



ECONOMICS OF FATTENER PIG PRODUCTION IN GRAIN BASED AND SWILL FEEDING SYSTEMS

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Pigs are reared mainly on concentrate feed and are kept in well constructed sheds under organized farm. But high grain diets for pig increases the cost of feeding as well as decreases the availability of grain for human population in developing countries (Joseph and Abolaji, 1997). Therefore, the most logical step of saving the grains and reducing the cost of pork production is to replace grains with an alternative source of feed. The popular feeding practice is known as swill feeding that consists of organic wastes from animal and plant origin. Though this practice is found cost effective, not much information is available on the economics of production in this type of rural production systems. Hence this study was taken up to assess and compare the economics of pork production in organized farms and rural sector in two genetic groups.

Materials and Methods

Samples of Large White Yorkshire (LWY) and crossbred pigs (CB) (75 percent LWY x 25percent Desi) belonging to Centre for Pig Production and Research (CPPR) were utilized for the study. Forty two weaned piglets each from LWY and CB were selected uniformly as far as possible with respect to age, sex and body weight. Male piglets were castrated before the study. Twelve piglets were randomly selected from each of the above mentioned two genetic groups and were maintained in the feeding and management conditions prevailing in CPPR,

Mannuthy for a period of six months formed the control group of the study.

The remaining thirty weaned piglets from each genetic group were randomly allotted to ten farmers in the field in such a way that each farmer got a minimum of three LWY and three CB piglets.

CB piglets (75 percent LWY) and LWY piglets maintained in CPPR, Mannuthy under the existing feeding and management conditions prevailing in the farm. These animals were fed with concentrate feed having CP of 16.85%. The quantity fed was 1.0, 1.25, 1.5, 1.75, 1.75 and 1.75 kg per day from 3-8 months respectively.

CB piglets (75 percent LWY) and LWY piglets maintained under feeding and management conditions prevailing in the field. The feed consisted mainly of chicken offal from slaughter houses (70 percent), restaurant/hotel wastes (20 percent) and vegetable wastes (10 percent). The pig sties had concrete floors and side walls with cement bricks.

Data on cost of production was worked out separately for farm and field conditions.

Norms used for calculating cost of production

1. In farm conditions cost of construction of covered area is Rs.300/sq.ft. and uncovered area Rs.150/sq.ft.
2. In field conditions cost of construction of shed is Rs.150/sq.ft.

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3. Interest rate calculated at the rate of 9 percent.
4. Cost of piglet is Rs.80/kg live weight for crossbreds and Rs.100/kg live weight for Large White Yorkshire piglets.
5. Cost of concentrate feed in farm is Rs.7.34/kg for grower ration and Rs.6.63/kg for finisher ration.
6. Cost of feed in field conditions is worked out at the rate of 50 ps/kg.
7. Labour charges is at the rate of Rs.120/men/day. He can take care of 60 piglets.

Results and Discussion

The cost of production for rearing six LWY pigs in the farm was Rs.23,859 and for rearing six CB pigs Rs.21,459 (Table). When the economics was worked out rearing six units of LWY pigs on concentrate feed resulted in a cumulative loss of Rs.11,237 and for same number of CB pigs Rs.7,293. This is in agreement with findings of Harikumar (2001) who has also reported a loss of Rs.9,415 on rearing six LWY pigs on concentrate. The total

production cost for rearing six number of CB and LWY in the field was Rs.8,729 and Rs.10,169 and resulted in a net profit of Rs.3,317 and Rs.2,935 respectively (Table). This is also in agreement with findings of Harikumar (2001).

The cost of production of one kg live weight was Rs.64.56 and Rs.66.16 for both CB and LWY piglets maintained on concentrates in the farm and Rs.21.92 and Rs.23.45 for CB and LWY maintained on swill feeding. Yadav *et al.* (2001) reported a higher cost of production of Rs.34 to 40 per kg live weight than the study for animals reared on different proportions of rice polish. The cost of production of one kg live weight reported by Ashokkumar *et al.* (2000) and Bhar *et al.* (2001) were lower than the present study.

Pigs reared on concentrate feed in the farm ended up in loss because of the initial investment on housing were high and the cost of concentrates also added up the loss. In the field, initial investment was less and feeding cost which contributes 80 per cent of rearing cost was also less and hence resulted in profit.

Table. Cost of production of pigs (6 No.) each in different treatment groups in rupees

Item		Farm		Field	
		CB	LWY	CB	LWY
Capital Cost					
1.	Cost of housing	58,500	58,500	12,600	12,600
2.	Interest on capital @ 9%	2,632.5	2,632.5	567	567
Operational Cost					
1.	Cost of piglets	4,800	7,200	5,280	6,600
2.	Cost of feed	11,666.8	11,666.8	2,482.2	2,602.8
3.	Labor charges	2,160	2,160	—	—
4.	Treatment charges	200	200	250	250
5.	Transportation charges	—	—	150	150
Receipts					
1.	Sale of pigs @ Rs.30/kg live weight	9,972	10,818	11,946.6	13,005
2.	Cost of manure	250	250	100	100
Cost of production					
1.	Total production cost	21,459.3	23,859.3	8,729.2	10,169.8
2.	Cost of production (per kg live weight)	64.56	66.16	21.92	23.45
3.	Profit/loss	-11,237.3	-7,279.3	3,317.4	2,935.2

Summary

An experiment was conducted to assess the economics of production of Large White Yorkshire (LWY) and crossbred (75 percent LWY x 25 percent Desi) pigs in different management conditions. The animals were maintained for the period of six months. The cost of production of one kg live weight was Rs.64.56 and Rs.66.16 for LWY and CB maintained on concentrates and Rs.21.92 and Rs.23.45 for CB and LWY maintained on swill feeding respectively.

References

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