



JEEVIKA
Bihar Rural Livelihoods Promotion Society
State Rural Livelihoods Mission (SRLM), Bihar



**A report on value chain analysis of vegetables (Onion),
Dairy co-operative society, poultry mother units,
Aggarbati and Bangles of Nalanda district (Bihar)**



Prepared as a part of summer internship with Bihar Rural Livelihood Promotions Society (BRLPS)

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Acknowledgment

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Executive summary

The report here covers the process and results from the value chain analysis on Onion and other vegetables along with the Agarbatti and Bangles making in four blocks of Nalanda district of Bihar. I have produced this paper based on the field experience derived while working on 'scoping study of value chain and its importance' a preliminary exercise by JEEVIKA in association with the Techno Serve and NGO for the forward linkage of the produce to raise the income of the vulnerable farmers in the district.

1. Introduction

Background

Bihar Rural Livelihoods Promotion Society (BRLPS) locally known as JEEVIKA an autonomous body under the Dept. of Rural Development is working in the villages with the objective of social and economic development of the rural poor. BRLPS works on the ground level livelihood intervention which always tries to promote socio-economic development of rural population in Bihar. BRLPS already initiated its intervention in all 534 blocks across 38 Districts of Bihar. The foundation of this initiative lies in the prior intervention in rural areas through making women Self Help Groups (SHGs) in the villages for their empowerment .Bihar under the umbrella of Jeevika is the first state to open a website for PIAs which was inaugurated by the honorable minister of Department of rural development. BRLPS always focused on providing quality training to staff as well as the other stake holders. District level banker workshops are regular feature of it. BRLPS isn't only providing rural livelihood opportunity to all women specially to those who are socially and economically oppressed from generations. Through BRLPS JEEVIKA tries to promote them through ideas of SHGs .at every level, there are livelihood intervention through which different types of programs and initiative of Jeevika is going at very high level.

Rural Livelihood intervention of BRLPS:-

FARM

- Agriculture
- Producer group
- Producer company
- Kitchen garden
- Vermin pit
- Digital green

OFF FARM

(Livestock)

- poultry
- gouty
- dairy

- animal husbandry
- health camp

NON-FARM

- Aggarbati
- Bee-keeping
- Lahti/bangles making

Objective of the study

The main objective of this study is to provide information on the current situation and explore potential villages for this intervention. The specific objectives are as follows:-

- Construct value chain map of onion produced in this region with the chain actors, their function and relationship
- Identify major producing villages
- Identify the limitations of the value chain and recommend intervention
- Identify the framework of value creations at different stages and the pattern of its distribution

Methodology

Study area

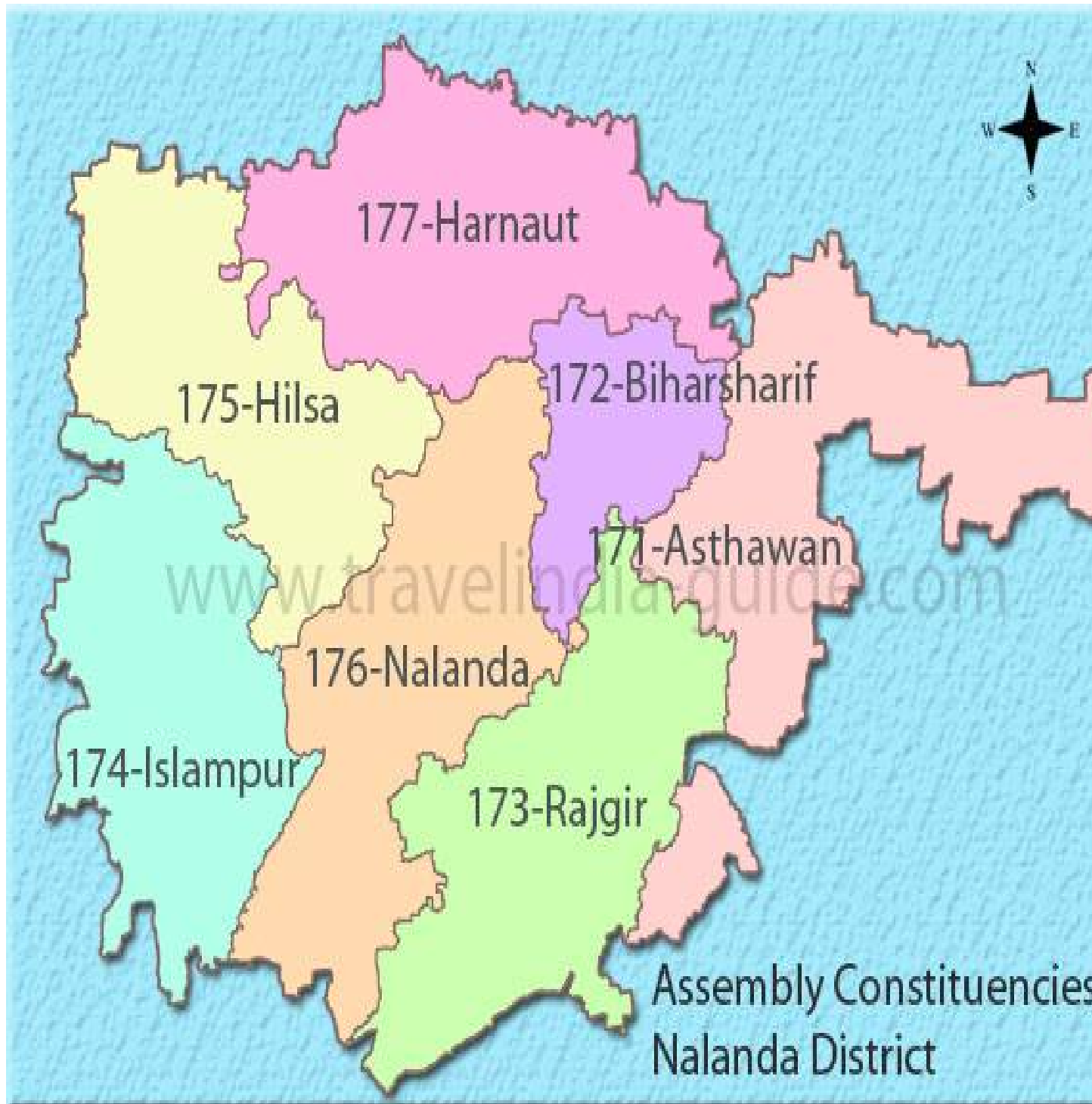
Based on the comprehensive study of the secondary data on vegetable production in different blocks of Nalanda, certain potential blocks were identified. Then the exercise of collecting primary data was conducted in these blocks. I was a part of this exercise thereon taking surveys. I will be presenting data on my findings from surveys in Noorsarai block .

Data collection

A mix of quantitative and qualitative method was used. The surveys were conducted on various PGs in the villages through structured questionnaire. Within the PGs a random sample of ten farmers were taken. The FGDs and some informal discussion were also used as a method to understand those important aspects which the questionnaire may not address.

Data analysis

A systematic analysis data was done to derive the study objectives. This was used to derive the value chain map and an estimate of volume of transaction.





2. Value Chain Analysis

2.1 Introduction to Value Chain

Value chain analysis of onion (farm)

As a trainee I decided to visit first the Noorsarai block in which procurement of onion was already at pace through ADS method.

At Noorsarai block, Jeevika was having intervention at different levels like poultry, procurement of onion, DCs, and implementation of initial capital utilization fund. Noorsarai come under three cluster as follows:-

Noorsarai block

1. Muzzafarpur cluster (Tajmahal CLF)
2. Andhana cluster
3. Nari cluster

At block level the following hierarchy is present among all the staffs of BRLPS:-

1. BPM (Block Project manager)
2. LHS (livelihood specialist)
3. AC (area coordinator)
4. CC (community coordinator)

There is also a provision of providing supper and help to village women and these works are performed by :-

1. CM (community mobilizer)
2. BK (block keeper) at vo level
3. VRP (village resource person)
4. JRP (job resource person) for skill development
Ex- computer training, bee keeping e.t.c
5. CRP(community resource person)
6. ARP (agarbatti resource person)
7. AHRP(animal husbandry resource person)
8. MBK(master book keeper)

In Noorsarai block trainee went to villages (Andhana , Higan, Daruara) and attended CLF meeting. He came to know that most of the villagers have small plots of land. And some landless people had taken land on lease for farming. Most of the farmers who have small plots of land belong to SC and EBC community.

Land distribution:-

- 45% of farmers have less than 1 bigha of land.

- 22% of farmers have more than 1 bigha of land but less than 2 bigha.
- 27% of people were landless and they work as casual labor or take land on lease for farming.
- Only 6% of people have more than 2 bigha of land.

In the value activity of onion- At Noorsarai block, there was a large number of producer from whom onion are being purchased with the help of local VRP and cadre staff. After purchasing of onion from producers group, onions are stored in Maa sitala cold store at Andhana.

After production of onion, farmers discussed with local VRP about the price of onion. Now,VRP set a discussion with APS team and CHS(livelihood specialist) about the price and quality level of onion.

