SUMMARY AND CONCLUSIONS

Studies on feed quality and feeding are scanty. It necessitated investigation on "Feed and feeding practices in relation to performance of broiler farms of Karnal and Sonipat districts of Haryana". With the objectives: to study the adoption level of feeds and feeding practices in relation to production performance, to know the relationship between variables and feeds and feeding practices and to identify the constraints in adoption of improved feeds and feeding practices by farmers.

For this purpose, 60 broiler farms each from Karnal and Sonipat districts were divided into 3 categories: small- 500 to 2000 birds, medium-2001-5000 birds and large-more than 5000 birds from families of various size, land holding, caste, age and educational levels. Data collected in respect of farmers' social status, feed and feeding practices, general managemental practices, disease management, marketing and constraints in adoption of improved practices were analysed statistically. Following results were obtained.

Of the 60 farmers, 15 were found occupied primarily in agriculture and 45 in poultry farming in district Sonipat and 21, 32, 3, 1 and 3 were engaged primarily in agriculture, poultry, business, dairying and service, respectively, in district Karnal. Neighbourers and relatives were observed playing major role in inspiring the farmers to take up poultry. All farmers obtained their chicks from private hatcheries.
Mortality was 7 per cent in Karnal and 5.5 per cent in Sonipat, where 26 and 14 farmers went for multi-age rearing system and 10 and 13 per cent took the farms on rent, respectively, leaving all other raising the farm at their own buildings. Bukhari, as a source of providing heat was used by as many as 38 and 36 farmers in Sonipat and Karnal districts, respectively. As many as 24 and 55 farmers shifted from old conventional feeders to semi-automatic type feeders in Sonipat and Karnal districts, respectively. Majority of the farmers adopted automatic waterers. Saw dust was chiefly used as a litter material. Vaccination against Ranikhet and Gumboro diseases was adopted. Farmers vaccinated their birds at their own (53 in Sonipat and 42 in Karnal).

Compounded feed was used only by 38 and 42 per cent of the farmers of Sonipat and Karnal districts, respectively. Farmers of Sonipat and Karnal district marketed their birds at the age of 42 and 44 days with a market weight of 1587 and 1565 g giving FCRs of 2.19 and 2.23, respectively. Only 4 farmers of Sonipat district possessed complete feed manufacturing plant. Grinders were observed only at 5 and 22 farms in Sonipat and Karnal districts, respectively. Crumbs and pellets were used by 32 and 27 per cent farmers in Sonipat and Karnal districts, respectively. About 17 per cent farmers got their feed samples analysed. Broilers were mainly marketed in Delhi through middlemen. Only 8 and 13 farmers of Sonipat and Karnal district visited Veterinarians regularly for the health problem of birds, respectively.

Age showed a significant (P<0.05) association with access to journals, radio/TV and seminars (Karnal), Institutional participation (Karnal), sources of
inspiration (Sonipat), space per bird (Sonipat), source of heat (Sonipat), type of feeders (Sonipat), frequency of raking of litter (Karnal), vaccination for IBH (Karnal), market age (Karnal) feed consumption and FCR at market (Sonipat), storage structure (Sonipat), knowledge about balanced feed (Sonipat), reasons for not using compounded feeds, use of crumbs/pellets (Karnal) and visit of doctor (Sonipat district).

Education showed a significant (P<0.05) association with training (Sonipat), access to communication, primary occupation (Karnal), sources of inspiration (Karnal), number of batches per year (Sonipat), procurement of loans (Sonipat), type of feeders and waterers (Karnal), feed composition (Sonipat), age at marketing, FCR (Sonipat), market weight and feed consumption (Karnal), storage capacity (Sonipat), storage structure (Karnal), usage of crumb/pellets (Karnal) and visit of doctor.

Family size showed significant association (P<0.05) with newspaper reading, number of batches per year, type of litter material, feed composition (protein, fibre, Ca and P) and type of storage structure in Sonipat district, whereas it showed significant (P<0.05) association with poultry journals and seminars, institutional participation, source of inspiration, type of feeders, feed composition (protein, fibre, Ca and P), type of storage structure, person who formulates, heard about crumbs and consultation of a Veterinarian in Karnal district.

Caste was significantly (P<0.05) associated with training, access to newspaper, primary occupation, procurement of loans, type of feeders and
waterers, vaccination against RD and IBH, feed composition (protein, oil, Ca and P), performance at market age, payment terms, heard about crumbs, consultation of doctor, constraints of quality and availability in Sonipat district, whereas it showed significant association (P<0.05) with institutional participation, primary occupation, break in poultry farming, per cent mortality, source of heat, feed composition (oil), storage structure and constrains of quality in Karnal district.

Size of farm showed significant (P<0.05) association with training, institutional participation, sources of inspiration, percent mortality, system of rearing, storeys of farm building, vaccination against Gumboro, storage structure, manufacturing facilities, samples’ analysis, consultation of doctor, constraints of high cost, poor quality and finance in Sonipat district, whereas it showed significant association (P<0.05) with access to newspaper, poultry journal and seminar, sources of inspiration, ownership of the farm, storeys of the farm building, type of feeders and waterers, frequency of raking up of litter, feed composition, performance at market age, storage structure, heard about crumbs, consultation of doctor and constraints of poor quality in Karnal district.

Land holding was significantly (P<0.05) associated with training, access to radio/TV, journal and seminar, institutional participation, primary occupation, sources of inspiration, ownership of farm, type of feeders, type of waterers, raking up of litter, vaccination against RD, feed composition (fibre, metabolisable energy), usage of crumbs, analysis of samples, consultation of
doctor, constraints of quality, knowledge and technical know-how and finance whereas it showed significant association with training, access to seminar, primary occupation, space per bird, insurance coverage, source of heat, type of feeders, type of waterers, litter material, raking up of litter, type of feed used, feed composition (oil, fibre and Ca), body weight at marketing, payment terms, knowledge about balanced feed and constraints of high cost.