

**A STUDY ON IMPACT OF VETERINARY SERVICES PROVIDED THROUGH
PASHU SAKHI IN DANG, GUJARAT UNDER THE AKRSP (I)**

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfilment for the award of the degree of

Master of Business Administration (MBA)

in

Development Management

By

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Under the Supervision and Guidance of

Dr. Ratna Verma

2024

Completion Certification



AGA KHAN RURAL SUPPORT PROGRAMME (INDIA)

AKRSPI/DNG/ADM/12/2024

Date: 2nd July 2024

INTERNSHIP CERTIFICATE

This is to certify that **Mr. Kuldeep Munda** from **IIHMR University, Jaipur** has successfully completed 80 Days of Rural Internship with Aga Khan Rural Support Programme (India) in The Dangs district of Gujarat during 1st April 2024 to 20th June 2024.

The internship undertaken by him was on "**Study on impact of veterinary services provided through Pashu Sakhi and Regenerative Agriculture in Dang district.**" I hereby certify that the work conducted by him was good to the best of my knowledge.

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DECLARATION BY STUDENT

I hereby declare that this dissertation titled "*To Study on Impact of Veterinary Services provided through pashu sakhi in Dang Gujarat under the AKRSP(I)*" is the Bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published and unpublished work of others has been duly acknowledged in the text.

Kuldeep Munda

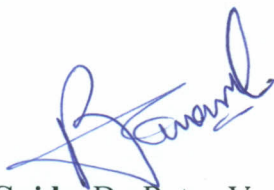
(signature)

Kuldeep Munda

Date: 5/7/2024

CERTIFICATE

This is to certify that the dissertation titled "*To study on Impact of veterinary services provided through Pashu Sakhi in Dang Gujarat under the AKRSP(I)*" is a record of the research work undertaken by **Kuldeep Munda** in partial fulfillment of the requirements for the award of the degree of MBA Development Management from the IIHMR University, Jaipur under my guidance and supervision and his/her approach to the research study has been sincere, scientific, and analytical.

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Abstract:

The Aga Khan Rural Support Programme (India) [AKRSP(I)] is a prominent non-governmental, voluntary organization dedicated to rural development. Operating across more than 3255 villages in Gujarat, Madhya Pradesh, Bihar, and Maharashtra, AKRSP(I) acts as a catalyst for the improvement of rural areas by providing immediate and sustained support to local communities. Its interventions have positively impacted over 3.5 million individuals, predominantly from marginalized groups including minorities, Dalits, and tribal communities. Remarkably, more than eighty percent of the households served belong to these marginalized populations, and women constitute over sixty percent of the beneficiaries, underscoring their central role in the program's initiatives.

AKRSP(I) has been recognized both nationally and internationally for its participatory development approach. The organization's primary focus is on empowering rural communities, with a special emphasis on women and marginalized populations. This empowerment is achieved through the promotion of individual entrepreneurship and the formation of collective institutions. The core strategy of AKRSP(I) revolves around fostering self-sufficient people's institutions that enhance rural governance, financial inclusion, and livelihood opportunities.

In recent years, AKRSP(I) has introduced significant initiatives in three key areas:

1. **Work and Entrepreneurship:** Facilitating economic opportunities and skill development to promote individual and community entrepreneurship.
2. **Agriculture and Climate Resilience:** Implementing sustainable agricultural practices and resilience strategies to mitigate the impacts of climate change.
3. **Local Governance:** Strengthening local governance structures to ensure better resource management and community participation in decision-making processes.

Through these strategic interventions, AKRSP(I) continues to drive sustainable rural development and improve the quality of life for millions in India's rural regions.

Acknowledgments:

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Abbreviations

- PS: Pashu Sakhi
- VH: Veterinary Health
- LH: Livestock Health
- MP: Major Poultry
- MR: Mortality Rate
- VHS: Veterinary Health Services
- CPS: Community Pashu Sakhi
- VACC: Vaccination
- VC: Veterinary Consultation
- TP: Training Participation
- LD: Livestock Diseases

Chapter Scheme

Introduction-

The was created with a particular emphasis on the marginalized and landless tribal people, while it also included a targeted approach for the poorest coastal Gujarat households. Goat rearing and dairy farming are not viable sources of income on their own, but they have provided marginalized populations in Gujarat with extra money and support. Every aspect of the ecosystem has been touched by activities, including infrastructure assistance for goats to veterinary care, knowledge sharing, and capacity building. The Goatry Ecosystem First, communities of marginalized and landless farmers emerge. Impact Lower Death Rate and Higher Incomes Entry Area Building Training Capacity and Sharing Knowledge Exposure Visits Pashu Sakhis Provides Preventive Healthcare Services (vaccination and deworming) Feed Enhancement Goat the Covering Receiving Credit Activities for promoting dairy products

Obtaining Credit in Tribal South Gujarat, there has been a lot of promotion of dairy products. The goal has been to give indigenous people who lack land a means of livelihood. 295 animals were given to tribal households in the Dangs program region in collaboration with Vasudhara Dairy with support from the Tribal Sub plan. Goat Rearing: From the start of goat rearing Feeding Goats Since the goat rearing program was started in 2014, it has grown to be one of the main activities in Dangs Gujarat's animal husbandry portfolio. 5412 homes have benefited from this program so far this year. The Goat Rearers Groups are a village-level platform designed to promote information sharing under this program. Goat rearers are presently actively being worked with by these groups. Goat farming groups united in 2015 to form a larger apex body that they have named the "Nimar Bakari palak Group." Each member paid a 500-rupee membership fee, which was deposited in the Bank of India along with the entire 75,000-rupee membership cost. account under the federation's name. The goat farmers will use this sum to encourage group selling of their livestock. The true success of the Dangs goat farming initiative is Pashu Sakhis, a group of women from the community who have received training in basic preventive veterinary care. In villages, they function as community-based animal health workers. They are important extension workers for vaccinations, deworming poultry, and sharing expertise. One of the most important aspects of the Pashu Sakhi model is that the village's goat rearers now have round-the-clock access to all primary healthcare services for the animals. With their training, 36 Pashu Sakhis and 7 Murgi Sakhi are employed as village-level para vets in 1876, households benefited from first aid provided at home, and 1836 homes benefited from veterinary care.