- ⇒ ADS and CHS discuss with local VRP about the quality and socio economic perspective of farmers (didi) and then assure the price of onion as per the quality level.
- ⇒ After the price level were fixed by the staff then procurement takes place through Jeevika by local transport service.
- ⇒ The price onions were fixed as per the grading of onion and quality level. After procuring the onion from village farmer reaches to the cold store.
- ⇒ Cold store is occupied on rent for half yearly basis on payment of 1, 50,000 rupees.
- ⇒ After procurement and storage of onions to the cold store, rotten onions are removed.
- ⇒ The farmers get the market price for their onions within 3-4 days.
- ⇒ Now grading of onions takes place according to their quality level.
- ⇒ Jeevika also ensures that any additional profit goes to the farmers for their welfare instead of keeping in the organization pocket.
- ⇒ The main objective of the study is to analyze the present value chain/ market status off-season vegetables and identify strategies to enhance the competitiveness of the sector.

After prolonged collective effort today farmers are making a considerable income from off season onion, and vegetables. The higher post harvest losses were due to improper handling, packaging, low level technology and poor facilities at collection centre. The post- harvest losses indicate great potential for increasing farmer's income and improve the rural economic condition as well a considerable potential for import substitution of vegetables.

The major obstructions in this sector are:-

- a. Unavailability of quality planting.
- b. Lack of proper knowledge among farmers especially about proper usage of fertilizer and pesticides as well as poor soil fertility management.
- c. Lack of irrigation facilities.
- d. Labor shortage
- e. Post- harvest loss due to perishable nature of vegetables.
- f. Limited access to reliable market information.
- g. Unorganized market centre.

- h. Limited collection centers.
- i. Lack of proper packaging and transportation facilities.

There is a need for promoting grading and establishment of collection centers

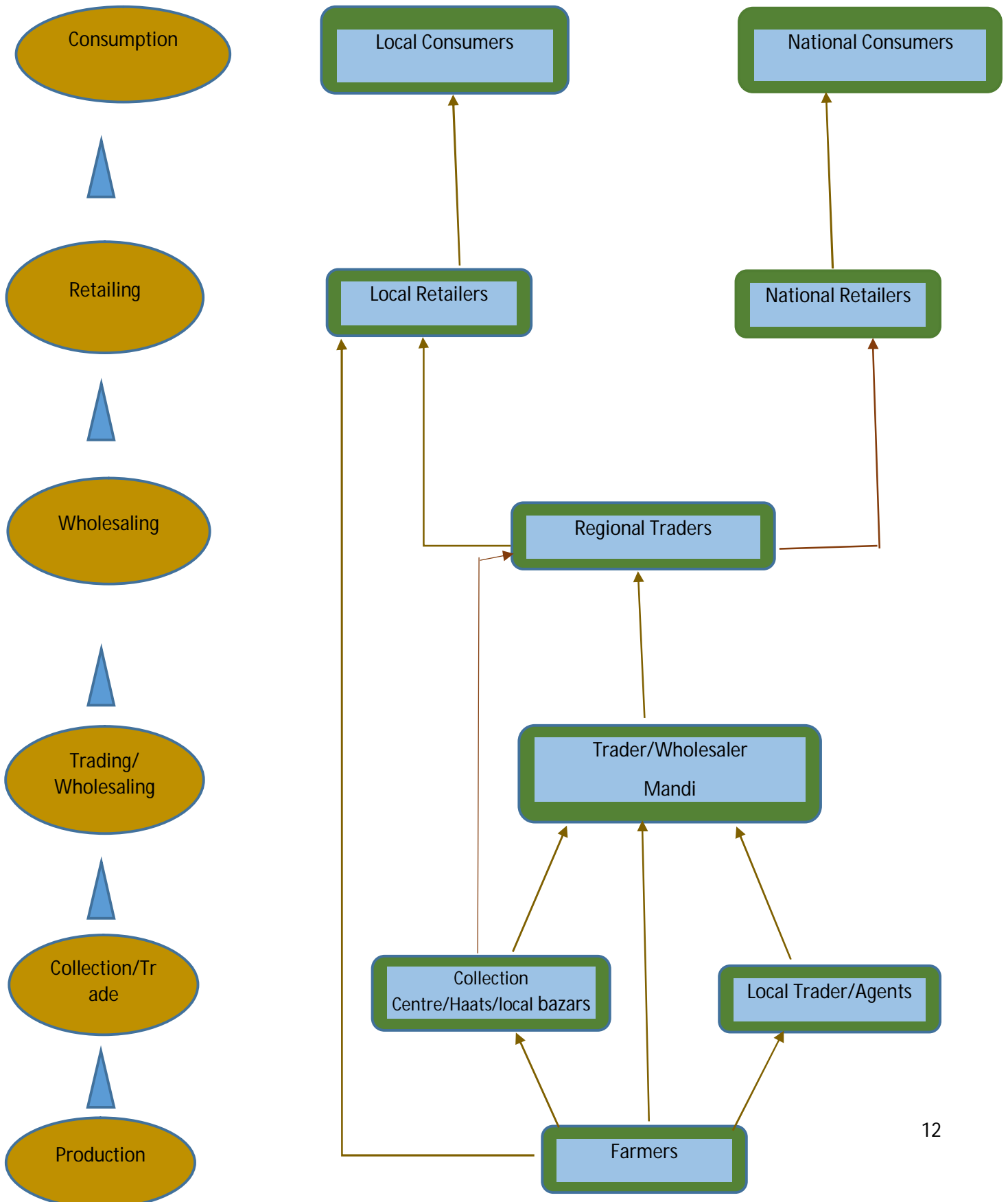


Function and actors in value chain analysis:-

- Farmers are the primary and most valued actors in the agriculture value chain.
- Two categories of farmers were noticed in this area-
Subsistence farmers & commercial farmers
 - Subsistence farmers generally purchase and organize necessary agro inputs and sell the products at local market (haat bazaar), the local consumption of off-season vegetable is 30% of the total production. The rest is sold to the outside market.
- Collectors and traders are the key factors the off-season value chain and are responsible for the trading of 70% vegetables from production markets. Their trading activities including buying and assembling, sorting, selling to the middle man, transporting and selling to the wholesale market.



2.2 Value Chain Map



Functions and Actors

Producer

There is generally two types of farmer or producers, one who produces for self-consumption and the other one who does it for commercial purpose. Within the second category there is one who produces at larger scale and prefer selling to the mandis other who produces at small and medium scale generally visits local bazaar or the Haats. As mentioned the mandis are much far from these villages, the local bazars as reported is located within a distance ranging 1-2 km. As the vegetables are perishable they are to be sold as soon as they get harvested. The farmers do not have any mechanism to control the prices and hence during the peak seasons the prices falls drastically. Many farmers responded saying 'vegetables like lady finger, bottle guard and sponge guard, we have ended getting rid of it at Rs. 2-3'. Farmers generally do not do grading and sorting for selling it to the paikars.

Collector/trader/middlemen

The collectors or middlemen play a key role in the market exchange process. Within the small and medium scale producers many are those who sell it to the middlemen coming to their door step. In such exchanges the price paid to the farmers is the lowest where the middlemen buys the produce by cutting the transportation cost and his margin with which he sells it to the wholesalers. Particularly for potatoes most of the producers sells it to the middlemen from their home, and only for this vegetable the cold storages are used but mostly to keep for the seeds. These middlemen in the local are referred to as 'paikars'. The middlemen are also present in the hats where the collection happens at a large scale. The grading/sorting is at this level which segments the high and low value of the produce.

Wholesaler

The wholesalers are mostly involved in buying the vegetables from the traders or the middlemen and supplying it to the retailers. . Mandi operates in all the seven days of the week the working hours are from 4 AM to 11 PM.

Retailers

Retailers enters the supply chain at two levels, there are some who buys directly from the farmers in the hats' others buys it through the wholesalers. The value addition here takes place through the process of buying it from the wholesaler, transporting it to their shops, grading/sorting, displaying and selling it to the consumer.

Consumers

Consumers here are the households, hotels, larger institutions, etc.

Post-harvest management of onion

In most of the production pockets, grading is not practiced for off-season vegetables such as onion. This is due to absence of price difference between high grade and low grade onions and the number of labor required for grading.

Storage of onion is not practiced and farmers prefer not to harvest vegetables when the prices goes down.

Packaging of onion:- for packaging, traditionally they were using jute bags or doko but after intervention of Jeevika rural livelihood mission now they are using plastic crates. Sometime because of poor packaging they lose 10 % of product during transportation. Farmers like to use plastic crates if they are subsidized as they minimize loss and helps in maintaining quality.

Jeevika also provides mini-trucks for transportation from production sites to cold storage or market.





Value chain governance:-

In Nalanda, onion and other kind of vegetables are supplied in the local market where commission agents charge 6-7 % as their fee but after the intervention of Jeevika now products are directly purchased by Jeevika at market rate in village itself.

Earlier I absence of proper market information system and low bargaining power, farmers were forced to sell their product at the price offered by traders. Jeevika purchase onion from producers group at market price.

There are certain weakness and strength in the value chain analysis of onion and other vegetables as follows:-

Weakness:-

- Lack of irrigation facility all around the year.
- Poor access to quality inputs (seed, fertilizer, pesticides and micro nutrients).
- Shortage of training for skilled labor.
- Inadequacy of proper growth in the seeds.
- Farmers are not using improved packaging or practice of cultivation, harvesting and post-harvesting management.
- Unavailability of quality inputs at time and if available is so expensive to bear.

