

## **Input, Output, Outcome and Impact of Piggery Entrepreneur in the District Hassan**

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### **Abstract**

Piggery is the most potential source of meat production and more efficient feed converters among various livestock species. Krishi Vigyan Kendra, (KVK) Hassan has organized demonstrations, training programs and other extension activities in the field of piggery farming since its inception. KVK has provided inputs and advisory services at every level. The cost : benefit ratio in an entrepreneur works out to be 1 : 7.35. The entrepreneur feeds 250 kg of hotel kitchen waste per day for 15 adult pigs and 30 piglets and does not incur any other charges towards feed. The entrepreneur annually sells 15 adult pigs at Rs 11,000/- per adult pig and 155 piglets at Rs 1400/- per piglet. The total cost of inputs purchased per year including feed, medicine and labor at Rs 100/- per day is Rs 47160/-. The gross income obtained by selling adult pigs and piglets is Rs 3,47,000/-. The business from piggery unit has tremendous impact on social life and economic change.

**Key words :** Piggery, Entrepreneur, Input, Output, Cost : benefit ratio.

The challenges faced in securing the food and nutritional security to fast growing population need an integrated approach for livestock farming. Among various livestock species, piggery is most potential source of meat production and more efficient feed converters after the broiler. In one of the research it is revealed that pig hemoglobin is being used to make cigarette filters more effective in blocking harmful chemicals before it enters a smoker's lungs (1). Apart from providing meat, it is also a source of bristles and manure. Pig farming will provide employment opportunities to seasonally employed rural farmers and supplementary income to improve their living standards. There is a huge potentiality in the district of Hassan for production of pork since it is the delicious food for many people. Poor livability, coupled with disease outbreak and poor body weight gain are the typical problems noticed in the district of Hassan related to pig farming. United together the challenges faced by the scientists and policy makers to improve the pig farming in the district are strengthening the pig population in terms of both number and quality, creating more self-employment opportunities, assisting weaker sections of the society to enhance their income level, control of diseases, conduct scientific studies into relevant aspects of pig rearing and to

equip the farmers with modern scientific practices pig farming. In this context, an attempt was made to study the selected case of piggery entrepreneur with the objective of establishing greater details of exactly how the entrepreneur manages piggery either traditionally or scientifically that would serve as a guide for other farmers, to take note of any associated benefits, problems and constraints, cost implications to suggest for future developments.

### **Methods**

The methods followed are as follows. Frequent visits were made to study the entrepreneur's practices and the impact through participatory discussions, observations and transect walks. Only one entrepreneur from Dasarakoppalu of Hassan taluk was selected for the study who is a beneficiary of KVK since 2002. An interview schedule was also developed and used to elicit information where ever necessary.

### **Results and Discussion**

Piggery is a subsidiary occupation for the farmer and is of middle aged running other enterprises as

**Table 1.** Inspiration behind choosing piggery.

Motivating factor	Rank
1 Venture in to new economic activity	I
2 Influence of KVK training	II
3 As a livelihood	III
4 Higher returns from the enterprise	IV
5 Influence by other entrepreneur	V
6 Demand for the produce	VI
7 Simplicity of the enterprise	VII
8 Experience in related enterprise	VIII

well. The entrepreneur started piggery the unit during 2002 by procuring piglets from KVK. The venturing into new economic activity was the main motivating factor behind choosing the enterprise for the entrepreneur followed by influence of KVK training, as a source of livelihood, higher returns for the enterprise, demand for the produce and experience of working in related enterprises (Table 1).

#### Input

KVK has rendered the activities in piggery component and various input components have been ensured to translate planned activities into action.

Responding to emerging needs expressed by farmers, such as demands for entrepreneurial and facilitation skills, knowledge about value chains and information on sustainable production methods, KVK has provided inputs and advisory services at every level. Table 2 depicts the glimpses of technical inputs arranged sequentially by KVK since 2007 during which period onwards piggery was given more importance by the KVK. The agricultural inputs and services mentioned are also rendered to the entrepreneur.