Gujarat Dangs dist. team continues to implement integrated goat and poultry development program. Goat and poultry

plays a critical role in livelihood risk mitigation for tribal communities of our program region. Around 50% of households keep goats while over 65% households keep backyard poultry in program villages hence these potential income generating activities for the people of the area Major highlights of livestock program in Dangs dist. More than 5000 households wherever it embraced were targeted with various interventions in the same year. 83 Pashu Sakhis are Continuing to actively participate in the program villages providing services like de-worming, vaccinations and castration. 138 Pashu Palak Groups (PPGs) are currently functioning in the program villages. These groups have membership of over 2500 women. 138 households benefitted through stacked through the activity of poultry shelters. 47 households covered goat protects the action. goat protects the action.

- 31417 chicks vaccinated and 7324 had gone through de worming process.

- 4202 HHs have been provided preventive veterinary services by Pashu Sakhis

- 40777 goats were vaccinated, and 24414 goats had gone through deworming process.

Background of Dang:

The study area, dang district, is located at coordinates 20° 33'; 21° 05' north latitude and 73° 02'; 73° 57' east longitude. On the north is the Maharashtra State's Surat and Dhule Districts; on the east, Nashik District; and Valsad District to the west. The total geographic area of the district is 1764 sq. km. Placed simply, the district might be defined as hilly, with a dense population and a concentration of forest cover. The entire watershed of this region is drained by all of the rivers and their tributaries through Gira and Purna.

, Purnna Khapri and Ambika rivers.

This district has a social - historical background. The den called Dandakaranya in the Ramayana was none but the Dang district of the recently formed Gujarat state of India. It is dragged that historical district is the one and only district in the state which is covered with dense forest. Out of 815 villages, as many as 311 are covered by Dang where as much as 75% of the population lives below poverty line while 98% of the population is of Scheduled Tribes.

Dang district according to 2011 CBS has a total population of 226769. As for the population composition, 94% of the population of the district are tribals. About 73. Fifty four percent of the total population is covered under BPL to which we can add 30% of SC/ST to get a cumulative figure of 84 of the total population. About 30000 people get migrated in the month of September for jobs in sugarcane cutting and vineyards.

About AKRSP

An organization focused to non-governmental, voluntary development is the Program for Aga Khan Rural Assistance (India). As a catalyst for the development of rural areas, AKRSP(I) provides quick assistance to nearby cities.

More than 3255 villages in Gujarat, Madhya Pradesh, Bihar, and Maharashtra are home to AKRSP(I). It has affected the lives of more than 3.5 million members of society's outcast groups. More than eighty percent of the households that AKRSP(I) serves are members of marginalized populations, including minorities, Dalits, and tribal people. Women make up more than 60% of recipients and serve as a key base for program interventions.

As a result of the work it has done in the nation, AKRSP(I) has received many honors for participatory development at the national and international levels. The empowerment of rural communities is the main goal of AKRSP(I)'s activities.

especially for women and marginalized populations, through individual entrepreneurship promotion and collectivization. The organization's core strategy is to create self-sufficient people's institutions for enhanced rural governance, financial inclusion, and livelihood enhancement. Now, AKRSP(I) is making major changes in:

- Work and Entrepreneurs
- Agriculture and Climate Resilience
- Local Governance

Background

In India, livestock play a significant role in rural subsistence systems, especially for small and marginal farmers. In addition to being a source of income for individuals living in rural areas, livestock is extremely important for risk reduction. Dairy has become a significant source of revenue for farmers in areas with sufficient land and water resources. Since raising goats and poultry requires less input, they are good options for farmers with limited resources. AKRSP(I) has experience working in the goat husbandry, dairy, and poultry industries.

Veterinary services play a crucial role in enhancing the livelihoods of tribal communities by improving the health and productivity of their livestock. This literature review aims to provide an overview of the types of veterinary services provided, their impact on tribal beneficiaries, challenges faced in service delivery, and potential opportunities for improving these services.

Pashu Sakhi model-

Livestock such as Goats and poultry serve as vital source of Livelihood for the rural poor particularly women however high mortality and morbidity rates among animals creates Economics social and mental stress especially affecting women who care for the sick animals Akrsp (I) addresses these challenges by implementing the pashu sakhi model in Gujrat pashu sakhi are community animal care providers who offers doors step first aid disease prevention advisory service and knowledge about improved livestock diets they spread awareness of improved practices organize trainings monitor animals health and administer vaccinations with a focus on herbal treatments.

Pashu sakhi role and responsibility

pashu Sakhi carries out three types of related tasks:

promoting better practices and knowledge exchange, offering first help at the patient's door and counseling for illness management and prevention, and

Enterprise management and best practices presented in her own home.

In addition, Pashu Sakhis provides monitoring and support services for the project. They go to each goat's home and evaluate it. An ongoing observation of the spread of disease and a Pashu Sakhis encourages farmers to adopt best practices through education and training, which increases demand for new inputs. Pashu Sakhis are trained to engage in entrepreneurial activities to meet local requirements. Rather than relying solely on service provision, Pashu Sakhis really supports business activities by supplying inputs for goat husbandry (e.g., providing treatment and first aid).

Challenges faced

Despite its success and acceptance in many states, this model has some drawbacks which had led many women to opt out from their role as a Pashu sakhi. These women had to a tiring job for them on a regular basis apart from their household responsibilities. Also, many times they do not get full support from their family members. The remuneration from them job is also not alluring enough to keep them motivated. Besides, they are unable to provide enough time to care for their farm and families. These challenges experienced by them needs to be solved for the sustainability of this women empowerment model among the rural women.

Overview of Veterinary Services in Tribal Areas

Veterinary services in tribal regions have evolved to address the unique needs of these communities. Historically, these services were minimal and sporadic, but recent initiatives have focused on systematic and sustainable approaches. Key services include vaccinations, treatment of diseases, reproductive health care, and education on animal husbandry practices (Kumar & Singh, 2015).

- **Community-Based Veterinary Workers:** Local individuals are trained to offer basic veterinary care, ensuring continuity and accessibility of services (Patel & Chauhan, 2019).
- **Health Camps:** Periodic health camps are organized to address specific health issues and provide mass treatments (Mishra et al., 2016).

Purpose of research-

Impact of Veterinary Services on Animal husbandry in Dang dist. Gujrat Tribal Areas

The provision of veterinary services has shown significant positive impacts on tribal communities.