- Lack of technical knowledge to rural farmers.

Value chain analysis of Agarbati and Lahti



Rajgir block-

- 1). Lahuar
- 2). Chabilapur
- 3). Bhui

Agarbati basically come in non-farm activity of BRLPS. A large no of poor households already linked to SHGs are involved in Agarbati making for last couple of years.

Gaya district is a hub of Agarbati making. In a survey conducted by the block project implementation unit at Dobhi. It was found that there are around 1500 households of SHGs members in Dobhi alone who are earning a part of their income through this activity.

The Agarbati making business was controlled by the traders who were into this business for many years. These traders supply measured quantity of inputs to the poor households especially women and take the finished products by weight. The payment is made on the weight of Agarbati supplied. The labor charges paid to these workers varies from rupees 14-20 per kg. More is paid depending on the quality of the Agarbati made.

In Rajgir block, there are many villages in which these Agarbati manufacturing is taking place on a large scale. In villages like Gajipur, Hassanppur and many villages of Chabilapurare doing well in manufacturing of Agarbatis.

Agarbati making is supplementary activity which they can undertake along with their routine work. The labor charges paid to these women varies from 18-20 rupees/kg. Agarbati making is a labor intensive work and relies on the skill of worker.

In the present scenario the Agarbati rollers are not concerned about the quality of the same. Formation of producer groups are working as an organized enterprise and providing opportunity to have a better control on the quality of output and hence better bargaining power for labor charge on output.

In non-farm activity especially in Agarbati making there are various groups are already formed:-

- Total producer group formed :- 49
- Total non-farm producer group:- 12
- Total member of producer group:- 600
- Amu of PG(producer group):- 12
- Total functional producer group:- 11
- Grading of Agarbati on the basis of A,B,C,D
- A= 35/KG
- B= 32/KG
- AB industry Munger in providing is providing all kind of capital facility and all kind of technical support.
- Each producer group will have around 40 members. Out of them there will be three office members namely the President , the secretary and the treasurer.
- Each producer group will be funded on account of 1, 73,000 rupees as working capital for Agarbati business along with a support of rupees 10,000 for the payment of Agarbati resource person.
- Each CLF will be funded a sum of rupees 2, 87,000 for the establishment of storehouse and purchase of its furniture and payment of staff, labor and transport cost.
- The funding of the producer group will be routed through the parent CLF whereby the CLF will be providing a loan of rupees 1,73,000 to the producer groups at 6% simple interest repayable in 48 monthly installments of equal amount.
- There are certain stages through which the fund would be released to the producer groups.
- Formation of producer groups consists of around 40 members.
- Opening of bank account of each group and completion of necessary paper work.
- Training to office bearers of producing groups. Agarbati resource person, store keeper and member of sub-committees on their roles and responsibilities.

There is a need for rules, compliance, appraisal check and monitoring for value chain analysis of Agarbati:-



1. Transparency:- all decisions of the group should be taken in a transparent manner and all the information and benefits formally conveyed along the members.
2. Accountability: - the group will be accountable to the members and their stake holders (suppliers, employees, and purchaser of product) , office members and social audit committee .
3. Participation: - all members should participate and discuss their concerns in decentralized decision making while discussing action plan, quality of inputs, issues related to payment of labor charges and other issues of concern.
4. Profit orientation:- the producer groups should benefit large number of members engaged in production of Agarbatti.
5. Local value addition:- the producer groups will build on local resources, skills and capacities as such local value addition in terms of quality improvement (grading and sorting)
6. Ecological impact:- the activities of the producers group should be ecological balanced and the management should be proper to cope up with these situations.

Roles and responsibilities of the purchasing committee

- The purchasing committee will be responsible for placing orders with the supplier on the basis of demand generated by the members of the group keeping in mind that there should be 45 days stock at all times in the store house.
- Roles and responsibilities of ARP:- the roles and responsibilities of the supporting project staff will be as follows:-
 - a). The Agarbatti making business is being run by traders who are into their business for many years .

- b). these traders supply measured quantity of inputs (on weight basis) to the poor households especially women and take finished product in the same way.
- C). quantity of inputs to be used for making agarbatti.
- d). process of rolling agarbatti match the required specification of the end product.
- d). maintaining book records.
 - ✓ Raw materials required for the manufacture of raw agarbatti are:-
 - Charcoal
 - Jigat
 - Bamboo stick
 - Norwa powder

Value chain analysis of Dairy co-operation society



- ❖ In all the blocks of Nalanda, DCs were already formed but AMCU(automatic milk collection unit) weren't working in most of them.
- ❖ Total no of DCs in Nalanda =72
- ❖ Dairy co-operative society:- the milk producers of the village with the support of the milk union form a village dairy co-operative society.
- ❖ The milk producers become members by buying a minimum of one share of the society and paying an entrance fee as per the bye-laws.

- ❖ All these members from the general body of society which has the supreme powers subject to the state co-operative act, rules and Bye laws.

The society has an elected managing committee including the chairman from among the producers as per the provisions of the BYEs laws. All the positions of the MC are honorary. The provisions of the bye-laws govern the term of the MC and the chairman of the society.



OLD METHOD OF MEASURING FAT

Legder maintained to record fat contained of every household providing milk

Operations of dairy co-operative society:-

The society's major operations can be classified in two groups:- milk trading and providing input services. Milk trading involves reception, testing, local and sample milk scale, dispatch of milk to milk union, payment and accounts keeping. Input services include animal health coverage, breeding, supply of cattle feed, fodder development, clean milk production and extension services to producer members.

Milk trading in DCs:-

Each society has milk collection centre either in an owned or hired premise. Each morning and evening, the milk producers bring milk in their own containers to the society.

A representative sample of milk is drawn for testing the quality of milk. Milk is collected in milk cans or directly to the cooler as the case persists.

well as the functioning of the machine so that purity of milk could be counted properly



at SNF measurement.

सुधा वैशाल पाटलिपुत्र दुग्ध उत्पादक सहकारी संघ लि०, पटना
दुग्ध मूल्य तालिका
दुग्ध उत्पादको के लिए प्रभावी तिथि - 17.05.2014

गाय का दूध दर प्रति किलो (रु. में) फैट : 245.82 एस.एन.एफ. : 184.36
एस.एन.एफ. % : 8.50 (निर्धारित)

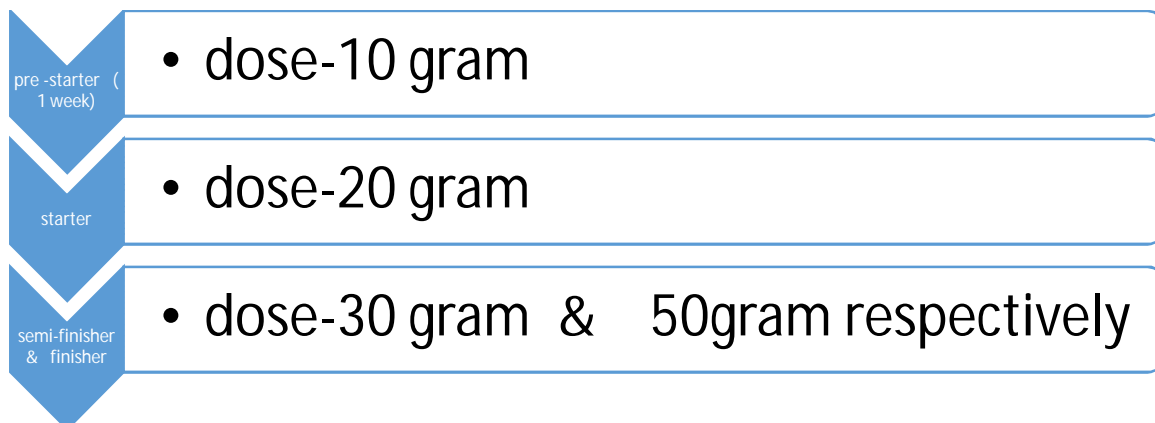
भैस का दूध दर प्रति किलो (रु. में) फैट : 541.00 एस.एन.एफ. : 0.00
एस.एन.एफ. % : 8.80 (निर्धारित)

