

DWIT COLLEGE
DEERWALK INSTITUTE OF TECHNOLOGY
Tribhuvan University
Institute of Science and Technology



**BAKHRA GYAN – A MANAGEMENT INFORMATION
SYSTEM FOR GOAT FARMING**

A PROJECT REPORT

Submitted to
Department of Computer Science and Information Technology
DWIT College

*In partial fulfillment of the requirements for the Bachelor's Degree in Computer
Science and Information Technology*

Submitted by
Arun Tamang / Sanjeev Budha
August, 2016

DWIT College
DEERWALK INSTITUTE OF TECHNOLOGY
Tribhuvan University

SUPERVISOR'S RECOMENDATION

I hereby recommend that this project prepared under my supervision by ARUN TAMANG and SANJEEV BUDHA entitled **“BAKHRA GYAN – A MANAGEMENT INFORMATION SYSTEM FOR GOAT FARMING”** in partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Information Technology be processed for the evaluation.

.....

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DEERWALK INSTITUTE OF TECHNOLOGY
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LETTER OF APPROVAL

This is to certify that this project prepared by Arun Tamang and Sanjeev Budha entitled **“BAKHRA GYAN – A MANAGEMENT INFORMATION SYSTEM FOR GOAT FARMING”** in partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Information Technology has been well studied. In our opinion it is satisfactory in the scope and quality as a project for the required degree.

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At the end, we would like to express our sincere thanks to all our batch mates and others who helped us directly or indirectly during this project work.

... ..

Arun Tamang

... ..

Sanjeev Budha

Date: _____



**Tribhuvan University
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STUDENT'S DECLARATION

I hereby declare that I am the only author of this work and that no sources other than the listed here have been used in this work.

.....

Arun Tamang

.....

Sanjeev Budha

Date: _____

ABSTRACT

Goat rearing is a local business section being practiced by the large volume of people in rural Nepal. Goat has become one of the best profitable business to the farmers with low initial investment. The multifunctional and increased demand of goat meat in national and international market has drawn the attraction of local farmers and business persons on it. However due to the lack of veterinary information on goat farming, farmers are not in position to identify minor diseases and nutrients required without consulting any veterinary expert. At this position, the primary objective of the project is to help farmer by providing basic information regarding the goat farming. This is a web application where admin can collect the information about goat farming by consulting with the expert. The added information is then retrieved by the external users as per their request. In addition to this, the application provides intuitive interface for user to post queries on commercial goat farming in Nepal which than will be answered by the expert. The application uses decision tree algorithm to identify the diseases based on the symptoms added by the farmers.

Keywords: Goat Rearing, Decision Tree Algorithm

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LIST OF ABBREVIATIONS

HTML - Hypertext Markup Language

CSS - Cascading Style Sheet

PHP - Hypertext Preprocessor

CHAPTER 1: INTRODUCTION

1.1 Background

The present period is often referred as the information age. Everyone believes that information leads to power and success, because of sophisticated technologies such as computers, satellites, cell phones, Internet etc.

Bakhra Gyan – A Management Information System is a web application which gathers tremendous amount of veterinary information on goat farming in Nepal. This application provides platform where farmers can find legitimate information and communicate with experts.

The application targets farmers who are usually people with non-technical background. So, for the comfort of the users and effective communication between the application and the users, the application displays the information in Nepali language.

The application stores information on five different topics. They are: breed, food, disease, cure and shed. Furthermore, application also manages users query and corresponding responses. The application has two types of registered users, admin and expert. The user with expert role can do everything except user management. The user management is the task that makes admin powerful than others. The unspecified but important users are farmers.

1.2 Problem Statement

Nepal imports 500,000 live goats worth Rs. 4-6 billion annually from the southern neighbor. The ministry estimates there are 10.17 million live goat in the country. On average, a Nepali eats 11.15 kg meat per year. Statistics of the Ministry of Agricultural Development show buffalo meat accounts for 58 percent of the total meat production, followed by goat meat (20 percent). (Khatiwada, 2015)

The country can be made self-reliant in goat farming if the farmers are encouraged towards commercial goat farming. The demand is high and the returns are equally high, which has encouraged farmers, businessmen, and educated youths towards goat farming, but there is a lack of technology and commercial goat farming knowledge.

The proper guidelines and goat farming materials are not accessible easily till date. The materials are not comprehensible easily. The farmers do not get chance to ask queries they have and goat farming experts also do not have platform to answer queries. Furthermore, majority of goat farmers are not well aware of improved goat technologies available in research stations and developmental farms.

1.3 Objectives

The objective is to build a web application that can be used by farmers to access legitimate information and post queries on commercial goat farming.

This application can be used as a standalone application or it can also be used as a part of a more sophisticated agricultural application.

1.4 Scope and Limitation

The scope of the application is limited to web right now. The future plan is to extend this application on mobile platform as well.

Since this is web based application users need to be connected to internet in order to access information.

