cheese), Ghee and Butter.

Main reasons for engagement in dairying activities are income generation, cultural and husband's wish. Constraints most encountered are bad roads, inadequate transport facilities and inadequate supply of raw milk from the cattle in dry season. Main sources of agricultural information include ILRI Programmes, friends/neighbours and the mass media (exclusively radio).

In view of the above findings, the following recommendations have been suggested:

- (i) The provision of good and motorable roads accessible at all seasons is most urgently required, to ease transportation problems and hence, facilitate transportation of dairy products, from the point of production to the nearest markets.
- (ii) The activities of the extension services should be made to have appreciable impact on livestock production and marketing. This

can be effected by increasing the number of extension agents within the local government area.

- (iii) Provision of safe, all year round pipe-borne water, deep wells or sinking of bore-holes to ease the water scarcity problem.
- (iv) Encouragement of literacy programmes such as adult education classes to facilitate literacy among the agropastoral women.

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