- **Adoption of Services:** Studies indicate high adoption rates of veterinary services when they are culturally appropriate and easily accessible. The involvement of local community members in service delivery has further enhanced acceptance
- **Scalability and Sustainability:** Training local para-veterinarians has been a key factor in scaling up services sustainably. This approach not only ensures the availability of services but also builds community trust and engagement
- **Economic Benefits:** Improved animal health has led to increased productivity and reduced mortality rates, which in turn have enhanced household incomes. Livestock, being a significant asset for tribal households, contributes directly to their economic stability

Challenges in Providing Veterinary Services-

Several challenges hinder the effective delivery of veterinary services in tribal areas.

- **Geographical Barriers:** The remote and often inaccessible locations of tribal communities pose significant logistical challenges. Delivering services to these areas requires innovative solutions and significant resources
- **Cultural Factors:** There is often resistance to modern veterinary practices due to cultural beliefs and reliance on traditional methods. Effective communication and community involvement are essential to overcome these barriers
- **Resource Limitations:** Limited financial and human resources can restrict the scope and frequency of veterinary services. Ensuring consistent funding and training is crucial for the sustainability of these services

There are numerous opportunities to enhance the effectiveness and reach of veterinary services in tribal areas.

- **Integration with Health Programs:** Combining veterinary services with broader health and development programs can provide a more holistic approach to community well-being. This integration can lead to better resource utilization and more comprehensive care (Kumar et al., 2020).
- **Policy Recommendations:** Effective policies and frameworks are essential for the integration of veterinary services into rural development programs. Government and non-governmental collaboration targeted funding, and supportive policies can significantly enhance service delivery (Reddy & Rao, 2021)

Research Questions:

1. What is the impact of veterinary services provided through Pashu Sakhi in Dang, Gujrat under AKRSP(I)?

Objective:

- To study the various kinds of services and approaches adopted under veterinary services provided through Pashu Sakhi.
- To assess the impact of veterinary services in terms of adoption and income enhancement among tribal beneficiaries
- To study the current issues and challenges associated with the services and further opportunities under the Programme.

Literature of review -

Goat Rearing Groups and Pashu Palan Samities Goat rearing groups and PashuPalan Samities are a platform where families that raise goats, especially those headed by women, can learn the finest practices for doing so and other livestock.

getting inputs like preventive veterinary services, feedstock. During year 2017 AKRSP(I)

worked with 641 goat rearing and livestock groups on various aspects. To livestock producer's companies have started their, business activities Dangs dist., their focus is on goat rearing and poultry related services to them

Dangs dist. Gujrat team continues to implement integrated goat and poultry development program. Goat and poultry

plays a critical role in livelihood risk mitigation for tribal communities of our program region.

Around 50% of the households keep goats while over 65% households keep backyard poultry in program villages hence these are important sources of income for the community.

The following were the main achievements of the livestock program in Dang's district in 2017: • Over 5,000 households received interventions during the year.

Pashu Sakhis are currently employed with the program. livelihood sources for the community.

Major highlights of livestock program in Dangs dist. during the year 2017 are

- Interventions reached to more than 5000households during the year.
- 83 Pashu Sakhis are actively working in the program villages providing services like de-worming, vaccinations and castration.138 Pashu Palak Groups (PPGs) are currently functioning in the program villages. These groups have membership of over 2500 women.
- 138 households benefitted through goat shelters activity. 47 households are served by the of goat shelters, where as there are shelters for poultry 31417 chicks vaccinated and 7324 had gone

through de worming process. 4202 HHs have been provided preventive veterinary services by Pashu Sakhis 40777 goats were vaccinated, and 24414 goats had gone through de worming process. One women's group has taken up goat feed production and marketing as enterprise activity. Over a thousand home were sold to by this group's products during.

Research Methodology:

(Study area, Methods used on data collections, target groups etc.)

The research design used by the researcher is descriptive research design. The objective of a descriptive study is to accurately describe a phenomenon. The study investigated the factors influencing the performance of 30 farmers of Poultry Unit, Goat Unit, Cattle and Pashu Sakhi.

Study setting:

This research will be conducted in Dang district of Gujarat focusing on tribal communities actively engaged in livestock development under the Aga Khan Rural Support Program (India) [AKRSP(I)]. Dang, known for its diverse tribal population, given a unique context for studying the method and outcomes of livestock development activities under socio-economic and environmental conditions specific to the region.

Study population:

- **Inclusion criteria:** Tribal families of Dang district who are actively involved in Livestock Development Project are included in this study.
- **Exclusion Criteria:** people or households who are not actively involved in the Livestock Development Project or who poses not implemented a Livestock Development Intervention will be excluded from the study.

Duration of Study:

- This study duration is going to be 3 months (14 march to 13 June 2024).

Sample Design:

- **Sample size:** The study involves a sample size of 50 respondents, irrespective of their background, and age group.
- **Sampling Technique:** A study would be used of technique Simple Random Sample and Stratified Sample in research.

Data collection procedure:

For this research both primary and secondary data will be used, and using the following methods will be used to collect the data.

- Focus Group Discussion (FGD)/ Interview
- Questionnaire
- Final reports/case studies

Sources of Data: Data is one of the most important and vital aspects of any research study. Data is thought to be the lowest unit of information from which other measurements and analysis can be done. The purpose of data collection is to obtain information to keep on record etc.

The foundation of data analysis in Data collection is the basis of statistics.

. Data is nothing but unorganized facts and figures which are collected for certain purposes, like an analysis. The medium through which data is collected is termed as a source of data.

OPERATIONAL DEFINITION

1. Deworming and vaccination
2. change in the rate mortality Animal husbandry

DATA ANALYSIS PLAN:

Excel will be used for numerical analysis such as statistical analysis to check the significance of changes health and the analysed data will be presented in the form of tables and graphs. Qualitative analysis will draw on thematic content analysis of qualitative data from interviews and focus group discussions as well as project indicators to explore the nuances of impact on communities.

ETHICAL CONSIDERATIONS

- Informed consent will be obtained from all participants.
- Privacy and confidentiality of participants will be strictly observed.
- Consider how this research will benefit tribal communities.
- Respect tribal society and traditions throughout the research process.
- The study will be conducted observing moral guidelines and regulations.

IMPLICATIONS OF RESEARCH:

By elucidating the impact of the Livestock Development Program in tribal communities of Dang, Gujarat under AKRSP(I), this research can guide policy makers to design more effective and targeted interventions. In addition, insights gained from successful strategies and identified difficulties can inform program administrators, enabling optimization of existing initiatives for increased scalability and impact. Moreover, research can empower tribal communities by given

evidence-based recommendations for sustainable livestock practices, contributing to their socio-economic development. Overall, the findings of the study provide a valuable roadmap for policy makers, practitioners, and community leaders to enhance the effectiveness of livestock.