QTY. Fat%	8.0-8.2	8.3-8.5	8.6-8.8	8.9-9.1	9.2-9.4	9.4-9.6	9.6-9.8	9.8-10.0	10.0-10.2	10.2-10.4	10.4-10.6	10.6-10.8	10.8-11.0	11.0-11.2	11.2-11.4	11.4-11.6	11.6-11.8	11.8-12.0	12.0-12.2	12.2-12.4	12.4-12.6	12.6-12.8	12.8-13.0	13.0-13.2	13.2-13.4	13.4-13.6	13.6-13.8	13.8-14.0	14.0-14.2	14.2-14.4	14.4-14.6	14.6-14.8	14.8-15.0	15.0-15.2	15.2-15.4	15.4-15.6	15.6-15.8	15.8-16.0	16.0-16.2	16.2-16.4	16.4-16.6	16.6-16.8	16.8-17.0	17.0-17.2	17.2-17.4	17.4-17.6	17.6-17.8	17.8-18.0	18.0-18.2	18.2-18.4	18.4-18.6	18.6-18.8	18.8-19.0	19.0-19.2	19.2-19.4	19.4-19.6	19.6-19.8	19.8-20.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
0.10	2.33	2.40	2.48	2.55	2.62	2.70	2.77	2.85	2.89	2.98	3.14	3.30	3.46	3.62	3.79	3.95	4.11	4.27	4.44	4.60	4.76	4.92	5.09	5.25	5.41	5.56	5.73	5.89	6.06	6.22	6.38	6.54	6.70	6.86	7.02	7.18	7.34	7.50	7.66	7.82	7.98	8.14	8.30	8.46	8.62	8.78	8.94	9.10	9.26	9.42	9.58	9.74	9.90	10.06	10.22	10.38	10.54	10.70	10.86	11.02	11.18	11.34	11.50	11.66	11.82	11.98	12.14	12.30	12.46	12.62	12.78	12.94	13.10	13.26	13.42	13.58	13.74	13.90	14.06	14.22	14.38	14.54	14.70	14.86	15.02	15.18	15.34	15.50	15.66	15.82	15.98	16.14	16.30	16.46	16.62	16.78	16.94	17.10	17.26	17.42	17.58	17.74	17.90	18.06	18.22	18.38	18.54	18.70	18.86	19.02	19.18	19.34	19.50	19.66	19.82	19.98	20.14	20.30	20.46	20.62	20.78	20.94	21.10	21.26	21.42	21.58	21.74	21.90	22.06	22.22	22.38	22.54	22.70	22.86	23.02	23.18	23.34	23.50	23.66	23.82	23.98	24.14	24.30	24.46	24.62	24.78	24.94	25.10	25.26	25.42	25.58	25.74	25.90	26.06	26.22	26.38	26.54	26.70	26.86	27.02	27.18	27.34	27.50	27.66	27.82	27.98	28.14	28.30	28.46	28.62	28.78	28.94	29.10	29.26	29.42	29.58	29.74	29.90	30.06	30.22	30.38	30.54	30.70	30.86	31.02	31.18	31.34	31.50	31.66	31.82	31.98	32.14	32.30	32.46	32.62	32.78	32.94	33.10	33.26	33.42	33.58	33.74	33.90	34.06	34.22	34.38	34.54	34.70	34.86	35.02	35.18	35.34	35.50	35.66	35.82	35.98	36.14	36.30	36.46	36.62	36.78	36.94	37.10	37.26	37.42	37.58	37.74	37.90	38.06	38.22	38.38	38.54	38.70	38.86	39.02	39.18	39.34	39.50	39.66	39.82	39.98	40.14	40.30	40.46	40.62	40.78	40.94	41.10	41.26	41.42	41.58	41.74	41.90	42.06	42.22	42.38	42.54	42.70	42.86	43.02	43.18	43.34	43.50	43.66	43.82	43.98	44.14	44.30	44.46	44.62	44.78	44.94	45.10	45.26	45.42	45.58	45.74	45.90	46.06	46.22	46.38	46.54	46.70	46.86	47.02	47.18	47.34	47.50	47.66	47.82	47.98	48.14	48.30	48.46	48.62	48.78	48.94	49.10	49.26	49.42	49.58	49.74	49.90	50.06	50.22	50.38	50.54	50.70	50.86	51.02	51.18	51.34	51.50	51.66	51.82	51.98	52.14	52.30	52.46	52.62	52.78	52.94	53.10	53.26	53.42	53.58	53.74	53.90	54.06	54.22	54.38	54.54	54.70	54.86	55.02	55.18	55.34	55.50	55.66	55.82	55.98	56.14	56.30	56.46	56.62	56.78	56.94	57.10	57.26	57.42	57.58	57.74	57.90	58.06	58.22	58.38	58.54	58.70	58.86	59.02	59.18	59.34	59.50	59.66	59.82	59.98	60.14	60.30	60.46	60.62	60.78	60.94	61.10	61.26	61.42	61.58	61.74	61.90	62.06	62.22	62.38	62.54	62.70	62.86	63.02	63.18	63.34	63.50	63.66	63.82	63.98	64.14	64.30	64.46	64.62	64.78	64.94	65.10	65.26	65.42	65.58	65.74	65.90	66.06	66.22	66.38	66.54	66.70	66.86	67.02	67.18	67.34	67.50	67.66	67.82	67.98	68.14	68.30	68.46	68.62	68.78	68.94	69.10	69.26	69.42	69.58	69.74	69.90	70.06	70.22	70.38	70.54	70.70	70.86	71.02	71.18	71.34	71.50	71.66	71.82	71.98	72.14	72.30	72.46	72.62	72.78	72.94	73.10	73.26	73.42	73.58	73.74	73.90	74.06	74.22	74.38	74.54	74.70	74.86	75.02	75.18	75.34	75.50	75.66	75.82	75.98	76.14	76.30	76.46	76.62	76.78	76.94	77.10	77.26	77.42	77.58	77.74	77.90	78.06	78.22	78.38	78.54	78.70	78.86	79.02	79.18	79.34	79.50	79.66	79.82	79.98	80.14	80.30	80.46	80.62	80.78	80.94	81.10	81.26	81.42	81.58	81.74	81.90	82.06	82.22	82.38	82.54	82.70	82.86	83.02	83.18	83.34	83.50	83.66	83.82	83.98	84.14	84.30	84.46	84.62	84.78	84.94	85.10	85.26	85.42	85.58	85.74	85.90	86.06	86.22	86.38	86.54	86.70	86.86	87.02	87.18	87.34	87.50	87.66	87.82	87.98	88.14	88.30	88.46	88.62	88.78	88.94	89.10	89.26	89.42	89.58	89.74	89.90	90.06	90.22	90.38	90.54	90.70	90.86	91.02	91.18	91.34	91.50	91.66	91.82	91.98	92.14	92.30	92.46	92.62	92.78	92.94	93.10	93.26	93.42	93.58	93.74	93.90	94.06	94.22	94.38	94.54	94.70	94.86	95.02	95.18	95.34	95.50	95.66	95.82	95.98	96.14	96.30	96.46	96.62	96.78	96.94	97.10	97.26	97.42	97.58	97.74	97.90	98.06	98.22	98.38	98.54	98.70	98.86	99.02	99.18	99.34	99.50	99.66	99.82	99.98	100.14	100.30	100.46	100.62	100.78	100.94	101.10	101.26	101.42	101.58	101.74	101.90	102.06	102.22	102.38	102.54	102.70	102.86	103.02	103.18	103.34	103.50	103.66	103.82	103.98	104.14	104.30	104.46	104.62	104.78	104.94	105.10	105.26	105.42	105.58	105.74	105.90	106.06	106.22	106.38	106.54	106.70	106.86	107.02	107.18	107.34	107.50	107.66	107.82	107.98	108.14	108.30	108.46	108.62	108.78	108.94	109.10	109.26	109.42	109.58	109.74	109.90	110.06	110.22	110.38	110.54	110.70	110.86	111.02	111.18	111.34	111.50	111.66	111.82	111.98	112.14	112.30	112.46	112.62	112.78	112.94	113.10	113.26	113.42	113.58	113.74	113.90	114.06	114.22	114.38	114.54	114.70	114.86	115.02	115.18	115.34	115.50	115.66	115.82	115.98	116.14	116.30	116.46	116.62	116.78	116.94	117.10	117.26	117.42	117.58	117.74	117.90	118.06	118.22	118.38	118.54	118.70	118.86	119.02	119.18	119.34	119.50	119.66	119.82	119.98	120.14	120.30	120.46	120.62	120.78	120.94	121.10	121.26	121.42	121.58	121.74	121.90	122.06	122.22	122.38	122.54	122.70	122.86	123.02	123.18	123.34	123.50	123.66	123.82	123.98	124.14	124.30	124.46	124.62	124.78	124.94	125.10	125.26	125.42	125.58	125.74	125.90	126.06	126.22	126.38	126.54	126.70	126.86	127.02	127.18	127.34	127.50	127.66	127.82	127.98	128.14	128.30	128.46	128.62	128.78	128.94	129.10	129.26	129.42	129.58	129.74	129.90	130.06	130.22	130.38	130.54	130.70	130.86	131.02	131.18	131.34	131.50	131.66	131.82	131.98	132.14	132.30	132.46	132.62	132.78	132.94	133.10	133.26	133.42	133.58	133.74	133.90	134.06	134.22	134.38	134.54	134.70	134.86	135.02	135.18	135.34	135.50	135.66	135.82	135.98	136.14	136.30	136.46	136.62	136.78	136.94	137.10	137.26	137.42	137.58	137.74	137.90	138.06	138.22	138.38	138.54	138.70	138.86	139.02	139.18	139.34	139.50	139.66	139.82	139.98	140.14	140.30	140.46	140.62	140.78	140.94	141.10	141.26	141.42	141.58	141.74	141.90	142.06	142.22	142.38	142.54	142.70	142.86	143.02	143.18	143.34	143.50	143.66	143.82	143.98	144.14	144.30	144.46	144.62	144.78	144.94	145.10	145.26	145.42	145.58	145.74	145.90	146.06	146.22	146.38	146.54	146.70	146.86	147.02	147.18	147.34	147.50	147.66	147.82	147.98	148.14	148.30	148.46	148.62	148.78	148.94	149.10	149.26	149.42	149.58	149.74	149.90	150.06	150.22	150.38	150.54	150.70	150.86	151.02	151.18	151.34	151.50	151.66	151.82	151.98	152.14	152.30	152.46	152.62	152.78	152.94	153.10	153.26	153.42	153.58	153.74	153.90	154.06	154.22	154.38	154.54	154.70	154.86	155.02	155.18	155.34	155.50	155.66	155.82	155.98	156.14	156.30	156.46	156.62	156.78	156.94



Value chain analysis of poultry mother unit

- Poultry is one of the important livestock (off -farm) initiative taken by the Jeevika. This is already prove to be important source of income for poor rural people.
- There are certain stages during which chicks started for feeding and vaccination. During feed time of chicks, there are four stages in which day old chick live at limited temperature and start their growth in proper vaccination.



