

## Entrepreneurship potential of chicken nuggets and meat balls in Puducherry

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### Abstract

Poultry industry is one of the important segments of livestock sector in India. The growth rate of poultry production in India is showing an upward trend as per the latest 20<sup>th</sup> livestock census of India. In this study manufacturing of meat products was undertaken over a period of four months in Department of Livestock Product Technology, Rajiv Gandhi Institute of Veterinary Education and Research (RIVER), Puducherry. During this project, chicken nuggets were manufactured and marketed in and around Puducherry region. The net profit of project was around 55.4 percentage. The data obtained in the current study may be useful as a reference for future scientific chicken nuggets production as potential entrepreneurship opportunity.

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## 1. Introduction

Poultry industry is one among the fast-growing agricultural sector in India. The poultry industry in India has undergone tremendous changes both in terms of organization and structure. Poultry meat segment is the largest sub-sector in the country's meat industry contributing 50% of the total meat produced annually (20<sup>th</sup> Livestock Census 2019). Almost 70% of the Indian population is non vegetarian. Demand of poultry meat and egg in India is growing day by day due to its growing population. Owing to its nutrient content, it is regarded as health diet among people (Prakash et al. 2022). Chicken meat is greatly accepted by consumers due to its versatility, relative low cost, ease of preparation, acceptance by all religions and is also seen as a healthy meat. The demand for chicken meat and meat products is expected to grow faster in India with sustained economic growth, rising per capita income, and increasing awareness of the nutritive value of meat and meat products. Poultry industry contribution to Indian economy by organised and unorganised sectors is 70 and 30 percentage, respectively. Poultry meat is the main and important component of global meat demands. Poultry provides high-quality protein, low levels of fat, with certain amount of fatty acid profile to human beings (Mir et al. 2021). Poultry

production and consumption of poultry meat has emerged as a potential market globally occupying 40.6% of meat market (Neeti and Chatli 2022). Based on these facts present study was undertaken to find the entrepreneurship potential of poultry meat product in Puducherry.

## 2. Materials and methods

Dressed chicken along with skin was procured from local slaughter houses. Dressed carcasses were then washed and the offals were removed. Skin was washed thoroughly which is regarded as the main source of contamination. The carcasses were hanged for drying/draining for approximately 10-15 minutes. The dried carcasses were then transferred into the freezer for 20-30 minutes for the purpose of cooling. The chilled meat was made into wholesale cuts after which it was deboned. The deboned meat was weighed, packed in plastic covers and frozen overnight. The frozen deboned meat was then thawed for about half an hour after which it was cut into smaller pieces which further enabled the meat pass through the mincer's grinder plate of 8mm sieve size. Minced meat was transferred into the bowl chopper. Figure 1 depicts the ingredient required for preparation of meat batter which includes salt, sugar, alkaline phosphate, and chilled water which were added to the minced meat followed by chopping and mixing for 1 minute to extract salt soluble and water-



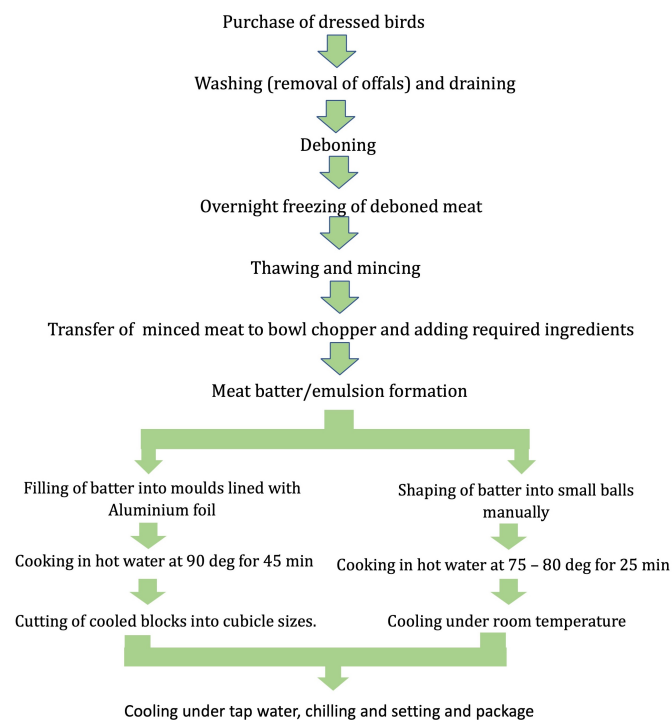
**Fig. 1** Ingredients required for preparation of meat batter

