



Feeding Practices Adopted by Small Holding Pig Farmers in Tamil Nadu

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ABSTRACT

Feeding of animals in a proper manner has a direct impact on the growth rate, production capacity and health status of animals. The dietary needs of an animal consist of nutrients which are the components present in the feed for easy digestion and utilization. The study was taken up to assess the various feeding practices followed by 30 pig farmers of Tamil Nadu. It was found that about 57 per cent of farmers used hotel waste and banana leaf to the pigs reared for fattening purpose, while 30 per cent of the farmers used concentrate feed for breeding pigs with locally available grains. Only 3 per cent of farmers used commercially available swine mash for feeding the animals. Farmers fed pigs with 5-6 kg of hotel waste per day and also 4 to 5 kg of banana leaf greens at evening time. About 10 per cent of the farmers used mixed feeding i.e. concentrate feed, hotel waste or greens. It was concluded that most of farmers were not aware of scientific rearing and specific feeding practices, this leads to piglet mortality, low production performance and disease occurrence.

Key Words: Concentrate, Feeding Management, Hotel waste, Pig ration.

INTRODUCTION

India is one of largest livestock wealth in the world. In 20th livestock census, the overall livestock population has increased (4.65%) from previous livestock census but the pig population was decreased (12.03%). Exotic population and native pig population was decreased 22.76 and 8.06 per cent, respectively. In India, pigs are reared by socio-economically weaker section of people. Now a days, the peoples showing interest in pig farming. Pig farming is diversified from backyard to farm yard farming system. In addition, more peoples are showing their interest in rearing of white pigs then desi pig due to higher litter size, growth rate, feed conversion ratio, dressing percentage, marketing rate etc. (Majunder *et al*, 2020).

Even though there are so many exotic breeds available, Large White Yorkshire (LWY) is the most suitable one in Tamil Nadu (Paramasivam *et al*, 2021). Sometimes LWY is also facing

problems during summer. Hence, TANUVAS is working on this line and released a crossbred variety "TANUVAS KPM gold" with the genetic inheritance of 75% LWY and 25% Desi. Previously pigs were let off from the home for grazing purpose and there is possibility to losing them due to predators, thieves etc., Hence the pig farmers are rearing them in intensive system with various feeding regimens such as hotel waste and banana leaf, concentrate feed with local grains, commercial swine mash and mixed feeding. Tochhawng *et al* (2013) reported high feed cost is one of the major constraints in pig farming in Mizoram. Rearing of pig without following the scientific methods of rearing and specific feeding practices which led to piglet mortality, low production, disease occurrence and finally end with loss. (Sharma *et al*, 2015). Pigs reared under 100% concentrate feed and 50% concentrate + 50% swill feed showed significant differences in their production and reproduction

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Table 1. Demographic Characteristics of Pig farming trainees

(N=30)

Sr. No.	Character	Number	Per cent
1	Age		
	Young (16-29 yr)	12	40.0
	Middle (29-42 yr)	10	33.3
	Old (Above 42 yr)	08	26.7
2	Gender		
	Male	26	86.7
	Female	04	13.3
3	Education		
	Illiterates	3	10.0
	Primary	6	20.0
	High school	7	23.3
	Higher Secondary	11	36.7
	Graduate	5	16.7
4	Occupation		
	Agri + Animal Husbandry	26	86.7
	Agriculture alone	04	13.3
5	Land Holdings		
	Small	10	33.3
	Marginal	12	40.0
	Large	08	26.7
6	Livestock possession		
	Low	13	43.3
	Medium	10	33.3
	High	07	23.3
7	Annual Income		
	Low	16	53.3
	Medium	11	36.7
	High	3	10.0
8	Family type		
	Nuclear family	17	56.7
	Joint family	13	43.3
9	Contact with extension Agency		
	Low	10	33.3
	Medium	16	53.3
	High	04	13.3
10	Social Participation		
	Low	11	36.7
	Medium	16	53.3
	High	03	10.0

Table 2. Different feeding practices followed by pig farmers.

