

Publication

A longitudinal study of cattle productivity in intensive dairy farms in central Ethiopia

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Ethiopia is witnessing an emergence of intensive urban dairy farming. The aims of this study were to capture cattle productivity parameters in selected intensive dairy farms in and around Addis Ababa (Central Ethiopia). The study is a pre-requisite and baseline for further economic analysis of diseases such as bovine tuberculosis (BTB) and to assess some of the current challenges faced by farm owners for optimal animal performances. Hence, a 3-year longitudinal observational study was conducted for the first time in Ethiopia, in 24 dairy farms with intensive husbandry, including a total of 1,705 dairy animals. Herd characteristics, animal movement, and productivity parameters (fertility, morbidity, mortality) were recorded in a herd-book. Whereas, half the farms saw their animals increase in number over the 3 years, 37.5% (mainly large farms) saw their herd size decrease. Offtakes accounted for 76.6% of all animal exits. One hundred and ninety (11.1%) animals died of natural causes. Highest mortality was observed in young stock (13.9%). Overall, diseases were the leading cause for death (57.5%). The majority of calves (69%) that died, did so within the first week of life. Mean calving interval (CI) was 483.2 days. Successful conception after artificial insemination (AI) was 66.1% with Addis Ababa and smaller farms faring worst. Mean time interval from calving to first service was 152 days. Date of birth to first service was 592.2 days and date of birth to first calving was 794.7 days. In conclusion, the study showed sub-optimal productivity performances in intensive dairy cattle and highlighted some of the current gaps and challenges in urban dairy productivity.

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