Limitations of the study:

1. Of Study Geographical area dang Touch village scattered
2. Community Migration rate high- September to October

Animal health Improve-

1. 26371 livestock households Received preventive Veterinary
2. 30 % reduction in goat mortality
3. 14 % Reduction in Poultry mortality (based on internal study)
4. . The pashu sakhi can additional income in the range of 500 to Rs. 2000 month from their services
5. Capacity building, and knowledge extension are largely around Housing, financial services, breeding, and preventive healthcare
- 6.

FINDING OF THE STUDY

1. 1. Basic profile (Tribal, Average family size, Major livelihood activity)

The involvement of Pashu Sakhis has positively affected the tribal community's livestock health and management practices. The low mortality rates, active participation in training programs, and regular consultations for veterinary services demonstrate improved awareness and proactive measures among livestock owners. Continued support and expansion of these offering could further enhance the communal means of subsistence

and livestock productivity, contributing to their overall well-being and economic stability.

2. Livestock details

Number of goats: 15

Poultry: twenty-five hens

There are two cows.

2. Number of pashu sakhi involved and their roles and responsibility and their coverage area

- Three Pashu Sakhi in all. Roles & Responsibilities:
- Pashu Sakhi: Villages 1 and 2 are covered
- Advise on diet, deworming, and vaccinations.
- Pashu Sakhi: Villages 1 and 2 are covered
- duties: maintaining records, treating illnesses, and doing health examinations
- Pashu Sakhi. Protection Region: Villages 1 and 2
- Programs for awareness and training, as well as assistance in times of emergency

4 Rate of mortality

Goats: 5 percent annually

Chickens: 8% annually

5 Major diseases in poultry

Newcastle Disease, Chicken Pox, Avian Influenza, Coccidiosis

6 Veterinary services taken by community (Vaccination) (Pashu Sakhi/Veterinary doctor)

The Community's Use of Veterinary Services: Services for vaccinations: Offered by Pashu Sakhi: Indeed.
given by a veterinarian: Certainly

7 Number of times consulted for Veterinary services

The quantity of times veterinary services was consulted: Three consultations on average every year

8 Participated in Training by Pashu Sakhi (Yes/No)

Took part in Pashu Sakhi's training: Indeed, 70% of those who own animals do. No, thirty percent of owners of cattle

Deworming in Goat

1. Rate of mortality
8 %
2. Major diseases in Goat
3. Veterinary services taken by community (Vaccination) (Pashu Sakhi/Veterinary doctor)
4. Number of times consulted for Veterinary services
5. Participated in Training by Pashu Sakhi (Yes/No)

vaccination in poultry (Deshi hen)

1. Rate of mortality
2. Major diseases in poultry (Deshi backyard hen)
3. Veterinary services taken by community (Vaccination) (Pashu Sakhi/Veterinary doctor)
4. Number of times consulted for Veterinary services
5. Participated in Training by Pashu Sakhi (Yes/No)

Deworming in milch cattle

1. Rate of mortality
2. Major diseases in milch cattle
3. Veterinary services taken by community (Vaccination) (Pashu Sakhi/Vetrinary doctor)
4. Number of times consulted for Veterinary services
5. Participated in Training by Pashu Sakhi (Yes/No)

observation

1. Basic profile: primary activity (agriculture, livestock)
7. No. of respondent (poultry, goat, milch cattle)
8. No. of poultry birds average size, goat milch cattle
9. Mortality rate poultry, goat milch cattle
10. Major health disease in poultry, goat milch cattle
11. Veterinary services taken by community ratio
12. Credit support by community support graph yes/ no
13. Frequency of veterinary services taken by community
14. Pashu sakhi role of response veterinary health
15. Training and capacity building
16. Major impact seen in animal health after veterinary -services given by pashu sakhi

Our findings on veterinary services were that when we did a study and visited observation of villages in rural areas of Dang, we saw a lot of changes. We met Pashu Sakhis and cattle keepers and got information about the diseases that affect chickens and goats. How does Pashu Sakhi do vaccination, how many times vaccination is done in a year, Which medicines are given? How do we make cattle keepers aware of animal husbandry. In which seasons of the year is deworming and vaccination done. We got detailed information on these things. Earlier, people in Dang district area used to face a lot of loss on livestock development Ten percent of the conditions are now under control, compared to twenty percent not long ago.

. Now, through Akrsp, with the help of Pashu Sakhi, veterinary facilities are available to cattle keepers at home from time to time. Vaccination and deworming services were available for cattle keepers who used to suffer from diseases. Now, these diseases are available. In comparison to the first 8 years, a lot of changes have been seen in veterinary services in Dang. The district's cattle farmers used to incur enormous losses in the past.

due to diseases in goats and chicken, now vaccination and medicines are given from time to time due to which there is less loss due to diseases and there is increase in animal husbandry of the cattle rearers and their income is improving. Cattle rearers were not aware earlier, they have now been made maintainable by constructing capacity through Pashu Sakhi's basic animal husbandry health awareness program. Employment of people possess increased through animal husbandry, migration has stopped, in this way a lot of change has come for the cattle rearers.

Conclusions: This study research concluded that all the cattle keepers of Dang district Gujarat are taking full advantage of vaccination and deworming services from Pashu Sakhi. Earlier there used to be a lot of migration, but that has stopped as compared to earlier. Now their income level has increased through animal husbandry. Milk production possess also increased. Cattle keepers are getting vaccination and deworming treatment at home from time to time. Women are being empowered by constructing capacity by training women through a series of training and proper training. Interest in the raising of animal husbandry has increased among the cattle keepers. Earlier, due to diseases in chickens and goats, a lot of dead goats used to die, due to which the cattle keepers used to suffer a many and the cattle keepers used to lose interest in animal husbandry. Now a lot of change has happened due to Pashu Sakhi. Now vaccination and deworming are done 2 to 3 times a year by Pashu Sakhi before the disease comes, due to which the death rate of animals is 10%. it's done

Pashu Sakhi focus Group Disscution

Question.1 What kind of services are you providing in the village for deworming and vaccination?

Ans. Pashu sakhi -You do vaccination in poultry and give medicines to goats. You give basic information about maintenance of goat and poultry to livestock owners.

Question. 2 Do people get deworming and vaccination done properly or not?

Ans pashu sakhi -Yes, they get it done properly, people have become aware.

Question 3. How is the support of villagers in deworming and vaccination?