1.5 Report Organization

The remaining part of the document is organized and represented in project block diagram as in Figure 1 given below:

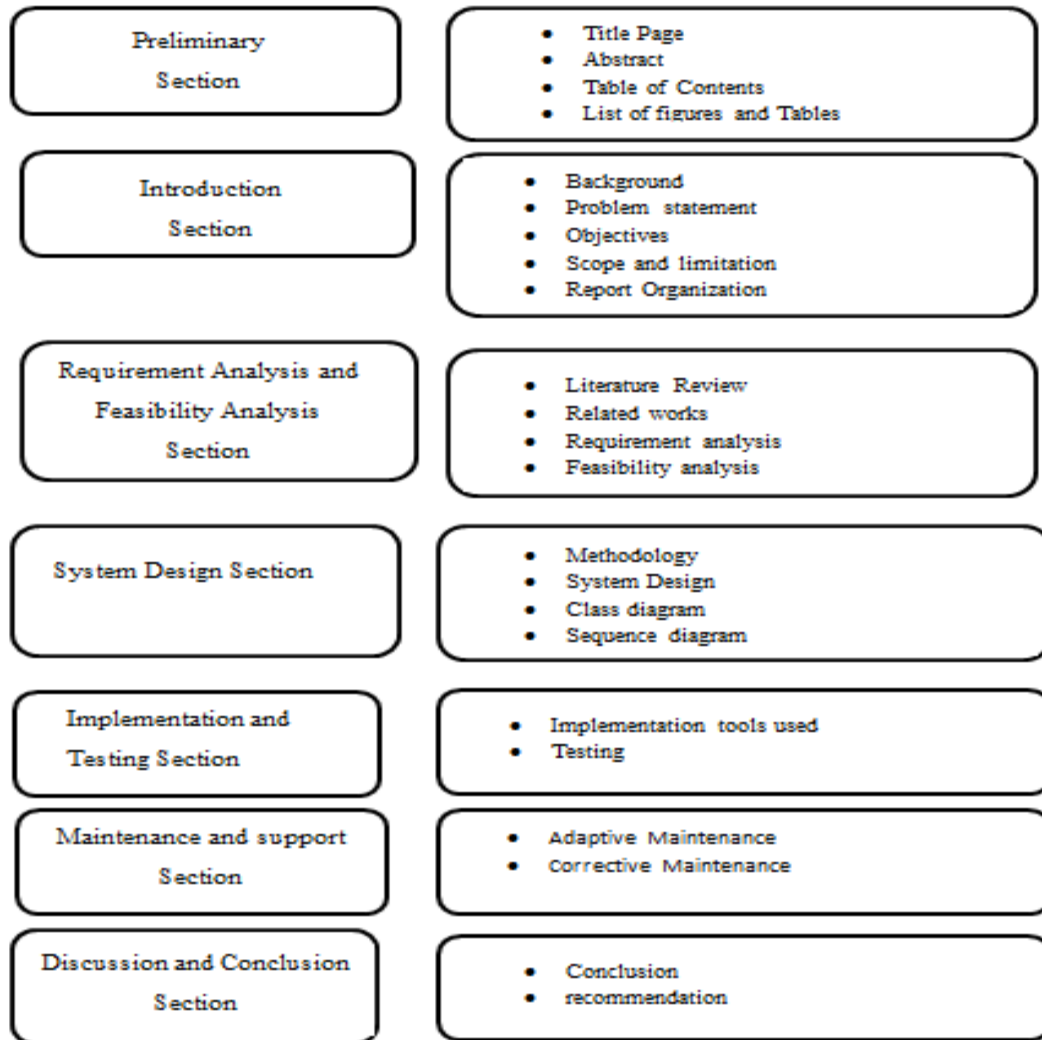


Figure 1- Project block diagram

CHAPTER 2: REQUIREMENT ANALYSIS AND FEASIBILITY ANALYSIS

2.1 Literature Review

This paper intended to discover the rules for the disease hit using decision tree algorithm. The paper also explores what rule can act in this area for the future prediction. The objective is to creating a prediction model, using decision tree for predicting the chances of occurrences of dengue diseases in a tribal area.

Two types of models are created, by using real life problem application of this research study.

1. An unsupervised clustering model for identifying the significant characteristics of insolvent customers.
2. Supervised classification model for insolvency prediction.

The clustering model created to understand different group behavior for history of dengue disease effected and accordingly action taken. The knowledge extracted from the clustering model helped to identify the significant characteristics of insolvent population which formed a particular cluster.

The supervised classification model was built on a data set. This model allowed predicting the insolvency of inhabitants well in advance so that the action measures can be taken against the insolvent people. 97% of the prediction accuracy was achieved employing the decision tree classification model. Overall performance is also good (N K Kameswara Rao, 2014).

Goat is one of the most dominant ruminants in Nepal. Goat keeping is an integrated approach for majority of Nepalese farmers as they keep couple of goats as part of the farming system. It is also regarded as the handy source of money in need and is considered to be attractive for poverty reduction and improvement of family food security and livelihood of the poor in developing countries.

This study is focused in HVAP districts along the three road corridors - Chhinchu-Jajarkot, Surkhet-Dailekh and SurkhetJumla – and suggests possible interventions to the project. The total population of goat in Nepal for 2008/09 was 8.8 million with an average annual growth rate of 3.31 per cent. Goat meat is widely consumed over the country with the highest cost per unit weight. It stands as the second largest consumed meat after the buffalo meat, and contributes about one fifths of the total meat produced in the country. Seven districts – Surkhet, Dailekh, Jajarkot, Jumla, Kalikot, Salyan and Achham – have more than 1.11 million goats with an annual meat production of more than 9 thousand tons. There is scope of the goat sector for economic and business activities to the small and mid-scale producers to boost their capacity towards commercialization of this sector.

