



ISSN: 2278 – 0211 (Online)

A Project Report On “Status Of Dairy Farming In Odisha”

Laxmi Narayan Panda

Principal Cum Administrator Viswass College, Odisha

Satyakam Mishra

Director Higher Education Odisha, Odisha

Abstract:

Dairy farming in Odisha employed more than 60 percent of total work force in agriculture and allied activity. The milk production status is increasing each year in Odisha. The milk production was 2.20 million ton in 2010-11 with per capita availability of milk 136 gms. There is total of 14.3 million of milch cattle up to 2007. Majority of dairy farmers are small and marginal farmers. Although OMFED is operating for more than three decades, new players have come. Among all the new players in milk processing area, Milk Mantra is growing at a high pace. Odisha dairy farmers are lagging behind the use of modern capital inputs due to lack of investment. Credit supply to odisha agriculture is not demand oriented rather it is supply driven. The specific need of the farmers are not considered and analysed. In this paper, the dairy farmer in Odisha has been classified according to the herd size, land holding, way of marketing and use of technology. The present scenario of Odisha dairy farmers has been clearly described from their challenges to a profit making case study. The green fodder cultivation is the important cost effective technique which is not used by farmers of Odisha.

1.Introduction

Odisha is one of the eastern states of India having tremendous agriculture and allied opportunity. Odisha has total land area of 1, 55, 820 square km with thirty districts having population of 4.19 crores. Odisha is blessed with huge reserve of minerals and coal. Apart from all this resources, Odisha is poorest state with high incidence of poverty. Odisha Economy has remained mainly agrarian, dominated by agriculture and allied subsectors contributed more than 70 percent of gross state domestic product (GSDP) in 1950s. This contribution is reducing slowly. The contribution of agriculture and allied subsector contributed 18.44 percent of GSDPs against national contribution of 14.60 in 2009-10. However this sector provides employment and sustenance, directly and indirectly more than 60 percent of state's total work force. About 85 percent of livestock holding in Odisha held by landless and small or marginal farmers. According to 18th livestock census, 2007, it has revealed that 123.09 lakh of cattle resource out of 230.57 livestock population in odisha. The cattle population is 60 percent of total livestock in odisha. According to 2009-10 information, Odisha contributed 2 to 3 percent of total milk production in India. The production of milk has increased from 1598 TMT in 2008-09 to 1651 TMT in 2009-2010. In Odisha, daily milk output is 60 lakh liters, but the amount processed is 5 to 6 lakh litres. So there is huge potential for processing industry to process milk and make it a value added product.

In dairy farming, major marketable item is milk. Apart from the production of milk, manures, meat, bones, hides, skin and draught powder also sold .Milk is very important in rural area. Odisha is not only a poor state, but also affected with malnutrition. So efficient and effective production of milk can bridge the gap of malnutrition in odisha. In odisha, major problem of any type of agri related activity is fragmented land. Apart from fragmentation of land, illiteracy, lack of information flow, lack of government policy implementation, less credit facility, issue with marketing has resulted inefficient and less productive dairy sector.

2.Objectives Of The Study

- To ascertain the profitability of dairy farming
- To find out the challenges in dairy farming.

3.Research Methodology

In this research ,different farmer segmentation has been done. According to this segmentation the research result has been designed. The segmentation has been done by considering following points.

- 1) Farm size in terms of herd size
- 2) Land for green fodder cultivation
- 3) Production system
- 4) Technology
- 5) Marketing

4.According To Herd Size

In odisha ,if we classify the dairy farmer ,according to the herd size then following classification will be resulted. Following classification has been done ,according to the contribution of cattle in the herd.

- 1)farmers having less than 2 cattle.
- 2) farmers having more than 2 cattle .
- 3) farmers having more than 10 cattle.

In odisha ,there is huge number of farmers who have less than 2 cattle and less than 10 cattle.The number of farmers having more than 10 cattle is very less in odisha, as per National statistics.