Ans pashu sakhi. -The support is good. All Goan people cooperate on the day of vaccination.

Question.4. What changes have taken place in deworming and vaccination as compared to earlier?

Ans pashu sakhi-Now a lot of changes have happened. The mortality rate in chickens and goats has reduced. Earlier, many chickens used to die when they got sick. Now vaccination is being done before the disease comes and when the disease occurs, other chickens are kept separated

Question5. How many times in a year do you do vaccination and deworming and in which months do you do it?

Ans. pashu sakhi- Vaccination is done in chickens 2 to 3 times in a year and goats are dewormed and given ppr medicine 2 or 3 times in a year in January. Vaccination is done in July and winter season in November

Question 6. What kind of training does Pashu Sakhi get?

Ans pashu sakhi. 3 days training is given on giving medicine to goats and 8 days training is given on vaccination and medicine for chickens.

Question 7. What are the diseases that occur in chickens and goats

Ans pashu sakhi. - Ranikhet and Jhada disease occur in chickens. Basic medicines are given to goats for stomach pain and deworming.

Question.8. What is the charge for vaccination?

Ans pashu sakhi. - For chickens, they charge 5 rupees for one vaccination, for goats, they charge as per the requirement of medicine and for cows, they charge 50 rupees for basic ointment and wound.

Question 9. Do you take people for exposure visits to other places for turning of Pashu Sakhi or not?

Ans pashu sakhi. - Yes, once a year or after 2 to 3 years we take the patient to another District Veterinary Institute in Ahmedabad.

Question 10. How has you guys experience so far working as pashu sakhi?

Ans. pashu sakhi-It has been a good experience. Till now, we have got a good recognition in the society. Everyone knows us by the name of Doctor Didi. Every house in the village has the facility of veterinary health services treatment at its doorsteps. People give us a lot of respect in social work.

Case study pashu sakhi -

Arunaben, from kudhks- village, waghai block of Dang Dist. Gujrat, reported that farmers in the village faced issues such as malnutrition, sickness, and even death of young goats or poultry on a regular basis.

In April 2018, arunaben eagerly volunteered to attend the Pashu Sakhi training when it was provided by an aga khan rural Samarth and programme under. At the training, arunaben learned about the sanitation and hygiene needed to raise goats, the importance of vaccination and deworming, the treatments for common ailments in goats, cows, and buffalos, recipes for creating nutritious feed, and the use of natural resources like to improve livestock health. As a trained Pashu Sakhi, arunaben started imparting this knowledge to others in her village.

When arunaben first started working as a Pashu Sakhi in her village, she said that only five women beneficiaries of the project were willing to listen to her advice or implement the new practices. Only after many months and being able to cure a goat who was ill, did people begin to trust and listen to her. In the last year, arunaben has dewormed and treated over a hundred livestock in her village. While initially starting individuals that possess goats, she now works with villagers from across her community. She also conducts door-to-door interactions, ward meetings, and community meetings to have more reach and participation with the village community.

Arunaben goes to the closest town herself, to purchase vaccines and other pharmaceuticals needed to carry out her job as a Pashu Sakhi. She receives an income of INR 3,500–4,000 by providing these services to her community members, and she has become financially independent as a result. arunaben as a Pashu Sakhi performs three kinds of complementary functions:

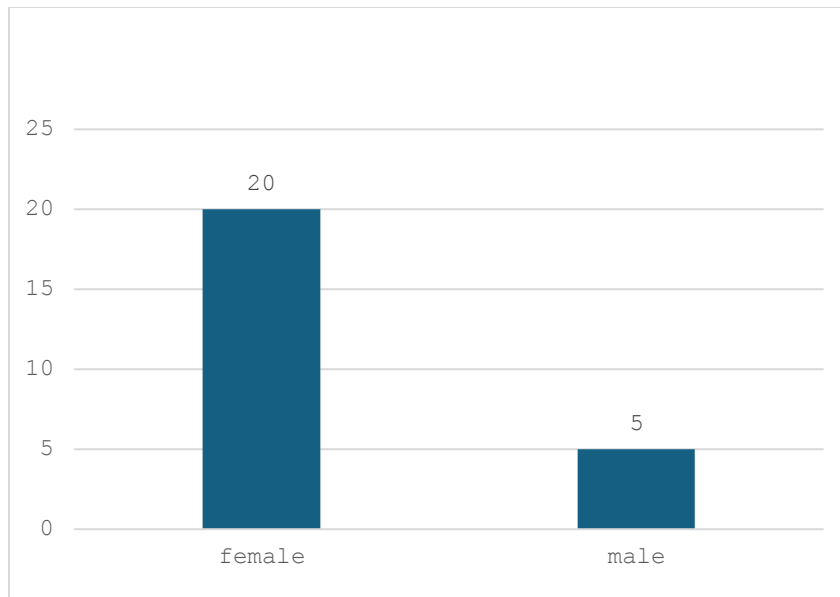
- Extends improved practices and knowledge sharing,

- Provides doorstep first aid and guidance services for disease prevention and management, and
- Demonstrates best practices and enterprise management in her own house. With an increase in the health and nutrition of livestock and their reduced mortality, villagers have improved their incomes by selling the goats at a much higher price. For example, a goat that would sell for Rs 5,000 previously, now sells for around Rs 9,000. Seeing how goat rearing was becoming a profitable endeavor in the village, four more families started goat rearing in the past year.

“In the work, people couldn’t believe that a woman how was how able to work with livestock and provide medical support. Today, the same people respect the knowledge that I have, and are willing to listen to me and the information that I share with them,” says arunaben, coming dignity in her community.