soluble proteins. Vegetable oil was added while the bowl chopper was running slowly and then mixed thoroughly at high speed for 30 seconds to get a meat emulsion. Further green condiments, refined wheat flour, and dry spices mix were

added and mixed thoroughly for 1 minute to complete the meat batter formation. Rectangular stainless-steel moulds lined with aluminium foil were used for cooking. Meat batter was filled into these moulds without any air pockets and lids were closed. To prevent opening of lids, the moulds are tied securely with plastic wires. Cooled nugget blocks are removed from the moulds and cut into cubicle size. The cubes and meat balls are weighed, packed in polythene covers with label aseptically. For sales, often products prepared are sold on the same day, otherwise they are stored in the deep freezers in the Department of Livestock Products Technology and sales counter of Rajiv Gandhi Institute of Veterinary Education and Research (RIVER), Puducherry.

### 3. Results and discussion

The results of current study are given in Table 1 which depicts the profitability of current project. The net result of project shows a profit of Rs. 36,182 in the span for four months. Figure 2 represents the total expenditure of the project, in which meat constituted around 71.31 %, groceries including oil, dry spices, sugar, refined wheat flour, and alkaline phosphate around 16.51 %, miscellaneous, transport, and green condiments were around 8.26 %, 3.32 %, and 0.6 %, respectively. Demand for poultry meat is expected to continue increasing due to population growth and rising individual consumption capabilities. The market for poultry meat products is projected to increase regardless of region or income level, with per capita growth slightly higher in developing cities like Puducherry. The data obtained in the current study will be useful as a reference for future scientific chicken nuggets production as potential entrepreneurship opportunity in Puducherry.

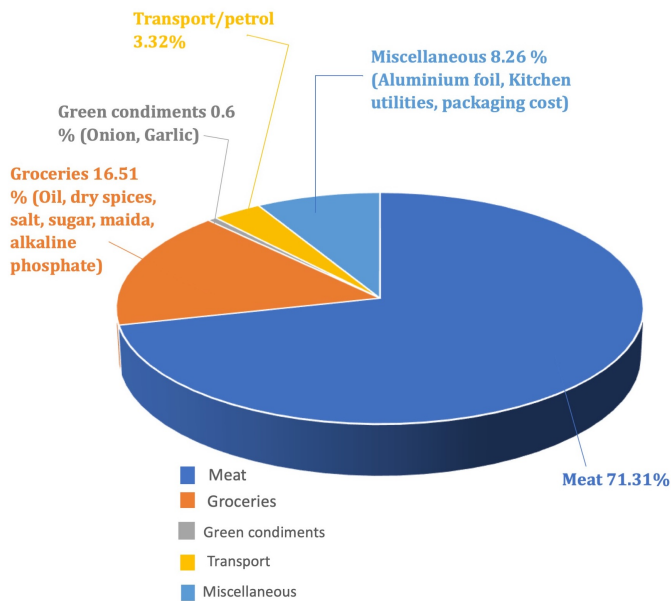


**Flow chart 1** – Preparation of chicken nuggets and meat balls

Particulars	Total (Rs.)
Total cost of production	45, 048
Total sales	81,230
Net profit	36,182
Profit percentage (based on cost of production)	80.32%

### 5. Conclusions

Chicken nuggets and meat ball production in Puducherry is one of the best and potentially most profitable business opportunities for the Puducherry residents. Poultry meat industry is a fastest growing sector of Indian economy with a higher profit return. Effective management entails getting the good returns as quickly as possible and with as few inputs as possible. According to the findings of this study, chicken nuggets and meat ball production seems to be a more profitable venture.



**Fig. 2** Total expenditure on the production of chicken nuggets and meat balls

## Declarations

**Funding:** The current work had the financial support from the institute as a part of the entrepreneurship project.

**Conflict of interest:** The author declares no conflict of interest

**Ethical approval:** The study was reviewed and approved by Animal Ethics Committee of Rajiv Gandhi Institute of Veterinary Education and Research, Puducherry

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