

PIG FARMING: AN INTEGRAL COMPONENT OF 'CLEAN KERALA MISSION'

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How far pig farming can contribute to the Government mission of Clean Kerala? The spread of epidemic diseases affecting a large population for the last consecutive two years evoked the Government to launch Clean Kerala Mission understanding the fact that these diseases originated from mismanagement of waste generated under different Local Bodies and their inability for effective disposal in time. The lack of awareness of public in management of stagnant water and many other factors also contributed to this. Presently the local bodies whether it is Corporation, Municipalities or Panchayats are spending more than 50% of revenue for disposal of waste generated under their jurisdiction, but due to the ineffective and untimely disposal, these diseases are taking their toll.

Type of waste and its disposal

The waste generated can be grouped into three categories, ie. solid waste, liquid waste and gaseous waste. There are sufficient regulations to control liquid and gaseous waste at its place of origin. Therefore the solid waste becomes the most important concern for the Local Bodies who are envisaged to handle the same. Among solid waste plastic and other non-degradable waste will cause environmental problems only in the long run, when compared to bio-waste. Majority of Keralites being non-vegetarian, slaughter waste constitute large quantum of solid waste. Bio-wastes of concern are slaughter waste including that of large animals and poultry along with hotel waste, fish and vegetable market waste. Besides being a good medium for multiplication of pathogens and their carrier vectors, these bio-wastes draw the attention of public very soon, as they get rotten by the next day and generate foul smell. Therefore, the major problem faced by the Local Bodies is the proper disposal of these bio-wastes. Now the practice is to dump it in an area where it is thinly populated which invite agitation from

the public as the dumped slaughter wastes are spread by dogs and scavenging birds contaminating nearby areas and water sources. Nowadays, it is a common scene that the butchers secretly dumping the slaughter waste by the side of Highways causing a lot of public nuisance. It is merely because of their helplessness for which they could not be blamed of.

Pig rearing – Past Vs Present

During the pre-independent and early post independent period pig rearing was purely on scavenging. It was a common scene that different variety of country pigs scavenging seashores, remote villages and even in small cities. The pigs were living in filthy or muddy places and the main source of feed was night soil and other thrown away wastes. This created a stigma against pig who is the champion meat producer and whose meat and meat products are a craze for 72% of the world population today. During early to mid sixties the Animal Husbandry Department started rearing pigs in intensive form by importing temperate breeds such as Large White Yorkshire and Landrace in organized Government farms. There after pig farms had gone through development programme under the leadership of the State Government and the Central Government (Indian Council for Agricultural Research) through Agricultural Universities. Even with these developments until the recent past people did not prefer pork over other meat because of high fat content. Now various research works taken up under pigs farms of Kerala Agricultural University and Kerala Livestock Development Board has evolved three-breed combination piglets selecting appropriate breeds, which resulted in 50% more slaughter weight and 70% less fat. Though pork is considered as red meat, the extent when we examine, it is between red and white meat leaning more towards white meat. In urban as well as in rural area, the demand for pork

has increased raising its market price three times when compared to the price five years back.

The drastic development in pig rearing, breeding and management practices now enable the farmers to maintain pigs in very clean and hygienic conditions, but the stigma developed against pig is yet to vanish from the mind of many, who level allegations against pig farms. A humble request to them is to note the fact that after careful evaluation of extend of environmental pollution by a pig farm, the Pollution Control Board has included pig farming in the orange category along with other animal farming and poultry. It may also be noted that there is not even a single authentic report regarding the prevalence of occupational disease among pig farmers in this country.

Biological waste utilization and pig farm economics

Now in the State pig farming is the most economic as it ensure good return to the farmer when compared to the other animal and poultry farming. This is because normally we spend 75% of the total expenditure for feed but as pigs are reared on the waste the farmer has to meet only the transportation cost reducing feed cost to 10%-20% of the total expenditure. When a pig farmer intend to market ten pigs per month, he will have a total herd strength of hundred pigs every time in his farm belonging to different age i.e., 2-10 months. Then each pig ranging between 2-10 months of age on average will consume 5 Kg. of biological waste per day. So his total requirement will be 500Kg per day and annually the farm will be utilizing about 185 Metric tones of bio-waste in a most eco-friendly way. The sale of 10 pigs will give a minimum of Rs. 30000/- net profit to the farmer and thus he can lead a decent life. Besides this the dung of pig and the remaining waste materials can be used for biogas production. Using this gas he can meet the energy requirement of the house, especially for cooking waste which is fed to pigs and to prevent any chance of food borne infection.

The slurry of biogas plant even if it is contaminated with the waste material will not produce any foul smell as it get fermented and can be used as good organic manure. So pig farming can be made an integral part of Clean Kerala Mission for disposal of the most dangerous biological waste in a very environment friendly way in addition to creating job opportunities for the unemployed youth, thereby uplifting the economically and socially weaker sections of the society providing them sufficient income.

If any Local Body can promote pig farms depending upon the quantum of biological wastes generated can easily manage the problem of biowaste disposal for what they are struggling now. These pig farmers will collect biological wastes at the source of production even by paying an amount to ensure daily availability. Therefore, the biological wastes will be automatically carried away and the Local Body authorities can save a major portion of their expenditure on waste disposal, which can be diverted for other welfare activities. The issue of licensing should ensure that it will not create any public nuisance and environmental pollution. There should be provision for biogas plant and waste water should be effectively utilized either for vegetable crops or drained to septic tanks where it is naturally purified by sand filtration.

Conclusion

So organized and scientifically planned pig farming will be a promising remedy for the voluminous bio-waste produced. Pig farming can also provide rural employment, decent returns to the farmer and can be used as an effective tool for poverty alleviation. This paper is presented before the public and concerned authorities for debate.

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