The major constraints that also covers specifically for women, dalit/janajatis and marginalized communities regarding goat rearing include: (a) improper technology for a large and commercial scale of production orientation; (b) low or no provision of appropriate feeding management for snowy winter harsh condition, especially in mountain districts; (c) insufficient technology on housing management (space, air flow, and slot management); (d) lack of goat resource center to supply elite doe and buck to the farmers (based on Khari, Sirohi or Jamunapari blood level standardized crosses); (e) poor facility of loan disbursement from government part to both producers and traders; (f) low priority of Banking sector to collator lands and property in the rural areas, high interest rate; (g) poor quality collection centres (and are limited in number and small in size) with no reconditioning facility; (h) transportation means undefined; (i) no subsidy or support on means of meat/live animal transportation; (j) less number of extension/VAHW workers and coverage, and (k) limited market information (ANSAB, 2011).

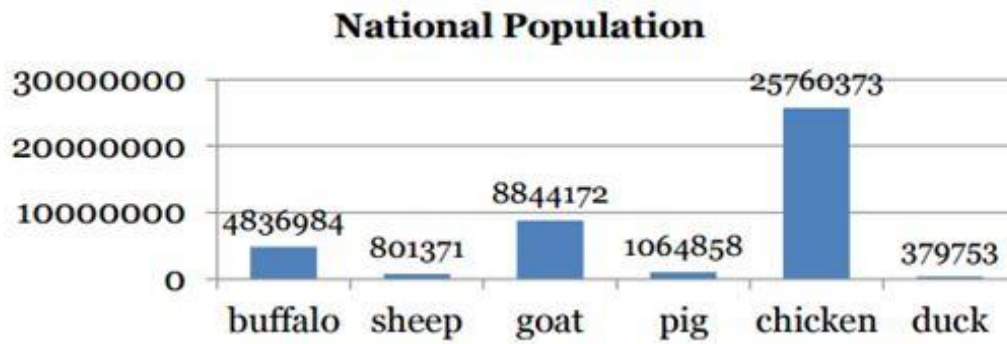


Figure 2- National populations of livestock in Nepal (2009/10)

(ANSAB, 2011)

The Bakhra Gyan has two types of support system to respond to farmers queries. They are: Expert help and system support using decision tree.

For the expert help section simple chat like system is implemented. For the system support system decision tree algorithm is implemented.

A decision tree is a decision support tool that uses a tree-like graph or model of decisions and their possible consequences, including chance event outcomes, resources costs, and utility.

Here in Bakhra gyan application we have implemented decision tree to identify disease goat is suffering from. The users have to tick symptoms check boxes and system will identify disease and provide possible curative measures.

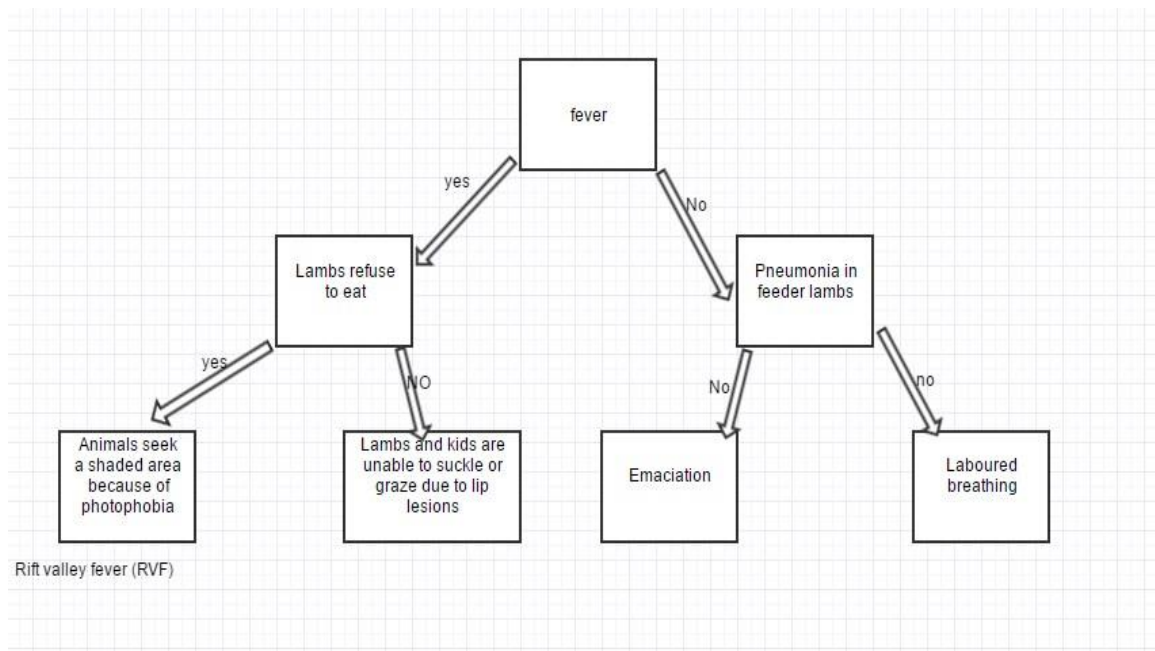


Figure 3- Decision tree to identify diseases

2.2 Related Works

Applications that are similar to Bakhra gyan are smart krishi, goat gyan, hamro krishi, krishi ghar.

Smart krishi is a mobile application. This application caters to every aspect of farming activities and large pool of relevant information for empowerment of professional Nepali agriculture. This application is not specific to goat farming (smartkrishi, 2015).

Goat gyan is a web application developed for India. It has all sort of information for goat farming in India (Gyan, 2014).

Krishi ghar is both web and mobile application. This application has information limited to vegetables only (MoAD/DoA, 2015).