- In the Rajgir block of Nalanda, poultry is doing very well and there is a very low rate of mortality.
- Total poultry mother unit in Rajgir= 5
- Total number of eggs lay through life time= 150-180

- Total number of people who are beneficiary= 1286 members
- Total number of producer group in poultry= 16
- At least 300 Didis are required to set up a poultry group
- Total number of chicks which are already distributed among the members= 3190
- Total no of eggs= 3215
- Total number of PRP(poultry resource person)
- Total amount which are already distributed in CLF= 2,770,000 rupees.

After feeding chicks in 4 stages of poultry mother unit now it get distributed among the producer group of poultry. After four stages of the unit, chicks become 28 days old and ready to distribute in producer group.

Now chicks become mature enough in 1—1.5 months and are ready to sell in the market.



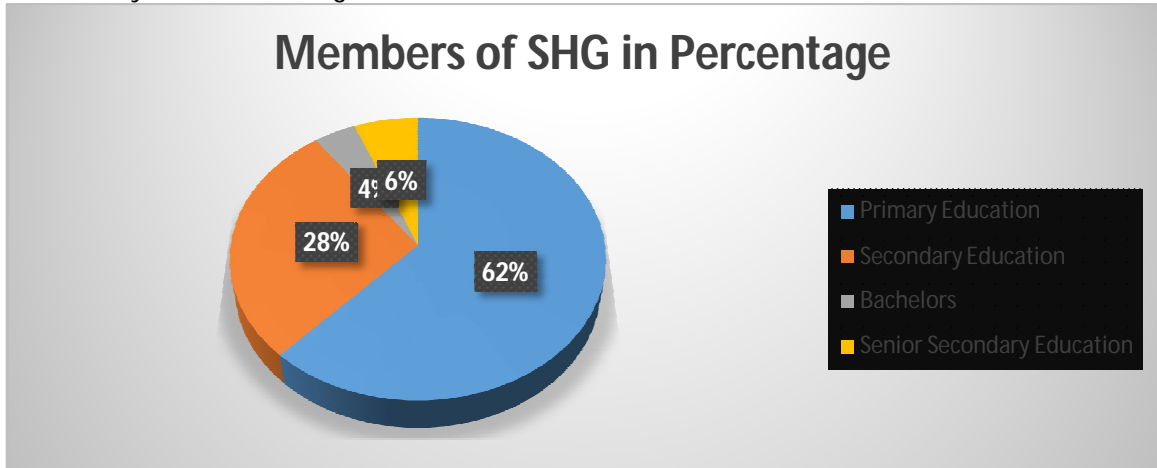
Chicken are affected from various diseases like Ranikhet, Gumboro e.t.c

चुजा वितरण रजिस्टर								
क्रम संख्या	दिनांक	सदस्य का नाम	समूह का नाम	ग्राम संगठन का नाम	वितरित चुजा की संख्या	स्टॉक पुष्ट संख्या	अंशदान प्राप्त रसीद संख्या	प्राप्तकर्ता का हस्ताक्षर
1	26.6.2012	मीना देवी	शिवपुरा	राँगी	15			
2	"	पुसाइ जुली	राँगी	"	15			
3	"	विष्णु कुमारी	पुलसी	"	15		450 रु०	मीना देवी
4	"	कमला देवी	राँगी	"	15		450 रु०	पुसाइ जुली
5	"	जातिन देवी	उलाव	"	15		450 रु०	विष्णु कुमारी
6	"	माधुरी सिंह	जैलमंभ	"	15		450 रु०	कमला देवी
7	"	उषा देवी	राँगी	"	15		450 रु०	जातिन देवी
8	"	मीना देवी	सरस्वती	"	15		450 रु०	माधुरी सिंह
9	"	सदा शारदा देवी	गाम्त्री	"	15		450 रु०	उषा देवी
10	"	उषा मिरज देवी	राँगी	"	15		450 रु०	सदा शारदा देवी
11	"	रीना देवी	पुलसी	"	15		450 रु०	उषा मिरज देवी
12	"	राधिका देवी	"	"	15		450 रु०	रीना देवी
13	"	रुकी देवी	विष्णु	"	15		450 रु०	राधिका देवी
14	"	उर्मिला देवी	सरस्वती	"	15		450 रु०	रुकी देवी

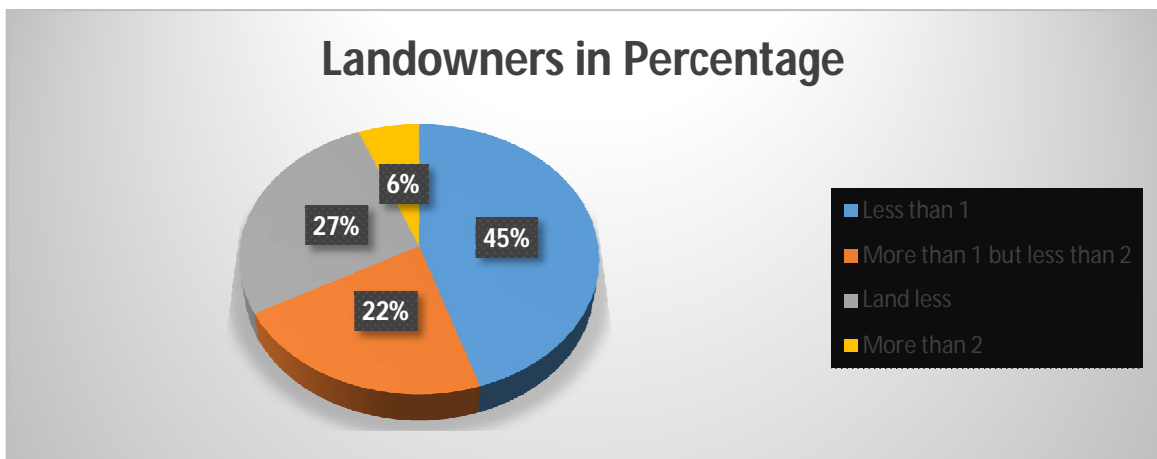
Chicks get distributed among different SHGs at a nominal amount

Data Analysis:

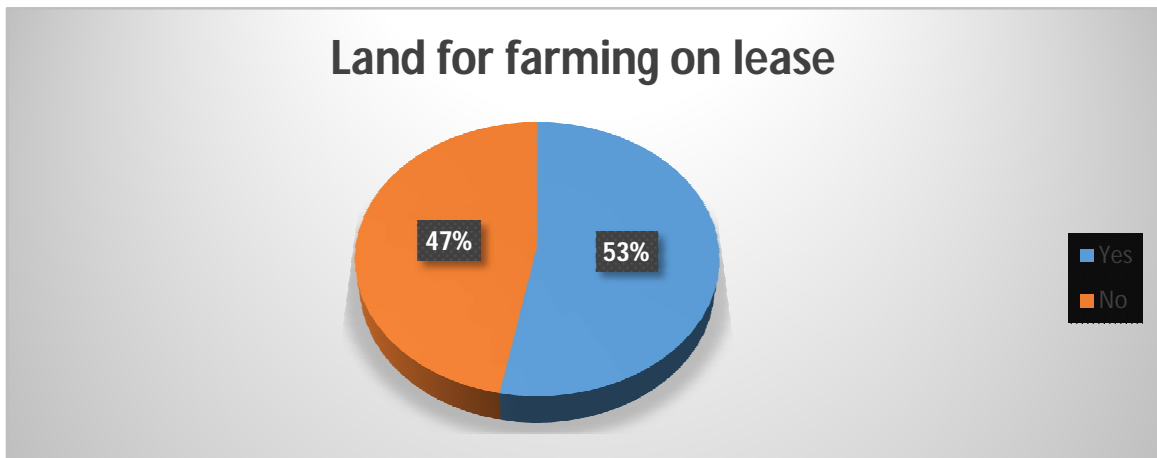
1. How many of them have got formal education?