5.According To Green Fodder Cultivation

Green fodder is very important for cost effective dairy production. We can classify as per land holding .

- 1)small farmers- less than 1 hectare
- 2)marginal farmers- less than- 2 hectare.
- 3)large farmers- more than 10 hectare.

Odisha is a state of small and marginal farmers.More than 80% of farmers are included under small and marginal group.

6.According To Production System

According to production system, following classification is observed.

- Traditional dairy farming.

- Commercialize dairy farming.

Dairy farming is mainly traditional way of farming. Small and marginal farmers' number is more in dairy farming in odisha. These section of farmers are unable to implement new methods to make the dairy farming activity as commercially viable.

7. According To Technology

According to use of technology, dairy farmers are of following types.

- Aggressive
- Not aggressive

Aggressive users are very responsive towards technology and immediately implement the technology in farm. This aggressive nature farmers are very less. This is observed in the large farmers having big numbers of cattle in odisha.

8. According To Marketing

According to marketing of milk and milk products, following classification has resulted.

- Selling to processing centre like OMFED.
- Selling to sweet shops and supply to hotels.
- Selling direct to customers.

After getting familiar with the classification of dairy farmers in Odisha, we will discuss about the SWOT ANALYSIS of dairy farming in odisha.

9. Swot Analysis Of Dairy Farming In Odisha

9.1. Strength Factors

Odisha has major milk producing climate like Cuttack and Jagatsinghpur. In village level, sufficient area for green fodder cultivation in waste lands are available. In odisha, there is social acceptability towards farming. There is a growing, competitive marketing facility by private processing industry (MILKY MANTRA) as well as government owned processing industry like OMFED.

9.2. Weakness Factors

Fragmentation of land also affects the dairy sector. The fragmented land cannot be used for any productive purpose. People are unwilling towards green fodder cultivation due to

problem like irrigation. Increased capital input is also a weakness factor, where credit supply is not of demand driven. Locating a better healthy breed from an organized sector .High perishable nature of milk also cause damage to the production. Increased cost of human resource also a weakness factor. Low productivity issues have resulted due to several factors. There is lack of credit to use modern technology. People lack of sophisticated input. There is a huge gap of government policy and implementation .Lack of organized help to get a dairy loan regarding preparation of project report.

10.Opportunity Factor

Milk and milk products are such that the demand will not drop. More private players are present in milk processing sector in odisha like milk mantra, seashore, kamdhenu etc. Integration of Research institutions like OUAT VETERINARY DEPARTMENT by KVK to take lab to land initiative. There is Subsidy for the dairy project and that subsidy is 25 percent for general candidate and 33% in case of SC/ST or women candidates.

11.Threat Factor

Natural disaster like flood and cyclone always resulted huge loss of life of livestock .Chronic diseases like foot and mouth diseases result sudden death inspite of having vaccines. Increasing market price of concentrate feed. Our odisha dairy farmers are depending more on the market feed ,so increased market feed price resulting loss of profit. Role play of middle man is also a threat for the dairy farmer taking away a major chunk of profit.

12.Major Challenges Faced By A Dairy Farmer

This research report has been prepared to present the status of dairy farmer in odisha.We should understand what a small or marginal dairy farmer faces in real life in dairy farming.So this has represented in a systematic manner from the purchasing of a cow upto its PLC.

12.1.1st Challenge-

12.1.1. Purchasing Of Cattle

Purchasing a better variety of milking Crossbreed cow by a farmer is totally a risk activity .In odisha, this cattle purchase is totally based on trust. There is no organized way of cattle business .When there is a surplus in government farms ,the government farm sales cattle .Generally ,farmers who are going to sale , use corruptive methods to show the high yield of milk .Farmers use certain Hormone stimulating chemicals in the udder of cow .By that chemical the cow gives high amount of milk from first day of inject up to 4 or 5 days. Then the cattle undergo severe health problem. But the person or farmer, who wants to buy the selected cattle observe the high milk yield of cow and immediately purchase the cow and the cow get serious health issue after the injection of the hormone stimulating chemicals. sometimes this corrupt practice result sudden death of the cattle also, resulting loss who purchases the cattle.

