Characteristics of Peri-urban Dairy Herds of Bobo-Dioulasso (Burkina Faso)

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ABSTRACT

Peri-urban dairy cattle farms within 50 km of Bobo-Dioulasso were studied to assess herd type, disease incidence, management, feeding and breeding strategy. Out of 417 cattle farmers, 42% had dairy objectives and were studied. Among these peri-urban dairy farmers, 60% were settled, 36% semi-settled, and 4% transhumant. In total, they held 4538 dairy cows, of which 32% lactated during the study. The prevalence of mastitis (55%) increased (p<0.05) with herd size. Advanced strategies for supplementary feeding and breeding were most frequent in small herds (<30 cattle). None of the large herds (>60 cattle) had advanced breeding strategies. Bulls and cows were culled at younger ages in herds with better breeding strategy. Overall, this resulted in higher individual milk output in small herds (2.46 L/day) compared with large herds (1.25 L/day). Pure breeds were rarely used, and the presence of Bos taurus baoué naturally selected for trypanotolerance was low. The prevalence of trypanosomosis (40%) in herds dominated by Bos indicus zebu and Méré (Zebu × Baouélé) is an argument for maintenance of biodiversity and selection of Baouélé for milk production.

Keywords: biodiversity, Burkina Faso, mastitis, milk, peri-urban, trypanotolerance

Abbreviations: AI, artificial insemination

INTRODUCTION

Interest in peri-urban dairy production increases with urbanization and economic growth in West Africa. Local dairy production satisfies only 10% of total demand (MARA, 1998). About a decade ago, private and government projects started milk collection and processing in Bobo-Dioulasso (Centrès, 1999). According to general opinion, traditional production systems are a key to increased milk yields. The present study was undertaken to assess variation in the characteristics of the dairy cattle herds in peri-urban areas with regard to management, breeding strategies and animal health.