Compare to these applications Bakhra gyan stands different with features like identifying goat disease with symptoms provided. User Interaction with experts is another feature which isolate from other applications.

2.3 Requirement Analysis

A requirement analysis was done on the product and the following data was obtained:

The functional and non-functional requirements addressed by the application are listed below in the table:

Table 1- Functional and Non-functional requirements

S.N	Functional Requirement	Non-functional Requirement
1.	User Registration	1. The user can register using a valid Email address. 2. Only one account can be created to with an email address. 3. The username can only contain alphabets and numbers 4. The admin should assign role i.e. admin or expert
2.	User login	1. The user can login with an email Username and password.
3	Post queries	1. The user should fill email address 2. The user should fill mobile number 3. The user queries should be on commercial
4	Identify disease on symptoms basis	The user should check symptoms correctly

In this application user with admin role can perform following operation

2.3.1 User registration

Admin registers the user with either admin or expert role. The user registered with expert role do not have privilege to manage users. Both the users can manage various information on goat farming.

2.3.2 User login

The registered users have to login into the system to perform necessary tasks. The task include add, update, delete and reply queries. Admin can view every information that application can store. Expert is restricted to manage users.

2.3.3 Post queries

Farmers can post queries using query form which is in home page of the application. The farmers fill every information and submits the form. The request then is listed in dashboard of both admin and expert. The queries is answered either by admin or expert whoever knows the answer.

2.3.4 Identify diseases

The application provides interface to find the disease on symptoms basis. The farmer checks the boxes and submits to application. Application then analyzes the data and responds back with either disease name or with message ‘no disease found’.