Graph –

Veterinary services received gender responded

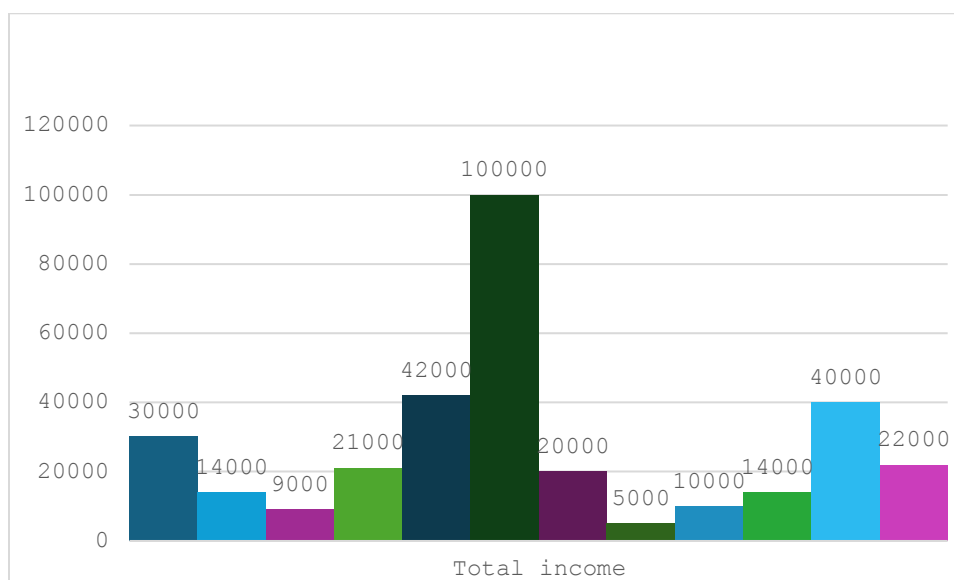


The graph is titled "Backyard Poultry Veterinary Health Services veterinary health services provided respondents." For clarity, these mistakes should be fixed in the title: "poultry," "veterinary," "services," and "respondents."

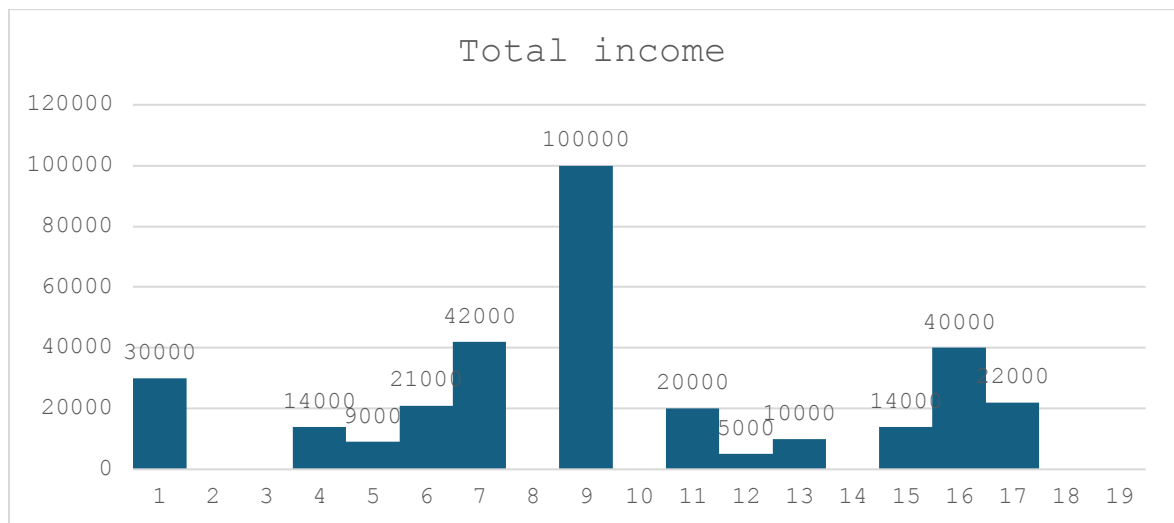
Information: The information reveals that five males and twenty females received veterinarian care for backyard poultry.

Visualization: The data is displayed on the graph as a bar chart with two bars, one for each gender: male and female. The female bar is noticeably higher than the male bar, suggesting that there are more female responders (20) than male respondents (5)

Goat Rearing income



Per Year income goat Rearing income



The "Total income" graph shows the distribution of income over 19 data points, which could be specific time periods or sales occasions for a company that sells chickens. The graph's interpretation of the rise in revenue from veterinary services is as follows:

Title: The graph's title, "Total income," suggests that the y-axis shows income, while the x-axis probably shows various data points, including locations, times, or events.

Overview of the Data: There are notable differences in income between the 19 data points. There are distinct peaks and valleys that show variations in overall revenue.

Important Notes:

At point 9, where the revenue is over 100,000, the largest income is seen.

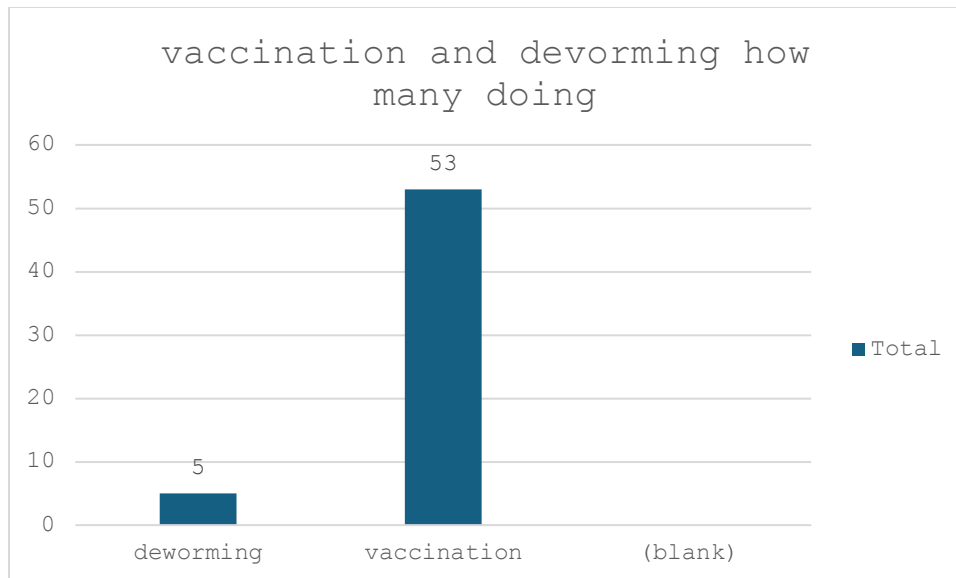
Additional large income peaks can be found at positions 8, 16, and 18.

Several scores (such as 2, 3, 4, 6, 13, and 14) indicate a very low income, at or below \$20,000.

Regarding Interpretation and Veterinary Services:

Periods during which veterinary services were provided or enhanced may be associated with increases in revenue. It's possible that offering veterinarian care improved the health and productivity of the chickens, which raised revenue and sales.

