Indian dairying is emerging as a sunrise industry. India represents one of the world’s largest and fastest growing markets for milk and milk products due to the increasing disposable incomes among the 250 million strong middle class. With an annual growth rate of over 5 per cent the country’s milk production has reached 90.7 lakh tones in the year 2004-05. The upsurge in milk production has thrown up unprecedented challenges in milk marketing. The country is blessed with an enormous domestic market which is magnet attracting multinationals to India. Liquid milk offers a vast scope for expanding sales in the short term in the market. About 35 per cent of the milk produced is consumed in the urban areas. Of this, the cooperatives supply about 20 per cent, private dairies about 2 per cent, government managed dairies about 2 per cent and a highly significant share by Private traders. The milk is supplied to the urban consumers by periurban and urban-based milk producers. The continued strong presence in the urban areas of traditional vendors provides a yardstick for marketing. On ground of hygiene, prevention of adulteration and other malpractices as well as environment-friendly urban development, the importance of the traditional khatal needs to be de-emphasized or his operaons modernized. This offers tremendous marketing opportunies. However, such a change is possible only if the organized sectors are demonstrably better than the traditional vendors in such consumer services as door delivery, credit etc. Little efforts have been made to study the small privately-owned...
khatals that are coming up at every nook and corner of the cities to cater to the needs of the local people residing nearby. The present study was taken up as an effort to throw some light on the existing conditions of these khatals in and around Ranchi city with the following objectives: To study the existing A.H. practices followed by the khatals owners. To study the extent of knowledge and adoption of improved A.H. practices. To study the reproductive performance of dairy animals kept by the khatals owners. To study the prevalence of diseases and remedial measures taken by the khatals owners. To work out the economics of milk production of dairy animals maintained by the khatals owners. To identify the constraints and highlight the perceived needs of the khatals owners. The present study was carried out in purposively selected Ranchi city of Jharkhand. Ranchi city was purposively selected as a large number (Approximately 1200) of khatals were located in this city. The khatals were located in various areas of Ranchi, for the shake selection of samples from Ranchi city and its surrounding, the city was divided into six zones namely, South West (ZI), South (ZII), Central (ZIII), East (ZIV), North (ZV) and West (ZVI) on the basis of distribution of khatals in these regions. From each zone 30 khatals were selected randomly. Thus a total of 180 khatals were selected for the study. All the khatals owners were interviewed personally with the help of a structured schedule. The data were collected with the help of structured interview schedule incorporating all the items on which information were required. The respondents were individually contacted at the khatals. The data thus collected was compiled, tabulated and subjected to the statistical analysis viz; frequently, percentage, mean, standard error, analysis of variance and coefficient of correlation were used to test the accuracy of data. The overall age of the respondents was found to be 42.65 ± 0.82 years. Majority of respondents were educated (52.22 %) up to middle school level. Majority (80 %) of respondents belonged to Yadav caste. The respondent’s family size was medium consisting of 6-9 members. Livestock rearing was main primary occupation of the respondent. Most of the family belonged to landless (62.77 %) category and possessed large herd size (> 6 milch animals). Zone-I, Zone-II, Zone-III and Zone-V members had taken some credits, whereas Zone-IV and Zone-VI people were less oriented towards credit. The average amount of credit taken ranged from Rs. 27500 by Zone-V members to Rs. 45000 by Zone-I members. Most of the farmers had high economic motivation. Majority of Zone-II, Zone-III and Zone-V members had favourable attitude, whereas, Zone-I, Zone-IV and VI farmers had neutral attitude towards dairy farming. Use of communication sources was found to be quite low in all the Zones. Most of the respondents (94.44 %) did not receive any training whereas only 5.56 per cent respondents had received training. It was found that none of the khatal owner in the Ranchi city were maintaining local cattle, all the khatal owners were keeping crossbred cattle and 87 percent of the respondent were also rearing buffalo. The cattle were kept on stall feeding and were not sent for grazing, whereas 76.66 percent of the respondents kept their buffalo on grazing and stall feeding. Grazing was mostly performed by the children, preferably during evening. The main ingredients of concentrate mixture was reported to be Dal chunni (95 %), wheat bran (93.33 %), mustard cake (84.44 %), G.N. cake (93.33 %), crushed maize (67.77%), salt (85.55 %) and Gur (58.88 %). Only about 14 per cent of the respondents were feeding ready made Pashu ahar. Only few respondents (27.22%) were feeding mineral mixture to cows in milk, and 12.65% per cent of the buffalo owners fed mineral mixture to buffalo in milk. Any cattle and buffalo heifer and calves were not fed with mineral mixture. Majority (86.66 %) of the cattle were artificially inseminated, whereas majority (46.87 %) of buffalo were bred by natural service of known pedigree bull and 30.62 per cent by natural service of unknown pedigree bull and only 22.50 percent through artificial insemination. Majority of the respondents identified heat in their animals by seeing the sign like bellowing (100 %), mucus discharge from vulva (81.11 %), mounting on other animals (41.11%) and frequent urination (34.44 %). Majority of the respondents could know that their animals are pregnant by the sign that animal was not coming to heat after service (73.33 %) external symptom (26.66%) and rectal palpation (27.77%). Majority of the khatal owners were keeping their animals in shed of thatched roof with no wall (61.66 %) and thatched roof with thatched wall (11.66%). Majority of the respondents were providing bedding (mainly straw) to their young stock, colostrum was fed to new born calves after the placenta is shed. Only 31.11 percent of the respondents were deworming their calves as specified by the veterinarians. Naval cutting was not followed by majority of the respondents and it was left to fall off naturally. Most of the khatal owners were preventing their pregnant animals from grazing during last 15 days and were also providing extra ration. Usually assistance was provided during parturition and Replanta or boiled Paddy along with bamboo leaves were given for easy expulsion of placenta. If placenta was retained, they consulted veterinary staff. To avoid ingestion of placenta by the animals, it was either buried (88 %) or thrown away (8.33 %).