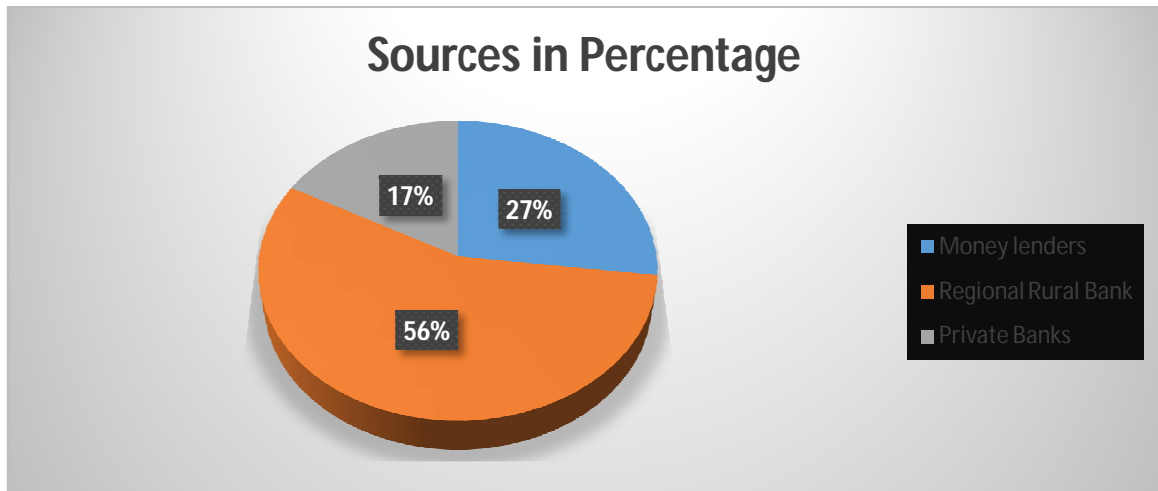
2. How many acres of land do they own?



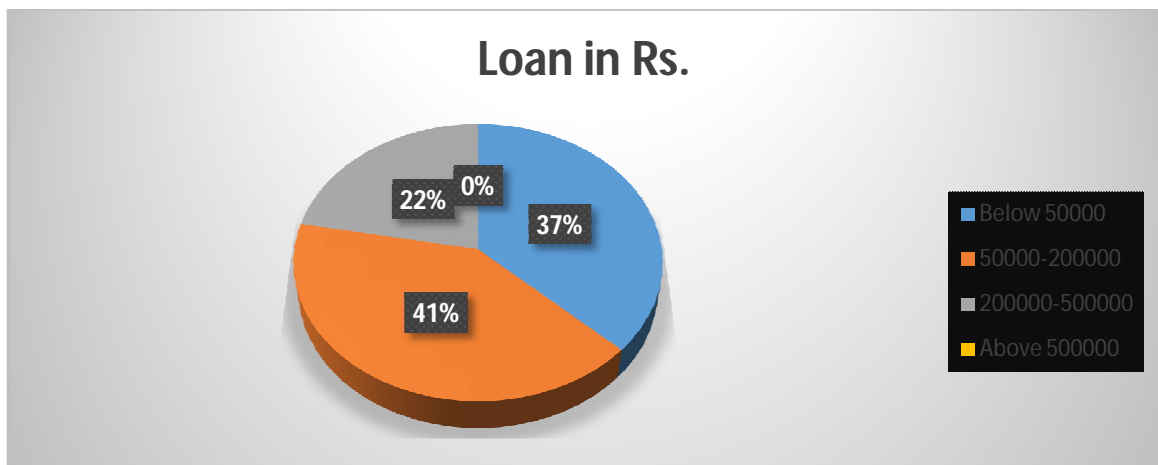
3. Do people take land on farming on lease?



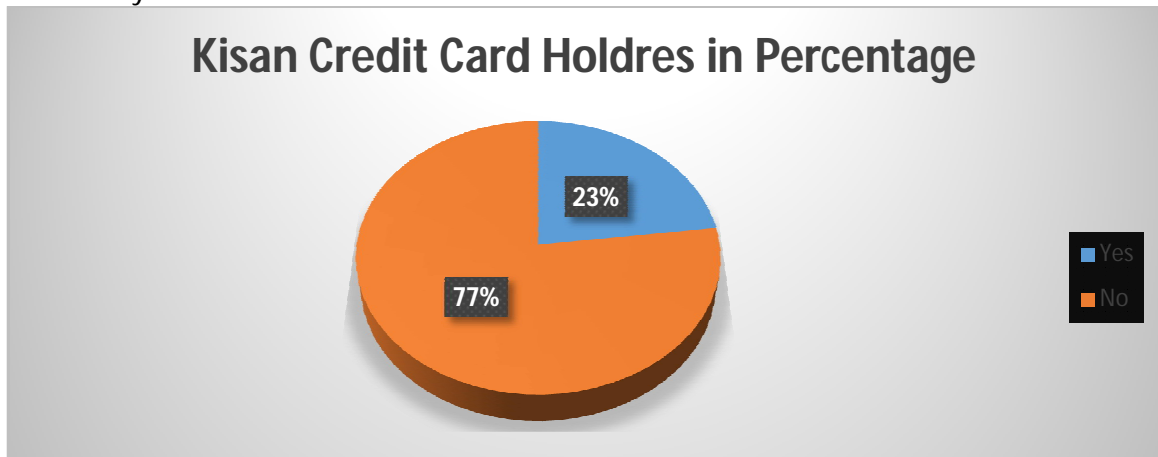
4. How do you borrow or get loan?



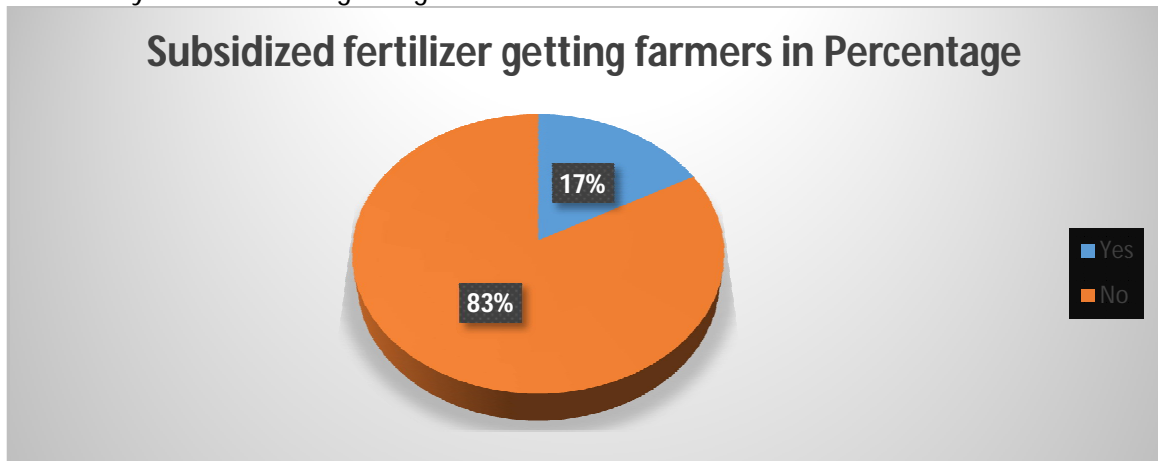
5. How much loan did they get from bank?



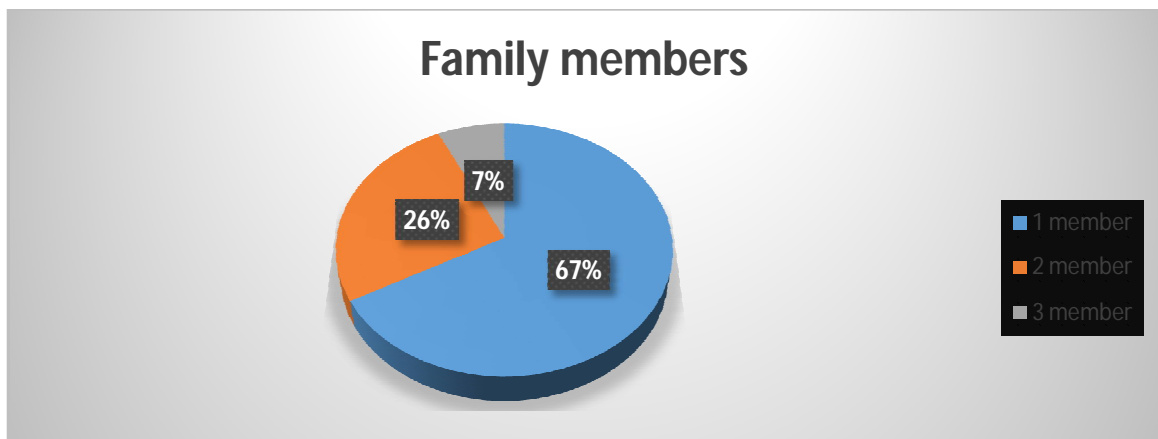
6. How many of them have Kisan Credit Card?