#### Output

There was noticeable change in the knowledge and adoption level of the entrepreneur about the improved practices as revealed by the entrepreneur itself. The main focus of KVKs extension is disseminating improved practices to the farmers in general and rendered the same to entrepreneur through personally contact on day-day basis which helped solve his farm problems (Table 3). The cost : benefit ratio in this study works out to 1 : 7.35 (Table 4). However, the farmer has not availed loan from any source and has utilized his own funds generated out of the income obtained from agriculture. During 2002, as an external input he has invested Rs 60,000/- for con-

**Table 2.** Input components ensured by KVK.

Year	Purpose of inputs	Village/ taluk	Inputs distributed	No. of animals treated	No. of personal visits
2007-08	Castration of male piglets as frontline demonstration	Nidudi, Dasarakoppalu of Hassan Tq, Kamasamudra of HN Pura Tq., Keagame, Heggadalu, Kaleri, Halebeedu and Sheelanagannahally of Belur Tq and Sakaleshpura	Surgical spirit, sporadiex tabs, tincture, BP Blade, soframycin ointment, catgut	100 animals	23
2008-09	Control of piglet anemia and castration of male piglets	Hosakoppalu, Thattekere, Dasarakoppalu & Hassan of Hassan Tq	Pig Catcher, Infeon injection, BP Blade, Spirit, Tincture, Himax & soframycin ointment, catgut	100 animals	25
2009-10	Control of piglet anemia and castration of male piglets	Hosakoppalu, Manichannahally, Devinagara, Byrapura and Dasarakoppalu of Hassan Tq, Vally Johnson of Sakaleshpura	Pig Catcher, Infeon injection, BP Blade, Artizone injection, Himax & soframycin ointment, catgut	100 animals	27

**Table 3.** Knowledge and adoption level of the entrepreneur before and after intervention.

Particulars	Knowledge level		Adoption level	
	Before KVK inter- vention	After KVK inter- vention	Before KVK inter- vention	After KVK inter- vention
Castration of piglets	Partial	Full	Nil	Full
Control of piglet anemia	Nil	„	„	„
Pig catcher	„	„	„	„
Vaccination schedule	Partial	„	Partial	„
Deworming	„	„	„	„
Water requirement	„	„	„	„
Hygiene practices	„	„	„	Partial
Scientific housing	Nil	„	Nil	„

struction of shed. To begin with he has bought eight Yorkshire piglets at Rs 600/- per piglet from KVK, Hassan.

The total initial investment thus works out to Rs 64,800/-. He is feeding only kitchen (hotel) waste and does not incur any charges for the same except the fuel for his own auto. He incurs only Rs 30/- per day towards fuel to bring the hotel kitchen waste, which is the only source of nutrients supplemented by mineral mixture. At present, the entrepreneur owns 15 adult pigs and 30 piglets. Every day he brings 250 kg of hotel kitchen waste in his own auto, which is sufficient for 15 adult pigs and 30 piglets. The entrepreneur is selling 15 adult pigs at Rs 11,000/- per adult pig and 155 piglets at Rs 1,400/- per piglet. The total cost of inputs purchased by him per year including feed (only transport charge), medicine (free from department) and labor at Rs 100/- per day (though own labor) is Rs 47,160/-. The gross income obtained from him through selling adult pigs and piglets is Rs 347,000/-. According to the entrepreneur, he uses the leisure time for working in piggery farm and works only for 2 hr a day along with his father thus does not incur any extra labor charges. After working at the piggery farm for the rest of the day he drives auto in the city and earns additional income. For the purpose he owns another auto purchased out of the earnings from piggery. However, the negative aspect is that no additional employment is generated from the enterprise. The entrepreneur feels that the enterprise can

**Table 4.** Economics of piggery unit of the entrepreneur.

Particulars	Details
1 Year of starting the enterprise	2002
2 Investment (Rs)	64,800
3 Materials procured/constructed for the enterprise	Piglets + shed
4 Average piglets sold per year	155
5 Average adult pigs sold per year	15
6 Gross income from the enterprise per year (Rs)	34,7000
7 Cost : benefit ratio	1 : 7.35

be easily adopted, can be understood and can be tried by any others. However, he feels one should be careful in marketing. He also believes that the enterprise is relatively more remunerative than the other enterprises.

Pigs should not eat scraps and spoiled food unless they are in the wild and that is their only source of food. Excellent pig feeds will supply them with all of the vitamins and nutrients they need to grow and produce. The varied menu and uniqueness in feeding followed by the entrepreneur is vegetarian and non-vegetarian kitchen waste. The entrepreneur feeds 250 kgs of hotel kitchen waste for 15 adult pigs and 30 piglets and the same is practiced throughout the season (Table 5). The source of kitchen waste is from the city vegetarian and non-vegetarian hotels and the hostels. He himself collects the kitchen waste from hostels and hotels and located in the Hassan city. He does not pay any charges to the hotel/hostel owners towards kitchen waste which has reduced his cost of production to a great extent earning him with a huge margin. Adding up to this, he does not incur any charges for feed supplements like B-complex since he obtains the same free of cost from the department of animal husbandry. The entrepreneur also feeds 25 lg of vegetable waste to 15 adult pigs and 30 piglets every day, which is also procured from hotels and hostels located in the city.