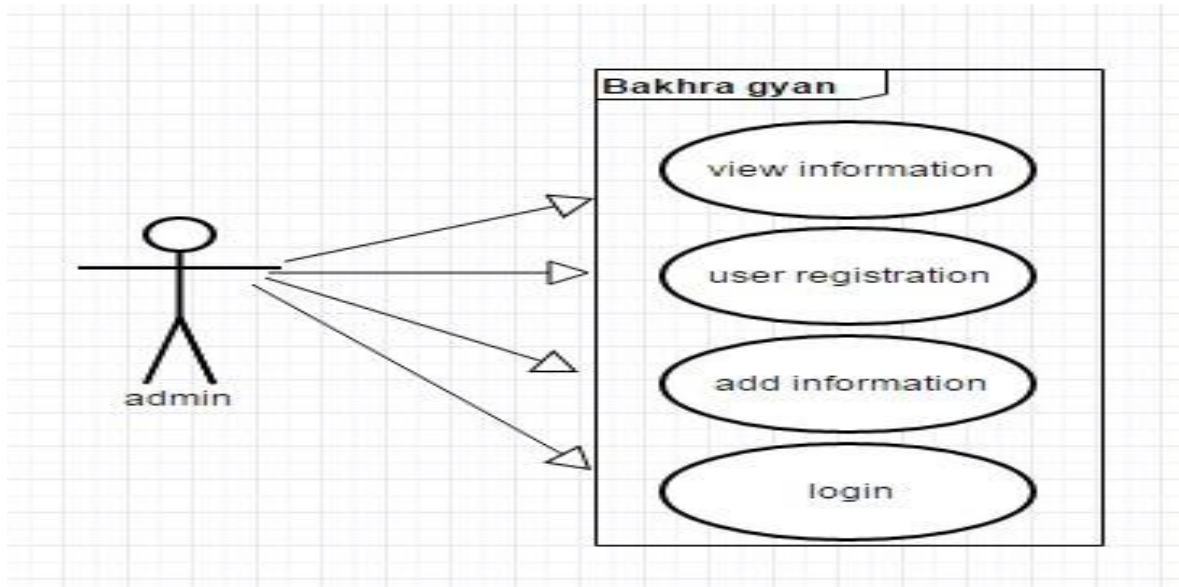


Figure 4-Use case diagram of admin

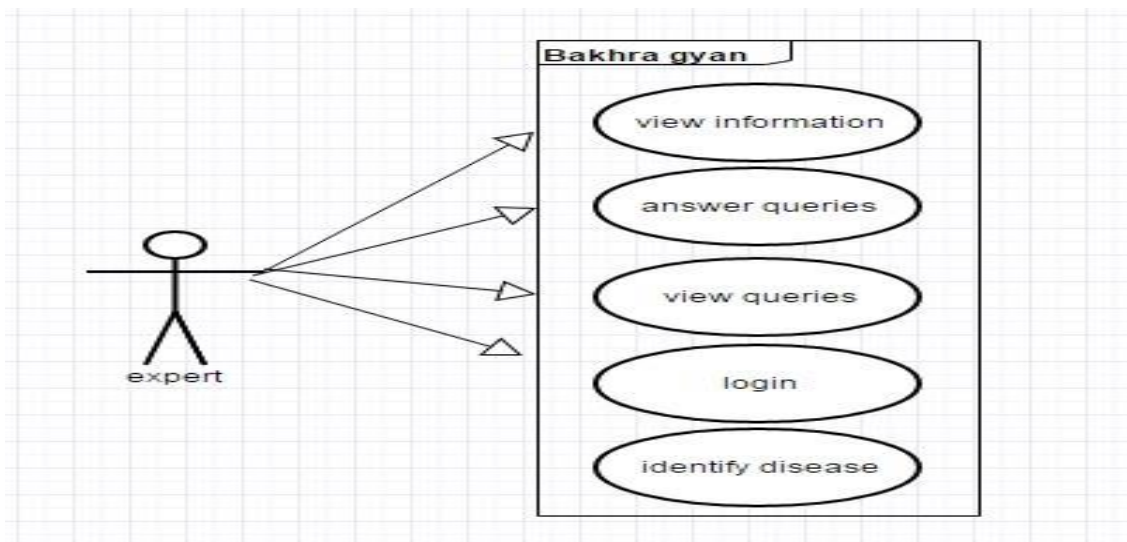


Figure 5- Use case diagram of expert

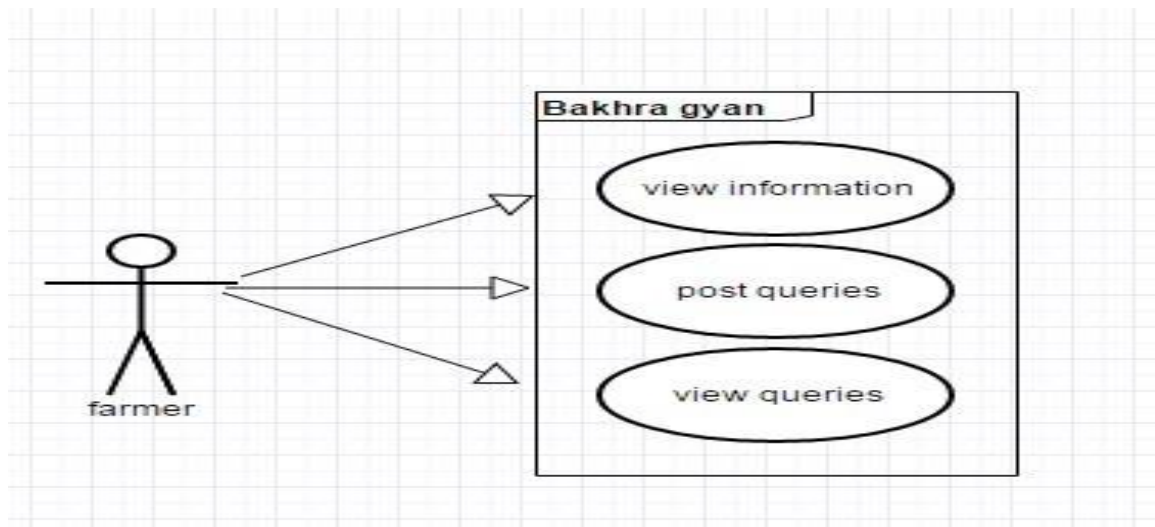


Figure 6- Use case diagram of farmer

2.4 Feasibility Analysis

The following result was obtained while performing a feasibility analysis:

2.4.1 Operational feasibility

Bakhra gyan is a web based application. It uses HTML/CSS and JavaScript at the front end and PHP and MySQL at the back end. It is based on client server architecture and needs internet connection to access information. It supports both windows and Linux platform for its operation. All of the technology required by application are available and can accessed freely, hence it was operationally feasible.

2.4.2 Technical feasibility

The application used 2-tier architecture. The famers, admin and experts of the applications are the end users who use the information. The server keeps and serves the information added by admin, famers and experts. The application can be accessed from

anywhere at any time with an internet connection. It is easy to use. Thus, it is technically feasible.

2.4.3 Economic feasibility

The cost associated while building the application can be:

- ☐ Internet usage cost
- ☐ Data collection cost
- ☐ Development time

The application can be completed within 3-4 months with team of 2 developers. Hence, it is economically feasible.

2.4.4 Schedule feasibility

The total estimated time for the development of the application is 4 months.

Table 2- Schedule feasibility

Tasks	Start Week	Complete weeks
Plan course3	0	2
Database Design	2	3
Front/Back end work	4	8
Review	8	4
Implementation	10	5
Documentation	4	8
Testing	14	20