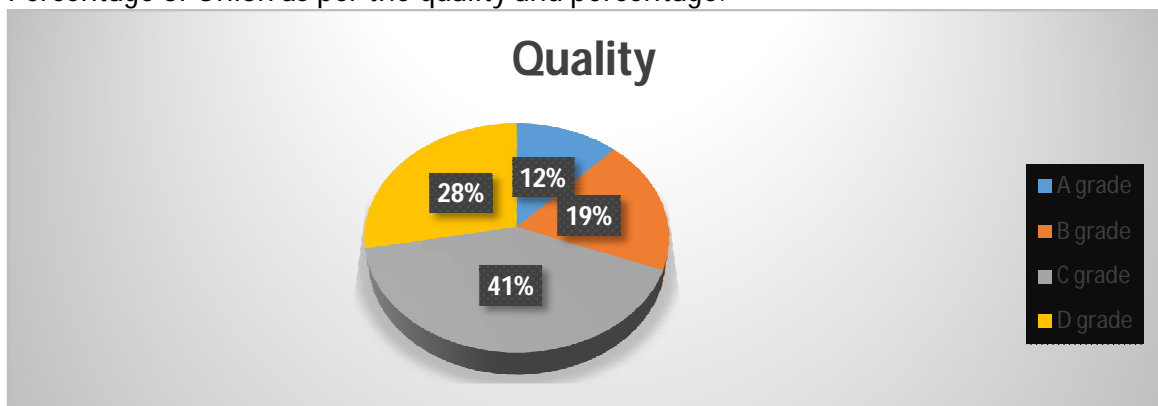
7. How many of them were getting subsidized fertilizer?



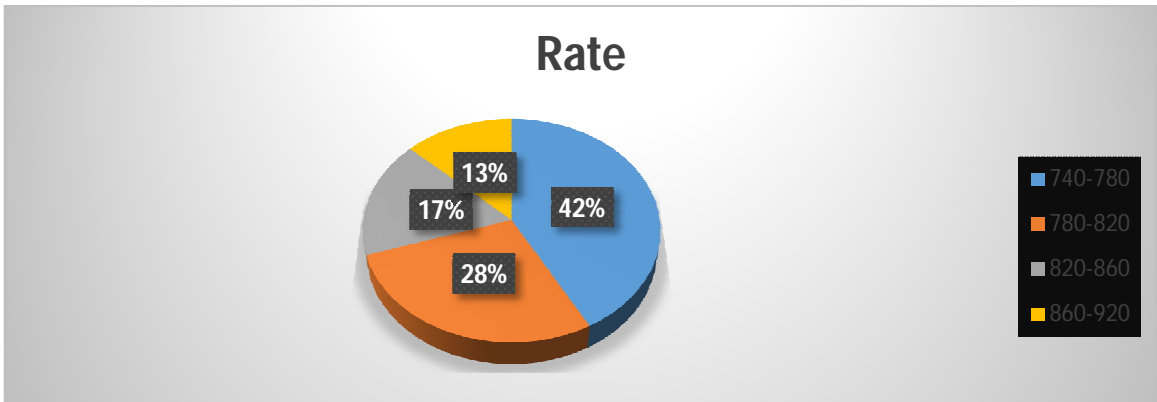
8. How many earning members are there in families?



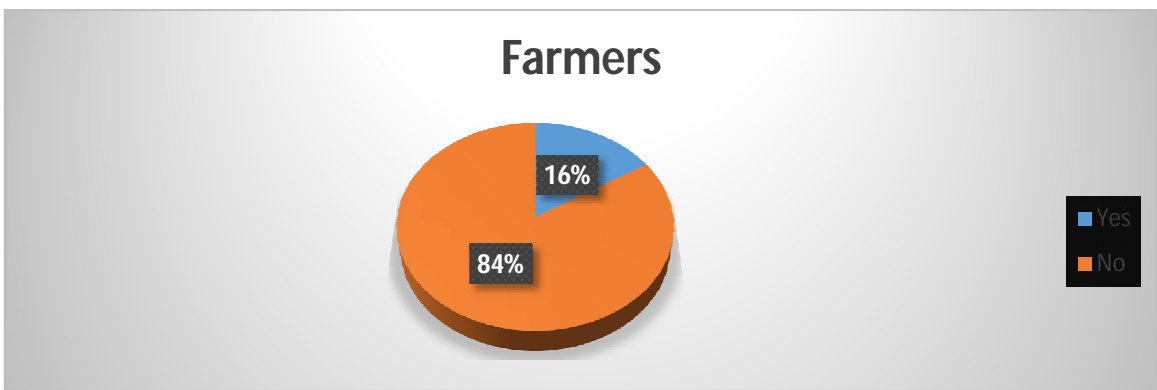
9. Percentage of Onion as per the quality and percentage.



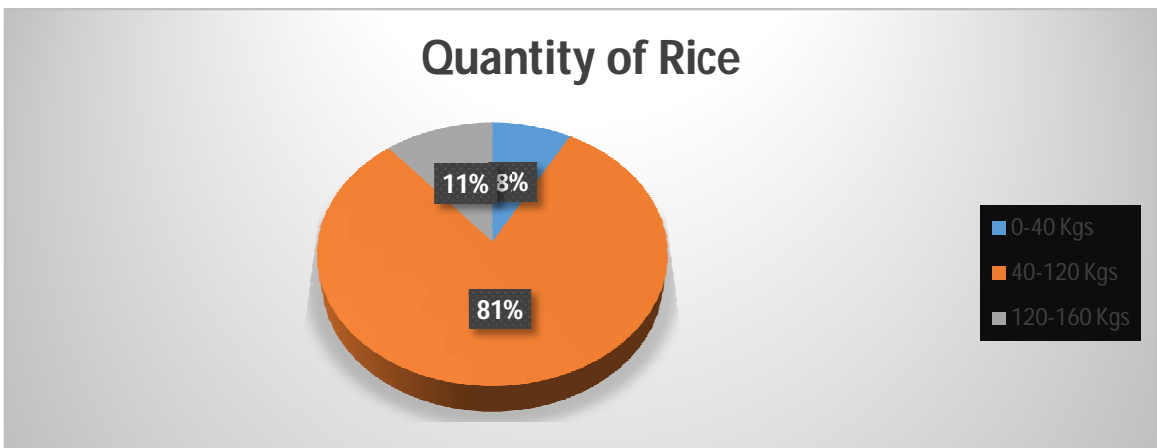
10. Rate of Onion on which Jeevika has purchased from local farmers or producers group.



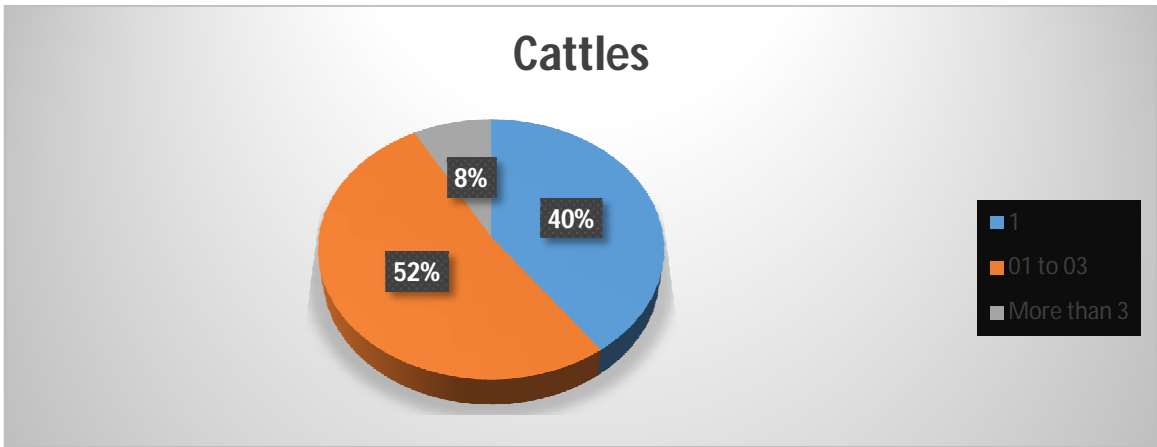
11. Total wastage of onion in 1 quintal of Packet.



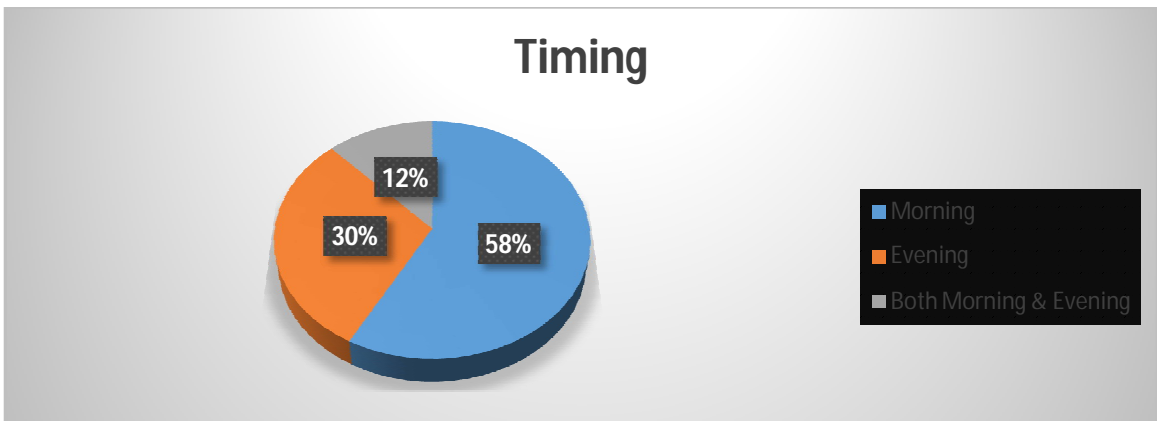
12. How many farmers are benefitting from SRI (System of Rice Intensification) method of farming or Sri Bidhi method of farming?