The entrepreneur follows the vaccination schedule regularly since 2005. There was severe outbreak of FMD during 2005 due to which 40 piglets died and then onwards the entrepreneur followed the vaccination schedule regularly by obtaining input from KVK. The entrepreneur gets 10—14 piglets per farrowing and the piglet mortality rate is just 15%. To reduce piglet mortality, at the time of farrowing, he uses pig-

**Table 5.** Feeding practices followed by the entrepreneur.

Feed items	Usage	Quantity purchased per day (kg)	Price of buying (Rs/kg)
Kitchen waste	365 days	250	Nil
Feed supplements (Antibiotics/B-complex/mineral mixture)	B-Complex when born	2 tablets/piglets & 3 per adult pig	,,
Vegetable waste	Daily	25 kg	,,
Concentrates	Weekly once	1.5 kg per adult	14

let guard, which is designed in such a way that the strong poles are fitted along the three corners of the shed and is about 22 cm above the floor. This reduces the mortality rate. Piglet anemia is not at all noticed in his farm.

#### *Outcome*

KVK has initiated need based demonstrations and has assessed and refined the technology of Pig Catcher looking into the problems of catching a pig using old methods. To catch a pig, in earlier days twitch or running noose was slipped over the upper jaw behind the tusks, twisted tightly and held by an attendant. A pig catcher can also be used similarly. During 1980's pig catcher was invented and it is in use till date. In these pig catchers, cut end of pipe, joining arrangements and wires are harsh on the snout tissues, leaving abrasions and even open wounds that can easily become infected. This minor injury on the snout of the pig and also on the upper palate of the mouth goes unnoticed as it in turn reduces the feed intake for 5—6 days. Identifying this problem, an attempt was made to modify the existing pig catcher and experiment was taken up for 3 years.

#### *Socio-Economic Impact*

Typical illustration of accomplishments and changes in the entrepreneur businesses, careers and personal lives were noticed. As revealed by the entrepreneur, his credibility within the agricultural community has enhanced, built relationships that improved his effectiveness at work and also enriched his life outside of work. The business from piggery unit has tremendous impact on his social life and economic change. Out of the earnings he has repaired

his house during 2003 spending Rs 30,000/-. He has planned to construct his new house at an outlay of Rs 500,000/-. He has purchased jewellery, materials for house and milch animals out of the earnings from piggery. He has spent Rs 500,000/- for the marriage of his two sisters. Apart from the economic impact, clothing pattern, cleanliness and food habits in the family has improved to a great extent all due to impact of he starting the piggery enterprise. The entrepreneur has started running an auto rikshaw as a new enterprise after seeing the success in piggery and is now a owner of three auto rikshaw's which is an additional booming income for him.

The entrepreneur sells 45 days old piglets at Rs 1,400/- per piglet. On an average he sells 25—30 piglets per month. Piglets were sold on the spot where farmers from outside come and take the piglets. Apart from piglets he sells about 15 adult pigs weighing on an average of 200 kg at Rs 11,000/- each. Similar practice is being practiced by farmers village of Tamil Nadu (2). The entrepreneur expressed that he faces problem in disposing adult pigs, since the wholesalers procure at cheaper rate and hence sometimes he himself slaughter and sell the meat on highway junctions. So far the entrepreneur has sold over 2,100 piglets to farmers of Hassan and neighboring districts. He is the inspiration behind many farmers for starting the units and by now 50 piggery units have been started who have purchased piglets from this entrepreneur. And thus the tangible impact can be seen in the district.

Entrepreneur feels that procuring kitchen waste daily is burdensome but expresses satisfaction over the cost benefit ratio. Pure breed (up to 75% purity) is not available in the region and is a major problem followed by lack of water facility. The entrepreneur also feels that feeding concentrate is not remunerative and there is no support from the government. Similar findings were reported by Meganathan et al. (3). Piggery farming has proved to be effective and flourishing enterprise for the entrepreneur. Apart from positive blooming economic change, remarkable change in social living can be noticed which is all because of the attractive take home income they are getting from the enterprise. For others who wish to start an enterprise, this study would serve as a guide and a commitment of time and risk is needed. Nicolaj (4) had similar opinion.

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