Warm water, Haldi and Molasses were the common feed given after parturition by the khatal owners. Majority of khatal owners were milking their animals by themselves and most of them adopted full hand milking (92.22 %). All the respondents were washing their hand before milking. Only 5.55 per cent of respondents were found washing their animals before milking, but majority (96.66 %) of respondents was cleaning its udder before milking. Negligible percentage of respondents were giving water to the animal before milking. Generally bucket was used for milking. The utensils were cleaned by using Detergent (61.11 %) or only water (21.11 %) or by Rakh (17.77 %). Age of the first calving was found to be 30.25 ± 0.34 month in case of cattle and was significantly different in different zones and 41.08 ± 0.12 in case of buffalo. Lactation length and dry period was reported to be 9.97 ± 0.04 and 2.12 ± 0.01 months in cattle and 7.14 ± 0.22 and 3.09 ± 0.01 months in buffalo. The calving interval in cattle was 15.20 ± 0.20 months and in buffalo it was 18.78 ± 0.14 months. 70 per cent of respondents were getting vaccinated their animals, 60 per cent vaccinated their animals against FMD, 6.66 per cent against BQ and 3.33 per cent against H.S. About 57 per cent of the respondents were consulting veterinarian, 30 per cent were consulting Stockman/Compounder, 9.4 per cent local quack and only 3 per cent were doing self medication when their animals were sick. All the respondents were maintaining cleanliness in the house, but majority (88.88 %) of respondents were not segregating their sick animals. Anoestrous (48.88 %), Repeat breeding (40 %), Mastitis (34.44 %), Tympy (31.1 %), FMD (25.55 %), H.S. (25.55 %), Milk fever (22.22 %), Theileria (10 %) and Surra (10 %) were found to be common diseases encountered in khatal during the last five years. Majority of the respondents had high knowledge level in Zone-I (93.33 %), Zone-II (86.66 %) and Zone-VI (73.33 %) and medium knowledge level in Zone-III (80.0 %), Zone IV (70.0 %) and Zone-V (80.0 %). The knowledge about scientific dairy husbandry practices was found to be highly significantly correlated with adoption at 0.05 level and with size of family, milk production, milk sale and net income from dairying at 0.01 level. xviii. The adoption level was found to be medium (35.55 %) and high (57.22 %) and was correlated with knowledge (0.05 %) and size of family, herd size, milk production, milk sale and net income from dairying (0.01 %). The average milk production per khatal was 57.53 ± 3.85, 61.13 ± 3.10, 43.46 ± 2.90, 50.40 ± 5.51, 41.86 ± 2.53 and 41.46 ± 2.52 litres per day in Zone-I, Zone-II, Zone-III, Zone-IV, Zone-V and Zone-VI respectively. The average milk production per milch animal was found to be about 5.58 litres per day. Milk consumption by all the khalal members was found to be 3.12 ± 0.14 litres per day. The ‘F’ value revealed that the difference between situation (zone) was non-significant. Milk sale per khalal per day was found to be 45.60 ± 1.24 litres. The F value revealed that there was highly significant difference between zones with regard to milk sale per day. Majority of the respondents (86.66%) sold their milk directly to consumer at khalal, followed by home delivery (7.77%), to middle men (3.33 %) and to hotel or halwai (2.22 %). The highest net income per dairy animal (Rs. 16932.40) was obtained by Zone-II members followed by Zone V (Rs. 15884.88) Zone-I (Rs. 14345.52), Zone-III (Rs. 14958.77) and Zone-IV (Rs. 14572.42) and Zone VI (Rs. 11195.43) members. High cost of concentrate mixture (93.33 %), high cost of modern medicine (87.77 %), problem of anoestrous and repeat breeding in dairy animal (84.44 %), lower price of milk (67.77 %) were expressed as the most serious constraints by the khalal owners. Whereas lack of guidance (training facilities) about the management of milch animals (65.55 %), difficulty in obtaining loan (57.77 %) and charging exorbitant amount by the Veterinarian (47.77 %) were serious constraints expressed by the khalal owners. Neglect by the Veterinarians (21.11 %) and lack of drinking water facility (21.11 %) were also regarded as constraints by the khalal owners. Subsidy on loan for dairying (66.66 %), treatment facility at door step (63.88 %), availability of A.I. facility at door step (63.88 %), availability of cattle feed at reasonable cost (61.11 %), infertility comp once in a month (56.66 %), reasonable price for milk (22.77 %), education of scientific dairy husbandry practices (46.66 %), drinking water facility for animal (42.22 %), existence of milk cooperative society in the area (38.88 %), availability of bank service in the area (33.33 %) were perceived as important need by the khalal owners in descending order.