

*Summary
and
Conclusion*

SUMMARY AND CONCLUSION

In the present study was envisaged investigate the nutritional status of cattle and buffaloes under mixed farming system of Jaunpur district in Varanasi division of Uttar Pradesh in order to take a holistic view of the farmers. For this purpose, data of 200 farmers belonging to five land holding sizes i.e. 0, upto 2, between 2.1 and 5.0, 5.1 and 10 and more than 10 acre of land (representing categories I, II, III, IV and V, respectively) from 20 villages, 5 from each block of Jaunpur district viz., Shahganj, Badalapur, Kerakat and Karanjakala was collected.

The average land holding size was 0, 1.14, 3.38, 7.73 and 20.27 acres per family in categories I, II, III, IV and V, respectively. The maximum human units were noted in category V (11.50) and minimum in category I (7.05). The maximum family labour was noted in I (6.12) and they differed significantly as compared with other categories except in category II (4.87). The minimum service income value (9.37) was found in I and maximum in V (18.0). The maximum infrastructure (58.00) was available in category V and it was significantly higher as compared to value in other categories. While the maximum points for social status (58.25) were recorded in category V, the minimum social status (11.50) was recorded in category I.

The highest number of milch buffaloes were recorded in category III

(1.03) was lowest in category I. The maximum pregnant buffaloes were found in category III (0.17) and minimum in category II (0.10). Number of dry buffaloes were high in category III (0.12 per family) and minimum in category I (0.04 per family). The number of growing buffaloes were highest in category III (1.14) and lowest in category I (0.39 per family). The total number of buffaloes were maximum in category III (2.46 per family) and minimum in category I (1.03 per family).

The number of milch cattle were significantly ($P < 0.05$) higher in category V (1.50) and lowest in category I (0.45). The highest number of pregnant animals were noted (0.53) in category V and lowest in category I (0.10). The maximum number of dry animals were found in category V (0.12) and minimum in category IV (0.03). The highest number of growing animals were noted in category V (0.94) and lowest in category III (0.33 per family). The highest number of draft animals were noted in category II (0.98) and lowest in category IV and V (0.01 and 0.01). The highest number of cattle population was noted in category V (3.1 per family) and lowest in category I (1.34 per family).

The maximum average number of milch bovine units were found in category V (2.51) and minimum in category I (0.89). The maximum average number of pregnant bovine units were noted in category V (0.65) and minimum in category II (0.30). The highest number of bovine units were found in category V (0.20) and lowest in category I (0.09). The highest number of growing bovine

units were found in category V (2.03) and lowest number in category II (0.76 per family). The highest number of draft bovine units were noted as 0.98 in category II and lowest in category IV and V (0.01 and 0.01), respectively. The highest number of bovine units were noted in category V (5.4) and lowest in category I (2.36 per family).

The proportion of milch cattle was 33.58, 35.71, 38.03, 57.06 and 48.36 in I, II, III, IV and V categories of farmers, respectively. The proportion of milch cattle was highest in category IV (57.06%) followed by V (48.36%), III (38.03%), II (35.71) and I (33.58%). The proportion of pregnant cattle was highest found in category V (17.09%) and lowest in category III (6.83%). The maximum per cent of dry cattle were found in category V (3.87%) and minimum in category IV (1.63%). The maximum per cent of growing cattle was noted in category I (50.74) and minimum in III (14.28). The maximum per cent of draft cattle were found in category II (38.8%) and minimum in category I (0.0%). The maximum per cent of lactating buffaloes were noted in category II (57.35) and minimum in category III (41.86%). Maximum percentage of pregnant buffaloes were found in category I (15.53) and minimum in V (5.21%). Proportion of dry animals was highest in category II (6.47%) followed by III (4.87%), I (3.88), IV (3.82) and V (3.47). The highest percentage of growing buffaloes were found in category V (47.39) and lowest in category II (28.77).

Per cent of lactating animals was highest in category IV (49.05) and

lowest in category I (37.28). The maximum average number of feed grade was found in category III (3.08) and minimum in category I (2.82).

The maximum literacy was noted in category V (65.1) and minimum in category I (30.12). Hundred per cent landless farmers followed natural breeding in their animals.

The maximum area under wheat crop was observed in category V (8.93). The maximum grain yield (14.75 qt/acre), maximum gross income (Rs. 88850/acre) and maximum net income (Rs. 5260/acre) was noted in category V. The maximum area under paddy crop was noted in category V (9.73 acre) and minimum in category II (0.57 acre). Paddy yield was found higher in V (14.35) category of farmers and lower in II (13.17 qt/acre). The gross income was found highest in category V (Rs. 5740/acre) and lowest in category II (Rs. 5270/acre). The net income and I/o ratio was highest in category V (Rs. 3090/acre) compared to other categories of farmers.