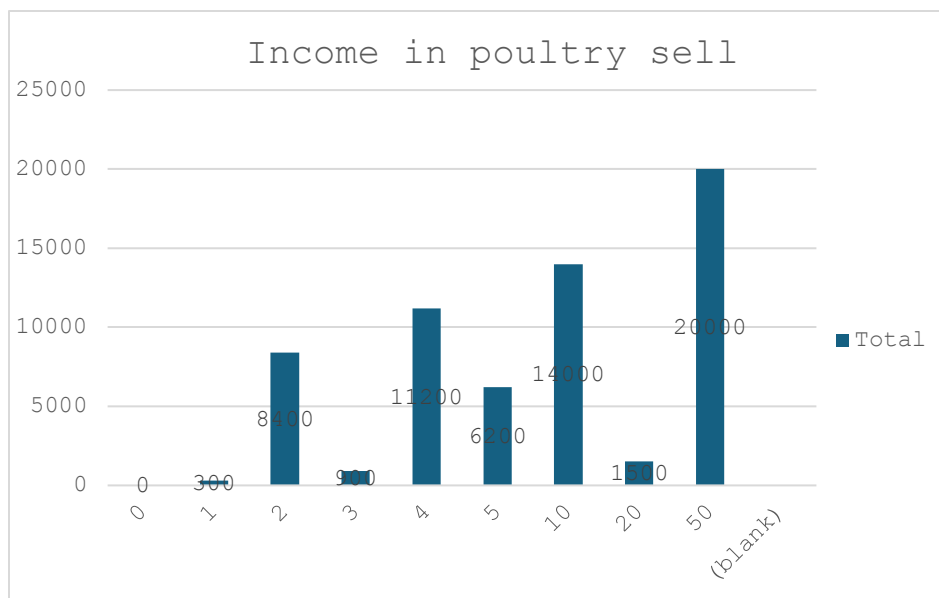
Responded received in vaccination deworming veterinary services



Deworming: There have only been a few cases—roughly 7—where deworming services have been rendered.

Vaccination: There have been a lot more cases—roughly 53—where vaccination services have been provided. Vaccination: The high number of vaccinations suggests that this service is more commonly performed compared to deworming. This could indicate a higher perceived importance of vaccinations among poultry owners or possibly a higher availability of vaccination services.

Deworming: The lower number of deworming instances suggests that this service is less commonly performed. This might be due to lower awareness, availability, or perceived necessity.

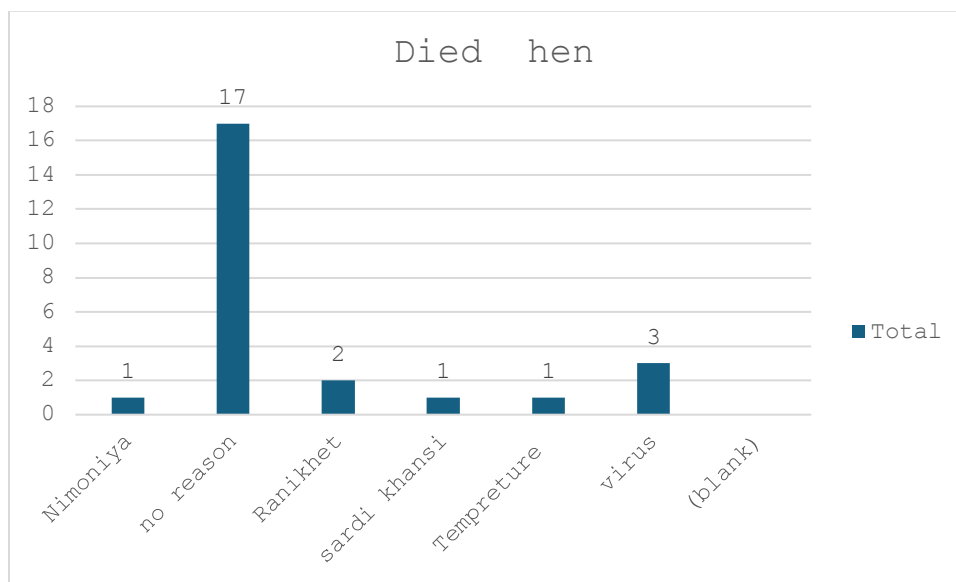


The graph you sent depicts a positive correlation between total income from poultry sales and time. The y-axis shows the total income in poultry sales, while the x-axis represents time. The

time unit is not specified in the graph, but it is likely years or months. There are evenly spaced increments on the x-axis from 0 to 50, with data points plotted at A, 2, 3, 5, 10, 20, and 50. The y-axis starts at 0 and goes up to 25,000, with increments of 5,000.

It is difficult to say definitively from this graph whether the increase in income is linear or exponential. A linear increase would result in a straight line, while an exponential increase would result in a curve that bends upwards more and more steeply as time goes on. The data points plotted here seem to suggest a more linear increase, but with only seven data points, it's hard to be certain.

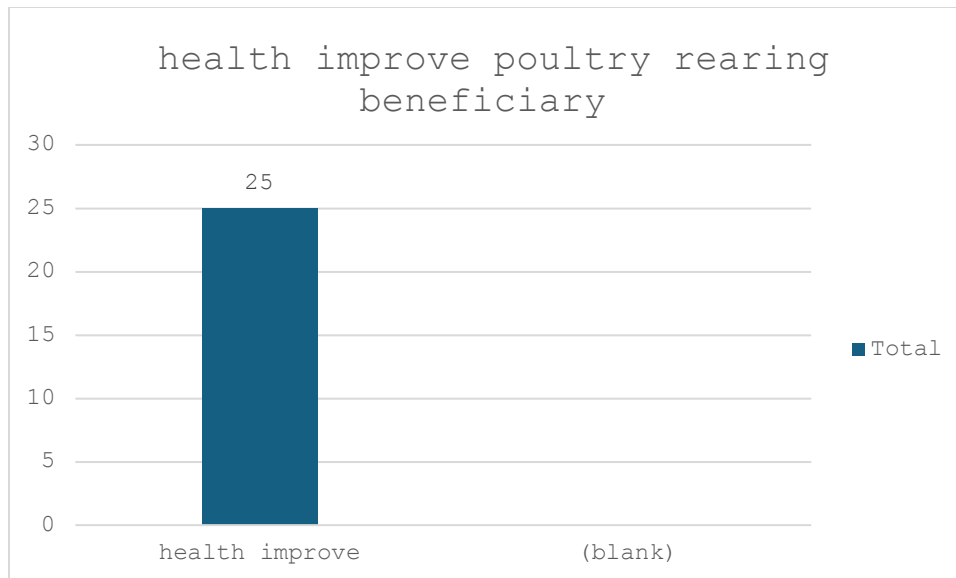
Here are some of the factors that could contribute to an increase in poultry sales income:



bar graph that shows the percentage of hens that died from various causes. The most common cause of death for hens in this dataset is pneumonia, which is a respiratory illness that causes respiratory problems in hens.