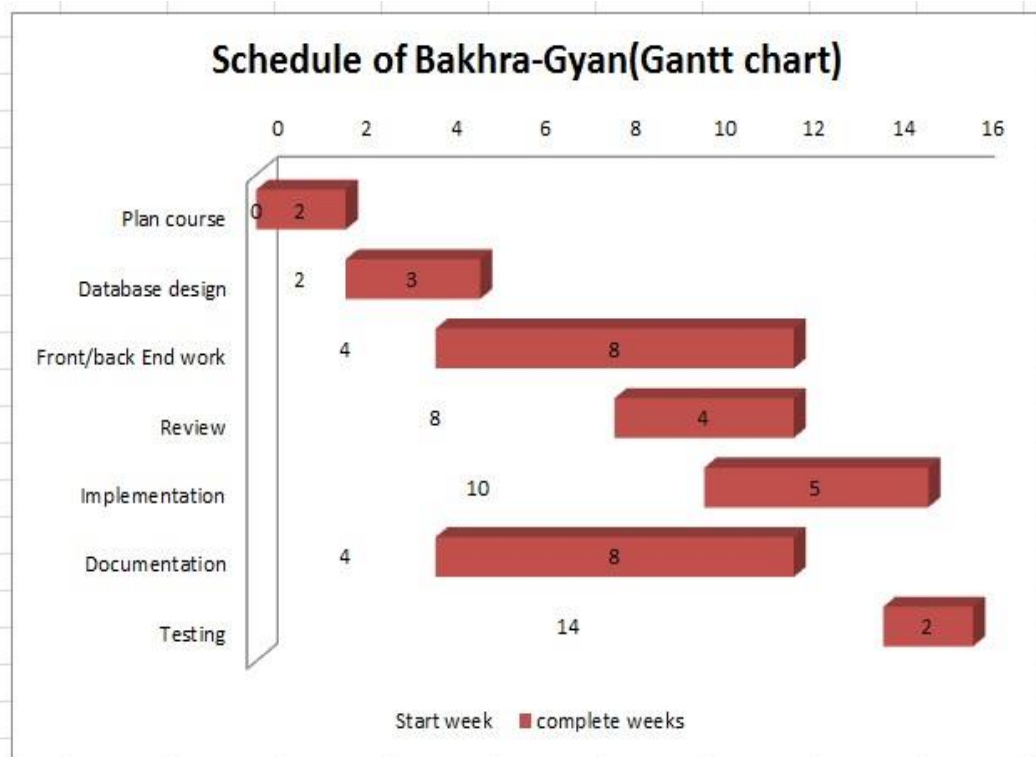


Figure 7- Gantt chart

CHAPTER 3: SYSTEM DESIGN

3.1 Methodology

This application is completed using the waterfall model. First the applications related to my application was searched on the internet. We found some applications similar to our idea. Some of them were Smart Krishi, Krishi Ghar and Hamro Krishi but none of them were exactly like ours. We researched on how they work and got a relative methodology to build this application.

The algorithm used in this application is decision tree. A decision tree is a decision support tool that uses a tree-like graph or model of decisions and their possible consequences, including chance event outcomes, resource costs, and utility.

The algorithm is used to identify disease the goat is suffering from. The input to the algorithm is lists of symptoms

3.2 System Design

Table used in application are represented in class diagrams

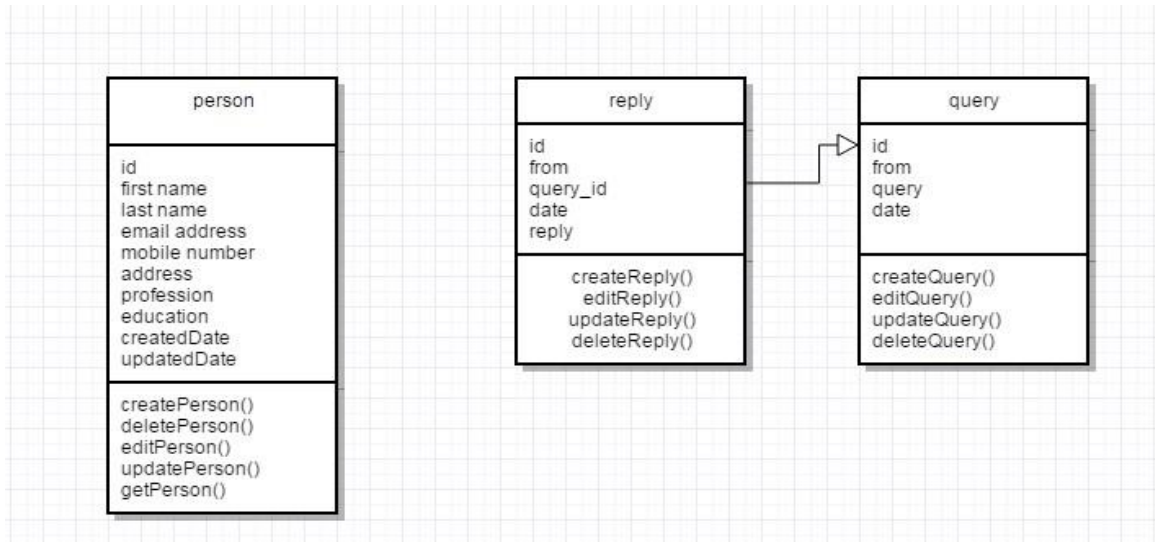


Figure 8- Class diagram for person, reply and query

Person table stores user registered information.

Query table stores query raised by famers about goat farming. Reply table stores reply to queries raised.