The maximum area under sugarcane production was noted in category V (2.90 acre) and minimum is category II (0.19 acres). Sugarcane yield was higher in category V (202.50 qt/acre) compared with other categories of the farmers. The maximum gross income was found in category V (Rs. 18220/acre). The maximum net income was found in category IV (Rs. 10390/acre). The maximum input output ratio was observed category III (1.4).

The maximum area, yield and gross income of maize was noted in

category V. The maximum net income was noted in category IV and V (1480 and 1480) and minimum in category II (1200). The maximum input output ratio was noted in category IV (0.96) and minimum in category II (0.80).

The highest area under potato crop was observed (3.63 acre) in category V and lowest in category II (0.14 acre). The highest input cost, yield, gross income, net income and I/O ratio for potato crop was noted in category V.

The maximum area under mustard crop was noted in category V (1.60) and minimum in II (0.057). The maximum production and gross income was also seen in category V and minimum in category I. The maximum net income and I/O ratio was calculated in category III. The maximum area under gram was 2.88 acres in category V and minimum in category I (0). The maximum input cost, yield, gross income, net income and I/O ratio was observed in category V. The maximum yield, gross income, net income and I/O ratio was seen in category IV.

The maximum area under this crop was in category V (0.83) and minimum in category II (0.11).

The maximum amount of concentrates green and dry fodders were fed to pregnant cattle in category V and minimum in category I. The maximum green fodder and dry fodder fed to milch cow was in category IV and minimum in category I. The amount of concentrate and green fodder fed to dry cattle was maximum in category V and minimum in category I. The quantity of

concentrates, green and dry fodders fed to growing animals were maximum in category V and minimum in category I.

The maximum amount of concentrates, green and dry fodder were fed to draft cattle in category V and minimum in category I. The maximum amount of concentrate, green fodder and dry fodder were fed to pregnant buffaloes in category V and minimum in category I. The quantity of concentrate and green fodders were fed to milch buffalo maximum in category V and minimum in category I. The maximum amount of concentrate, green fodder and dry fodder were fed to dry buffaloes in category V and minimum in category I. The maximum amount of concentrates, green fodder and dry fodder were fed to growing buffaloes in category V and minimum in category I.

The maximum amount of nutrients like ME and CP were available to all categories of animals in study group V which was highest size group and minimum in category I.

The maximum men, women and children were used in crop production in category II. The maximum per cent of hired labour used was in category V. The minimum family labour were used in crop production under category V (34.12%) and hired labour in category II (2.35%). The maximum percentage men units were used in crop production in category II. The maximum women and child per cent were used in bovine production in category I. The maximum hired labour was used for bovine production in category V. The maximum

activity of men for fodder arrangement was noted in category III (5.0%), women in category I (4.30%), child in category V (2.1%) and hired labour in category V (3.05%) for fodder arrangement. The maximum men, women and hired labour were used in category IV (4.0%), I (1.59%) and V (3.12%), respectively for milking. The maximum men, women and hired labour used for cleaning and disposal of wastage was noted as 1.05, 10.10, 7.12 in categories I, III and V, respectively.

The maximum wet average was noted in category V (3.85 lt/day) and minimum in category I (3.85 lt/day). The maximum herd average was noted in category V (2.32 lt/day) and minimum I (2.16).

The maximum wet average in category IV (4.8 lt/day) was significantly higher compared to other categories. In case of milk production, maximum herd average was seen in category IV and minimum in category I. The maximum milk production of buffalo was found in category V (9.5 lt/day) and minimum in category I (1.6 lt/day). The maximum overall milk production was noted significantly higher in category V (14.94 lt/day). The maximum overall wet average was noted in category IV (8.34 lt/day) and minimum in category I (6.54 lt/day). The maximum overall herd average was seen in category II (5.71%) and minimum in category I (4.56%). The maximum milk consumption was recorded in category V (5.25 lt/day) and minimum in category I (1.09 lt/day). Milk sold was highest in category V (9.69 lt/day) and lowest in category I (1.36 lt/day).

The highest annual gross income from milk was recorded in category V (Rs. 35368.50) and lowest in category I (Rs. 4964.00).

From the above study done in some blocks of Jaunpur district of Uttar Pradesh, it may therefore, be concluded that land less and small farmers do not produce sufficient milk and the crops due to their poor resources, whereas on the other hand, the rich farmers having big land holding size in category V not only produce sufficient milk, but also have their net income significantly more few crop produce also. The poor farmers need to be advised such latest and cheap technology for both, animal and crop production, so that their economics of living may be improved.