Here is a breakdown of the causes of death listed in the graph:

- Pneumonia: 22%
- No reason listed: 16%
- Ranikhet disease: 14%
- Heatstroke: 12%
- Viral infection: 10%
- Other causes: 26%



impact of receiving poultry health services on the health improvement of 25 pulpulaks (which likely translates to poultry farmers). It appears to be a bar graph with two categories on the x-axis: "Received poultry health services" and "Did not receive poultry health services." The y-axis likely represents some measure of "health improvement," though the specific units might not be labeled.

Here's a breakdown of what the graph might be showing:

- **Poultry health services received:** The bars in this section would show the average improvement in health for the 25 pulpulaks who received veterinary care or other health-related services for their poultry.
- **Poultry health services not received:** The bars here would represent the average improvement in health for the pulpulaks who did not receive any poultry health services.

Suggestions and Recommendations:

Health and Hygiene

Sanitation Practices: Educate farmers on maintaining proper sanitation and hygiene in animal housing to prevent infections and diseases.

Regular Health Check-ups: Conduct regular health check-ups and deworming. Improving veterinary services provided by Pashu Sakhi can significantly enhance the health of poultry, goats, and milch cattle, thereby increasing the income of livestock owners. Here are some suggestions:

Training and Capacity Building

Regular Training: Conduct regular training sessions for Pashu Sakhi on advanced veterinary practices, disease management, and animal nutrition.

Workshops and Seminars: Organize workshops and seminars with veterinary experts to update Pashu Sakhi on the latest developments in animal health care.

Disease Management

Vaccination Programs: Implement regular vaccination programs for common diseases in poultry, goats, and milch cattle.

Early Diagnosis: Trained Pashu Sakhi in early diagnosis and treatment of diseases to prevent outbreaks and reduce mortality rates.

Disease Surveillance: Set up a system for continuous disease surveillance to monitor and control potential outbreaks.

Nutrition and Feeding

Balanced Diet: Educate farmers on the importance of a balanced diet for their animals and provide guidelines for proper feeding.

Supplement Programs: Introduce mineral and vitamin supplement programs to ensure animals receive essential nutrients.

Fodder Development: Promote the cultivation of high-quality fodder and forage crops to improve the nutritional intake of livestock.

Breeding and Reproduction

Breeding Programs: Implement selective breeding programs to improve the genetic quality and productivity of livestock.

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Record Keeping: Encourage the maintenance of detailed records of breeding, calving, and production to monitor progress schedules to ensure the well-being of animals.

Clean Water Supply: Ensure a clean and adequate water supply for animals to prevent water-borne diseases.

Community Engagement and Support

Awareness Campaigns: Run awareness campaigns to educate the community on the importance of veterinary services and animal health.

Farmer Cooperatives: Encourage the formation of farmer cooperatives to share resources, knowledge, and access to veterinary services.

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Goat Rearing in livelihood base line survey - 2024.

A. 1, Basic Profile of Household Name-

Village-	Cluster-	GP-	Block-
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2. Respondent Name-
3. Head of household name-
4. Sex of the respondent-
5. Age of respondent-
6. Caste-
7. Maritus status
8. Type of house:(Kuchha/Pucca/Semi Pucca)
9. Total no. of family member
- 10.. Income-
11. Primary activity:
12. Secondary Activity:
13. What were the challenges before the interventions?
- 1.
- 2.

Milch cattle feed and shed Management.

14. No. of existing milch cattle -
15. Type of milch cattle (cow, Buffalo)
16. Name of Cow Breed:(Desi/HF/Jersey/Other's)
17. Do you have a shed for Cow? (Yes/No)
18. Did you construct the Shed by yourself? (Yes/No)
19. What is the input cost in a year (In Rs.)

Constructing and maintaining the shed	Feeding (Rs).	Medical expense (Rs)	Total Expense (Rs)

20. What do you feed milch Cattle?
21. Do you feed any additional nutrition feed to milch cattle (Yes/No)

If yes -

22. Milk Production Details

No. of milch Cattle at present	How much milk does your cow give per day	Rate (In Rs.)/Ltr.	Milk production from cattle is for how many months	Total Income

Health and Disease Management

24. Did any milch cattle die last year? (Yes/No)

25. If yes, how many milch cattle died in last year-

26. What was the reason of mortality of the milch cattle -

1. Disease (Thanaila, Muhkappa langra bukhari, Lampi virus, khurkappa

3 Miscarriage

4. Others

27.. If the reason is disease, then.

28.. Did you get support from Pashu Sakhi/Veterinary doctor/others on veterinary services (Yes/No)

29. If yes, then which veterinary services (Deworming/Vaccination/castration/others)

30. Do you have any information about milch cattle veterinary services-

31. In a year how, many times do you consult for veterinary services:

Veterinary services	No. of times	During which month
Deworming		
Vaccination		
Others		

32. How many kids does your milch cattle give in 1 year-

33. Where do you take milch cattle for grazing, (near home/forest/Other place)

Training and Capacity Buildings

34.. In last year, do you attend any training/exposure on milch cattle and Management? (Yes/No)

. If yes, how many times?

35. Who gave you the training (Pashu Sakhi/AKRSP(I) Staff/ Others)

36. Name of the topics of training:

1.

2.

3.

4.

37. Did you participate in Exposure? (Yes/No)

38. If yes, then place of the exposure visit:

39. Name of your village pashu sakhi-

40. Have the veterinary services by pashu sakhi/exposure/training helped you to improve your cow's health? (Yes/No)

41. If yes, specify.

42. Did you take any loan / credit for milch cattle and Management? (Yes/No)

43.. What do you do with the financial support you get for milch cattle? Do you spend it on business or useless things?

44. If the yes, from where did you take any loan / credit for milch cattle-

45.. (Moneylender/Relatives/Banks/SHG/Cooperative/other, did you receive any support from the government for milch cattle (Yes/No)

46. If yes, then specify. -

47.. Any son or daughter of your family member should join the organization of Village Institute - SHG Group, Village Development Committee-

48.. What is the impact of interventions after, and Veterinary services provided under AKRSP(I)

1.

2.

3.

4.

49. What changes happened in your family after milch Cattle

Do you want to expand your cattle bussiness further-