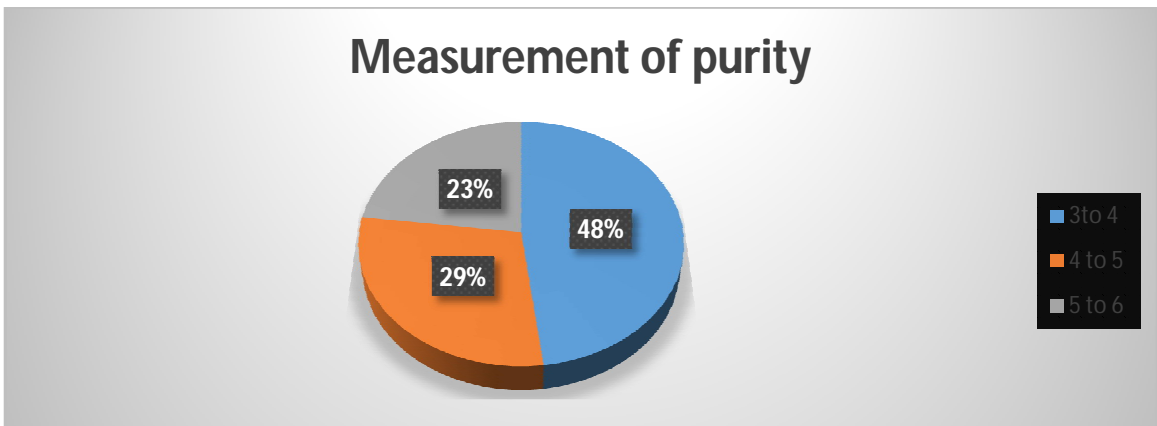
13. How many cattle do they own?



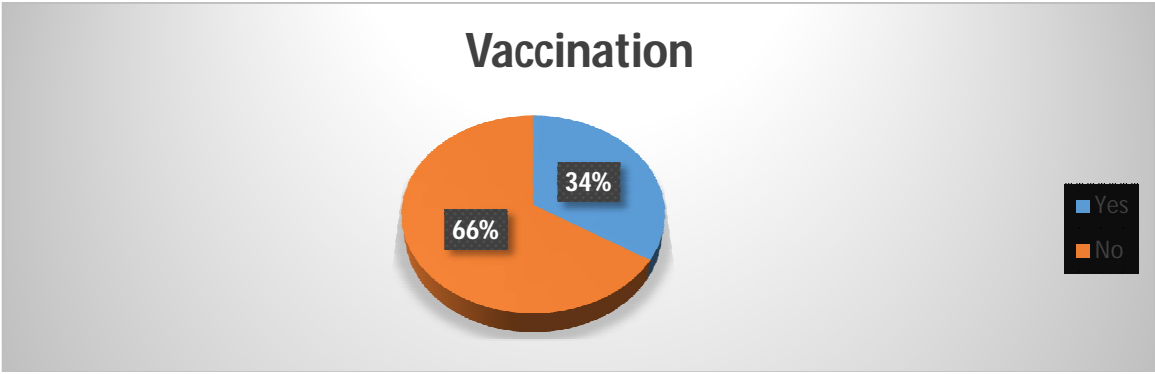
14. How much percentage of farmers used to supply milk both the timing (morning and evening)?



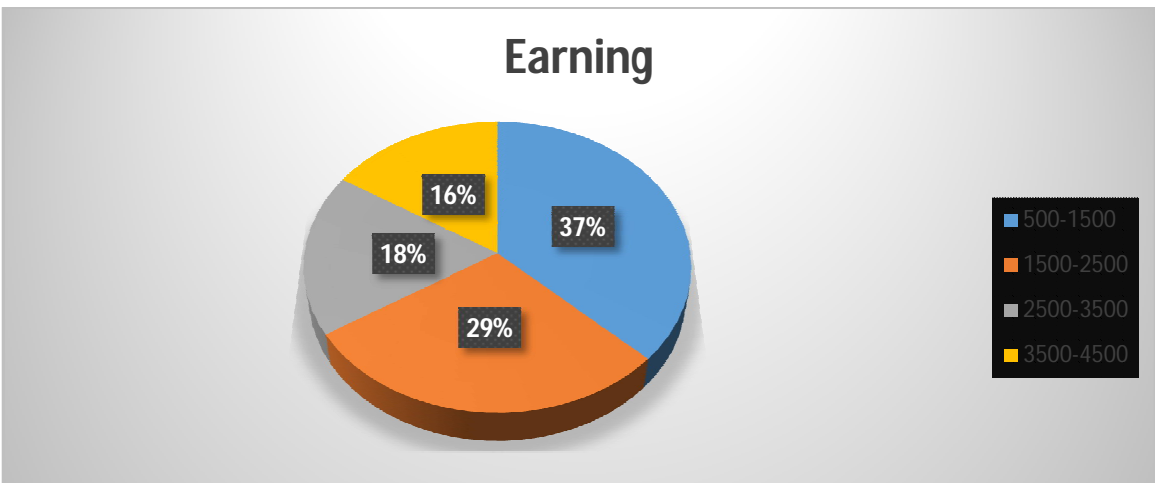
15. How much measurement did they have for the purity of fat in milk at Dairy Co-operative Society?



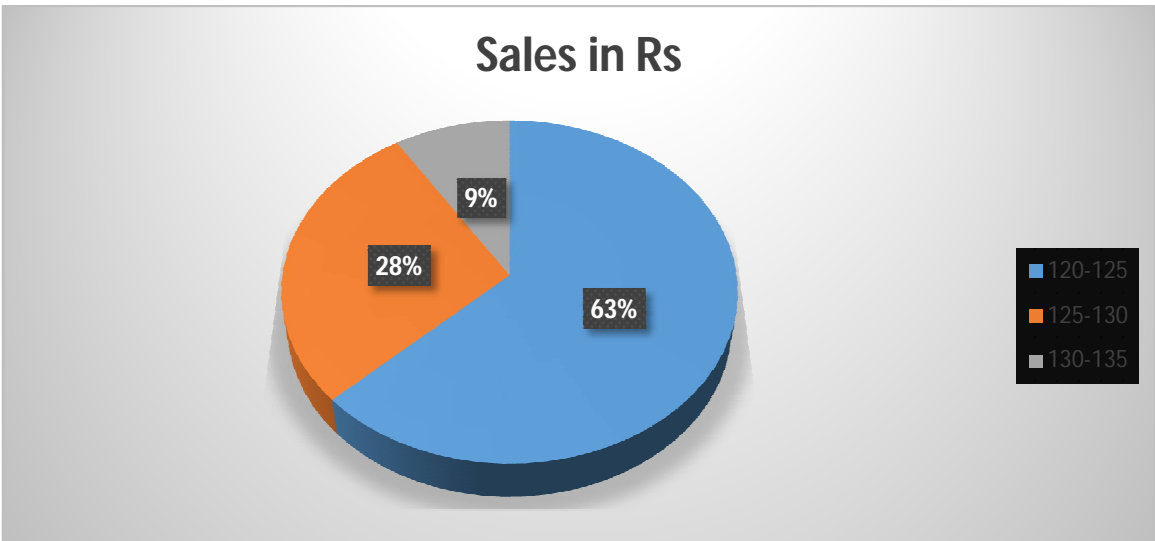
16. Have they completed Vaccination process for their cattle?



17. How much do they from Cattle rearing?



18. How much price do they get after selling the chicken in the market?



Recommendations and conclusion

Production

Since most of the farmers here are small and marginal farmers, it is important that they are to be organized. Firstly it could be started with those already producing for commercial purpose. This way intervention of forming Producer Company by merging PGs appears one of the most effective intervention to raise the household income. Facing the lack of resources most of these farmers often practices in their traditional way of farming. There is a need for extending the trainings like SRI method and others for improving the yield. Few farmers who were working with SRI method reported that their produce were almost double of the normal producers. Also, the training could be cost effective as in many villages the resource person are already available in the villages. Improvement on the input side is much required in terms of training and about the better yielding seeds, arranging for irrigation technology on the co-operative basis.

Logistics

There is a need for better technology in the areas like picking, storing, and transporting. A lot of wastage resources is accompanied in each of these processes. For instance during peak harvest sometimes farmers find it very difficult to pluck all the vegetables from plants leading to over-ripening of some of them. Vegetables like tomatoes and others requires different storing arrangements other than their general use of plastic or gunny bags for storing and transfer. A lot damages in these process could be avoided with the use of things like plastic crates which was found not being used. Also, the packaging could be improved through using advanced packages which shortens the perish ability of vegetables.

Grading is one important method of value addition which was reported by many middlemen and wholesalers as one way to differentiate prices among the same vegetable. Many farmers do reported they practice but still left space for other agents to do it signal that the farmers may not be doing it properly.

There is need to establish cold storages locally. At least for the short run the available greenhouses could be more used to lengthen the vegetable season.

Market information system

As this sector faces fluctuation in prices there is a high need for such information systems through which they could be informed about the better prices available amongst different markets. As the pillar of this intervention is enabling cooperative production and sale, the farmers could also be organized to persuade the government to establish a local mandi. There is a need for deeper market study to identify the potential buyers outside the district. A margin on prices could then be identified to attract major players like restaurant chains and retail chains for directly buying from the producer companies.

THANK YOU