12.1.2.nd CHALLENGE-HYGIENIC CONDITION OF CATTLE SHED

Hygienic condition results reduction of infectious disease and other viral diseases spread by mosquitoes. The farmers cannot provide better housing condition for themselves, so it is far to expect the better concrete cattle shed. By designing concrete shed and doing it in a government prescribed manner not only helps to reduce the disease frequency , but also make eligible for subsidy .

12.1.3.rd CHALLENGE- GREEN FODDER CULTIVATION

For better growth of the cattle, green fodder is very essential. This increases the milk fat content and provide required protein content. In odisha, there is huge opportunity for green fodder cultivation. Green fodder can be any green part that cattle can digest .Such as any grass ,or green leafy portion of plant is also given .HYBRID NAPIER is a grass which can be produced throughout the year and is the best green fodder .Farmers are not willing to cultivate this grass due to lack of irrigation facility.

12.1.4.th CHALLENGE-MEDICATION EXPENSES

Medication expenses is more in case of hybrid cattle like Cross breed cows. The hybrid variety is more prone to diseases. So medication part after the disease affected is very expensive. So the farmer has to take care of every preventive measure to prevent any

disease. Vaccination and other antibiotics should be given periodically. Regular visit by veterinary doctor is also prescribed.

12.1.5.5th CHALLENGE-MARKETING OF MILK AND MILK PRODUCTS

Marketing is very crucial step for sustainability of any business. Dairy farm may be a small business unit or may be a large business unit according to the herd size. So for any operation of business activity two things are required.

- Financial sustainability.
- Operational sustainability.

Financial sustainability is defined as stable economic activity or continuous inflow and outflow of money. The operational sustainability is defined as the operation at low cost. Hence for the dairy farm these two types of sustainable activities make profitable business.

For financial sustainability, marketing should be there. So according to marketing channel used by the dairy farmers in odisha following picture is observed.

12.1.6.6th Challenge -Government Organization Structure And Manpower

In each block ,there is a VD(Veterinary Doctor).The veterinary doctor takes care of the issues in respect of the villages coming under the respective block. There is BDO(Block development officer) who controls the block level veterinary clinic. There is KVK (KRISHI VIGYAN KENDRA) a technology facilitating centre to farmers situated in each district. This KVK plays important role for any technical guidance. This is hardly reaching to service of farmers.

13.Real Situation Of Dairy Farming In Odisha

In odisha, dairy farmers provide sufficient green fodder in rainy season. But they are unable to give the green fodders in other periods, due to two basic problems. These two problems are irrigation problem and fragmentation of land. So these farmers are dependent on market feed or concentrate feed. The price of market feed is increasing day by day.

The market price of protein content feed of 50 kg packet ranges between 830 to 850 (2012-2013) rupees. so price of market feed per kg average of 17 to 18 rupees.

There is lack of green fodder or any leafy part for urban dairy farmers. So they are totally dependent on market feed. In rural areas, although land availability is subsequent amount, but lack of irrigation facility hampers green fodder cultivation. So the dairy farmers of odisha suffer from external shock due to increase of feed price.

In real, the dairy farmers cannot meet the food demand per cattle per day. The food taken by a cattle per day is less than 70 percent of its daily need. So the milk production is also low. The daily food amount of a cattle is decided as per its weight .Although the green fodder is given to cattle its less than its requirement .

14.Organised Processing

There is organized sectors procure the milk at a specified parameter and process the milk and make value added products. In odisha there are two types of organized processing sector is present.