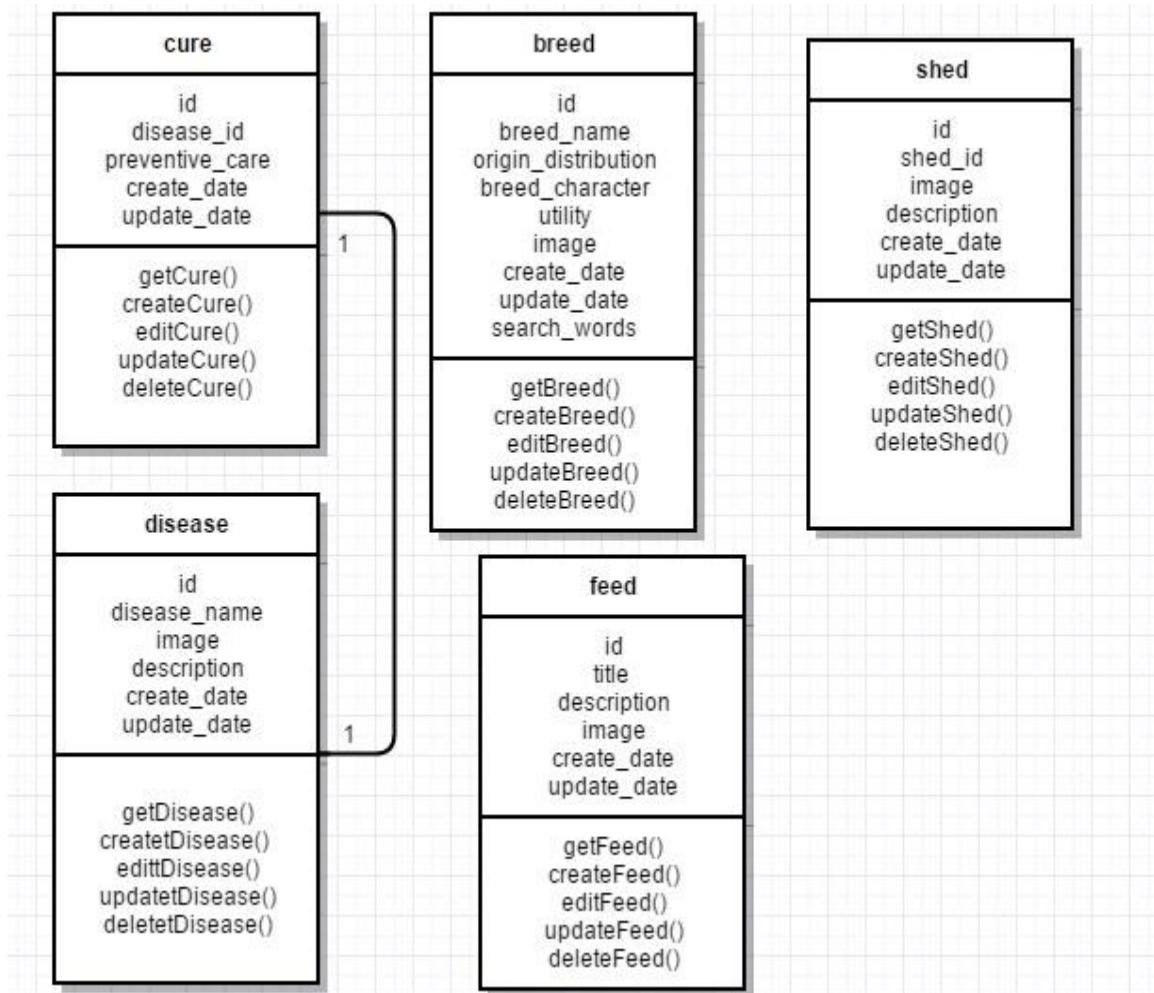


Figure 9- Class diagram for cure, breed, shed, disease and feed

The cure table is designed to store preventive measures information. This table is dependent on disease table because disease id is referenced to map curative measures.

The breed table is designed to store goat breed information. The breed information like name, origin and distribution, utility are stored.

The shed table is designed to store shed information. The shed information may include types of shed, description.

The disease table is designed to store disease information of goat. This table stores information like disease name, description and symptoms.

The feed table is designed to store goat feeding information. This table stores information like feed name, description.

Sequence diagram

Users visit application by entering application's URL on browser as it is web application. Then application provides user with goat information. User can navigate different tabs displayed. User can send queries and get information. The queries posted and replies are listed on questions and answers page.

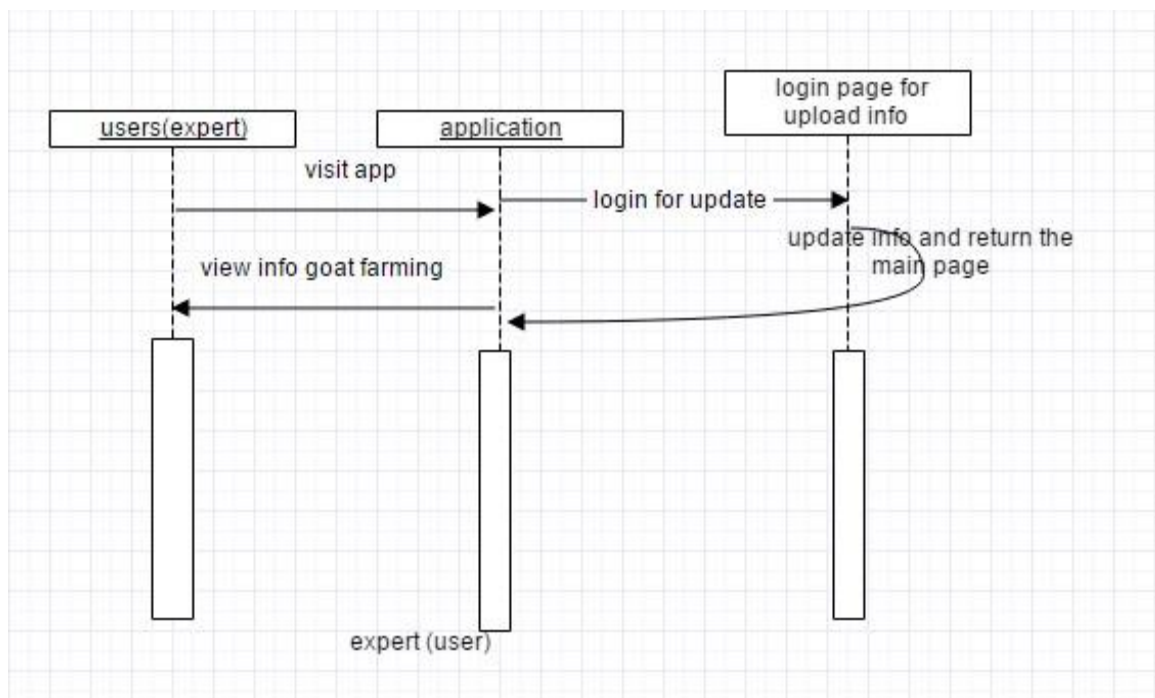


Figure.10- Sequence diagram for user with expert role

User with expert role can login to application. The user can view, add, edit and delete information. The expert has another important task i.e. reply back to queries posted by farmers.