Feeding practices	Per cent adoption	Purpose
Hotel waste and banana leaf	57	Fattening pigs
Concentrate feed with local grains	30	Breeding pigs
Commercial swine mash	3	Breeding pigs
Mixed feeding	10	Both breeding and fattening pigs

performances in organized farm (Ramesh *et al*, 2012). Therefore, the study was framed to find the suitability of various feeding practices adopted by small holding pig farmers in Tamil Nadu.

MATERIALS AND METHODS

In Tamil Nadu, there are 37 districts, 388 blocks and 12525 villages. For the pig farmers of Tamil Nadu, Post Graduate Research Institute in Animal Sciences is conducting one day hands on training. During the year 2019 to 2021, a total number of 89 trainees were trained on pig farming. The district-wise plotting of trainees revealed the high concentration of trainees in Kancheepuram district (39 Nos.). Out of 39 trainees of Kancheepuram district, a sample size of 30 trainees was included in the study following simple random sampling technique. An interview schedule incorporating all the items pertaining to the specific objectives of the study was constructed for the purpose of collecting the data. Necessary precautions were taken to ensure that the questions in the schedule were unambiguous, flawless, clear, concise and comprehensive. The schedule was prepared in English and then translated into Tamil for easy elucidation of data.

RESULTS AND DISCUSSION

Demographic Characteristics of Pig farmers

The data (Table1) revealed that nearly 40 per cent of the respondents were young had secondary level of education with marginal land holdings, low livestock possession and practicing animal husbandry as their subsidiary occupation to agriculture. Their level of farming experience and earnings were at a lower level. They maintained

nuclear family with less than 5 members. Their level of contact with extension agency and economic motivation were found to be medium to high in nature. Their level of mass media exposure and social participation were found to be low to medium in nature.

Different feeding practices in pig rearing

The different feeding practices and various feed ingredients used by pig farmers were based on availability of resources. Majority of farmers reared pigs for fattening purpose. According to Ranjan *et al* (2003) preweaning weight gain was higher in concentrate feed, post weaning weight gain was higher in hotel and rice fermented waste as well as CP content was higher in hotel waste (25.01-26.23%) than concentrate (18.60%) feed. Supplementation of ration in the form of swill feed along with scavenging widely practiced in urban (62.50%) and rural 54.17% (Majunder *et al*, 2020). Various feeding practices adopted by famers in Tamil Nadu were given in Table 2.

Hotel waste, banana leaf and boiled rice

Fifty seven per cent farmers feed their fattening animals with hotel waste, banana leaf and boiled rice. Similar results were documented by Kumar *et al* (2004) in addition to this found that pigs reared under hotel waste had higher body weights. Biosecurity measures and hygienic practices are riddle in this type of feeding. Procurement of swill feed is variable among farmers. In Urban it was carried out by direct procuring (91.67%) and by involvement of middlemen (8.33%) but in rural sector 100 per cent respondents procure directly (Majunder *et al*, 2020). According to Haldar *et al* (2017) and Shyam *et al* (2016) use of locally

available weeds and traditional feeding system might be utilized in improved way.

Concentrate feed with local grains:

Thirty per cent farmers feed their breeding stocks with locally available feed which includes grains, cereals, meat, fish meal etc., and there was no separate feed for piglets, weaner and for adults. Only 3 per cent farmers used commercially available swine mash for breeding purpose. Higher feed cost of commercial swine mash was a major constraint in pig farming. It was revealed that 10 per cent farmers fed concentrate feed for breeding and swill feed for fattening animals. This was one of the ways to reduce feeding cost. However, strict biosecurity measures need to be followed to avoid disease transmission. Contrary to Talukdar *et al* (2019) and Shyam *et al* (2016), majority of farmers feed their pigs once daily either in the morning or in evening but no feed additives and supplements were provided.

CONCLUSION

The pigs are omnivorous animal, which eat various kind of feed and make valuable animal protein source. The study revealed that most of farmers were not aware of scientific rearing and specific feeding practices which led to piglet mortality, low production and disease occurrence. Hotel waste and banana leaves feeding practices were adopted only for fattening purpose of pig rearing and other feeding practices like concentrate, grains, mash were adopted in breeding farms. At the same time biosecurity measures might be followed for prevention of diseases. Hence suitable training programmes with special emphasis on feeding practices of breeding and fattening pigs need to be conducted for the pig farmers to create awareness about importance of feeding, feed ingredients and different feeding practices.

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