- One is government owned milk co-operative OMFED and other private players. OMFED follows the ANAND model of procurement. There is village or panchayat level initial milk collection centers. In different village level, milk co-operatives are made .The members are dairy farmers. Milk van moves two times per day, morning time and evening time. The farmers are paid by the panchayat level field officers at a ten days interval. The farmers are provided with free service of medicines and vaccines. But certain products and services are paid services by OMFED. The paid service amount is deducted from the payment at ten days interval. Then milk collection van collects milk from panchayat level and brings to district level chilling plants. All district level office are there , who control the panchayat level milk co-operatives. Then the chilled milk again goes to the processing plants. At present there are four processing plants in Odisha.
- Second is private players like MILK MANTRA, SEASHORE, KAMDHENU etc. From all this private players Milk Mantra is growing at a faster pace than any other private players. Milk Mantra owned by Mr.Srikumar Mishra, a MBA graduate from XIMB ,served TATA ADMINISTRATIVE SERVICES (TAS) .With his excellent career and corporate experience leads the business successfully. Milk Mantra now procuring from area like Bhubaneswar, Cuttack and Puri. Basically the company processing plant is situated at GOP, PURI. The NIMAPADA, GOP and the vicinity area are potential area of milk production

.The company has 16 collection points till now. The company is using GROUP METHODOLOGY in village level and providing them with adequate resource for dairy operation. Its brand is named as MILKY MOO. Now for the Odisha market, company has launched BOILED MILK at an affordable price.

- Direct To Customer: Dairy farmers are more interested to sell directly to the customer from door to door. They are also using the strategy of “SEEING IS BELIEVING” .Often the farmer who serves directly serve the customers alleged with complain of mixing water with milk. According to that “SEEING IS BELIEVING”, the customer goes to the farm yard of the farmer and observes the milking of cow and bring fresh quality milk from the farm yard, but often at a higher price.

Some dairy farmers also mixing powder to make the milk more thick.

15.Unorganized Marketing

In this marketing system, basically paneer, curd is supplied to various hotels and sweet shops. There is huge demand in this market. Odisha market is dominated by this system of marketing. There are two types of intermediaries play between dairy farmer and the hotels/sweet shops.

- The dairy farmer convert it to paneer and sell this to intermediary who collect paneer from whole village and keeps his margin after sale is made.
- Some intermediaries who procure the milk from the dairy farmer at an higher price than the OMFED. Then this middle man converts the milk into paneer or curd and sell in contracted hotels or sweet shops.

Lots of things happen in this unorganized marketing on which the government has no control over the intermediaries playing between the dairy farmer and the hotels and sweet shops. Government should make strong quality control aspects due to following reasons.

- Intermediaries sometimes exploited in payment from hotels and sweet shop.
- The dairy farmer or intermediary mix powders to increase the SNF.
- The powder which is mixed by the farmers is serious to health.

(Although the powder is mixed with milk, by using it paneer can be made, but sweets cannot be made by the powder mix milk. so the powdered milk is only used for paneer preparation.)

16. Statistics Of Business

(considering major food as market concentrate feed and less green fodder)

This paper presented the statistics according to the CB cattle breed food consumption and the cost for feeding and other expenses. Average weight of a CB cow is 450 kg. So minimum of 1/30TH of the weight amount has to be given (if not giving green fodder) as market concentrate feed as per scientific evaluation. But in odisha, farmers hardly give 3 to 4 kg of market feed. Then more amount of straw is also given by odisha farmers. But there is not any protein content in the straw. This straw is only given to fill the stomach of the cow. In urban area the farmers only give concentrate feed with straw.

Let us consider the CB cow and cost incurred on it.

AMOUNT	PRICE
6 to 7 kg of chokada (protein content)	126 rupees
2 to 3 kg of kunda (carbohydrate content and lignin content)	20 rupees
Straw 4 to 5 kg	6 rupees
Medicine expenses	20
Labour	20
Total cost	192 rupees

Table 1

17. Own Source Analysis

Hence it comes around 192 rupees per CB cow per day. After all these inputs the milk production per cow per day is around 6 to 7 liters. Although the potential of the CB cow is average 10 liters of milk, it cannot produce milk effectively and efficiently due to lack of food.

If the farmer sales the pure milk at a price of 27 rupees, then the farmer earn around 190 rupees. This cannot meet the input cost even or the amount of cost incurred is same as

that of the sales value .so no profit is resulted. But the farmers are forced to do corruptive practices to sale the milk in market.

From the above statistics the major cost incurred in dairy farming is feed cost. So a dairy farmer has to reduce the market feed and increase the green fodder as a food for cattle, that can derive profit.

18.Statistics For A Single Cb Cow For A Profitable Business

Dairy farming can be a profitable business, if one cultivates the green fodder .This can minimize the market feed dependance and from increased market price shock to input cost .Apart from the green fodder bio fertilisers like AZOLLA can be fed to cattle.

INPUT	AMOUNT	COST in rupees
GRASS	20KG-30kg	20
STRAW	10KG	8
CONCENTRATE FEED	5KG	90
KUNDA	3KG	15
MEDICAL EXPENSE		20
LABOUR		20
TOTAL EXPENSE		173

*Table 2: DAILY INPUT AND COST FACTOR (By Cultivating Green Fodder)
Own Source Analysis*

Total expenses become nearly 170 to 175. One CB cow average milk yield is 10 litres. If the farmer sales 1 liter of milk in 27 rupees ,then for 10 liter of milk the farmer gets 270 rupees on daily basis. All the expenses are around 170 to 175. The farmer can get profit of 95 to 100 rupees per cow daily.

19.Profit Statistics

Sale of 10 liter milk (1liter /27 rupees)	270 rupees
Total expense for input	170 to 175 rupees
Total profit (daily/cow)	95 to 100 rupees
MONTHLY PROFIT PER ONE COW	Around 3000 rupees.

Table 2

Own Source Analysis

If the farmer has minimum of average two CB cows in milking condition, can get income nearly 6000 /month throughout the year.

20.A Case Study- Emerging Commercial Way Of Farming

Raghab Behera, is a farmer who is residing side of 203 highway which connects Bhubaneswar to puri, odisha. He has only 3 acres of land, but fragmented. He has own irrigation system. He is involved in two type of agri activity.

- He has 5 CB cows-out of which average three cows are in milking condition throughout the year. He sales paneer to a nearby sweet making shop.
- He does baby corn cultivation .Baby corn can be produced round the year. This baby corn has market in hotels for sandwich and other fast food items. Baby corn is a cash crop, which also been procured by the middle man to supply the processing industry situated in Kolkata.

Ragahab sales the baby corn, and whatever the green leaf covering of corn was detached from the corn act as a green fodder to its CB cows. Every week he produces baby corn and the baby corn leafy covers act as fodder to CB cows. He saves around 1000 rupees by increasing the green leafy part of corn and reducing the market concentrate feed.

21.Conclusion

Odisha is a potential area for dairy farmers having tremendous potential for processing and value addition. Young entrepreneurs should come to this sector for development with active support from government. A commercialised way of farming should be promoted among the existing dairy farmers. Now Odisha government is providing new subsidized scheme for integrated farming .This integrated farming includes dairy, fishery, horticulture all together in a single patch of land. The Krishi Sahayak Kendra has to be more efficient and effective towards the service delivery to the farmers. The farmer should design the shed, so as to keep hygiene factors .The cattle should be proper vaccinated to protect them from any kind of viral infection.

22.Reference

1. Dr. Bhagirathi Panigrahi, OUAT, BBSR, “Livestock and production management”.
2. Dr. P. K. Mohanty, Agronomy department, college of agriculture, OUAT, BBSR
3. KVK (Krishi Vigyan Kendra), Sakhigopal
4. Dr. Basant K. Das, Microbiology, CIFA.*regarding azolla cultivation
5. Dairy farmers of Nimapada.
6. Nimapada chilling centre, OMFED.
7. Economic status report 2010-11.