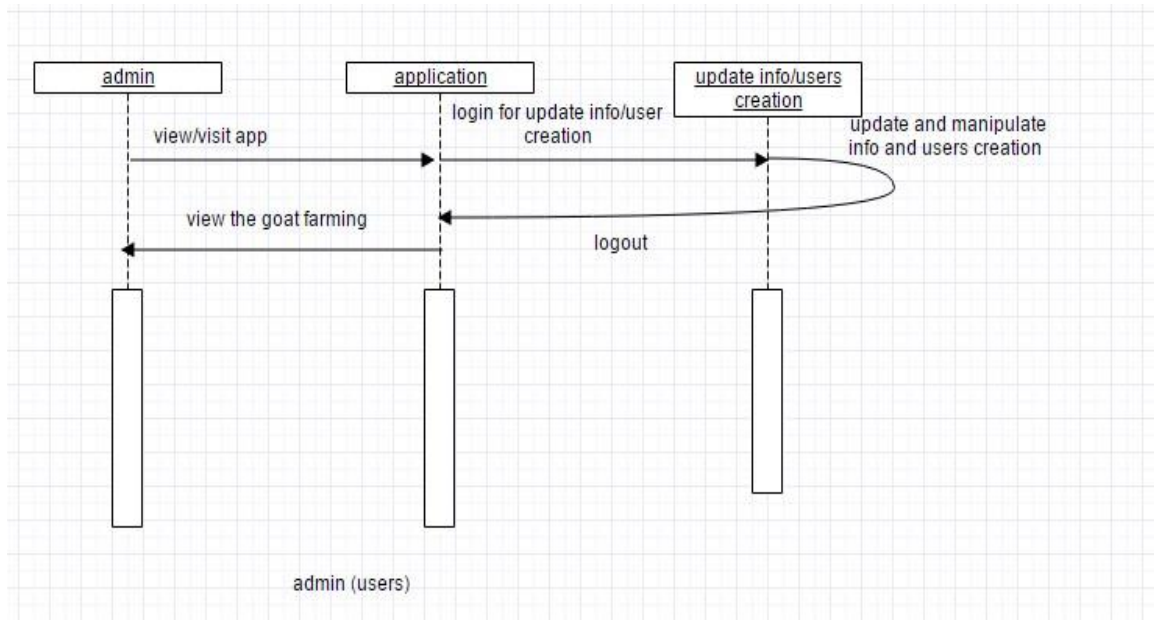


Figure 11- Sequence diagram for user with admin role

CHAPTER 4: IMPLEMENTATION AND TESTING

4.1 Implementation

We have collected data from web resources and feed into our system. The data were collected from report and e-books published by different government and non-government organizations in and out of country. The system is a web based application which needs internet connection to access information.

4.1.1 Tools used

Following tools are used in bakhra gyan web application. They are: -

Front End

- **HTML/CSS**

HTML/CSS were used for designing web pages. The web pages are used to display user request.

- **JavaScript/jQuery**

JavaScript/jQuery are used for client side validation. Ajax, combo of JavaScript and XML used for asynchronous communication with server and client.

- **Bootstrap**

Designing web pages made easy with use of bootstrap. Bootstrap is powerful front-end framework. Bootstrap is used in this application to power design.

Back End

- **PHP**

PHP is server side scripting language. In this application PHP class is written to store and retrieve information in and out of database.

- **MySQL**

MySQL is an open source database. This is used in this application to stores application data.

4.1.2 Description

The major class is common class. This class includes CRUD operation methods for every other classes. This methods get data collected from form via handler. Handler are intermediary function which acts as link between web pages and common class. The handler for this application are: -

- **breedHandler:** - It collects breed information from breed form and call specific function according to mode specified. Then function executes SQL statements.
- **cureHandler:** - It collects cure information from cure form and call specific function according to mode specified. The function executes SQL statements.

- feedHandler: - It collects food information from feed form and calls specific function according to mode specified. The function executes SQL statements.
- diseaseHandler: - It collects disease information from disease form and calls specific function according to mode specified. The function executes SQL statements.
- shedHandler: - It collects shed information from shed form and calls specific function according to mode specified. The function executes SQL statements.
- queryHandler: - It collects query information from query form and calls specific function according to mode specified. The function executes SQL statements.
- personHandler: - It collects person information from person form and calls specific function according to mode specified. The function executes SQL statements.

4.2 Testing

The following testing was done.

4.2.1 Test case: 1

Test Case Id: 1

Test Case description: Login page.

Test cases	Preconditions	Steps to be executed	Expected results	Actual results	Pass/fail
Login for admin	The admin Account should be registered	1. Enter correct email address and password. 2.click login	Admin must successfully login to admin page	The admin is successfully logged in	Pass
Login for admin	The admin account should be registered	1.Enter incorrect email address and password 2.click login	admin cannot access admin page	Login unsuccessful	Pass
Login for the expert	The expert account should be registered	1. Enter correct email address and password. 2.click login	Expert must successfully login to expert page	expert should be logged in to expert page info about goat	Pass
Login for the expert	The expert account should be registered	1.Enter incorrect email address and password 2.click login	expert cannot access expert page	Login unsuccessful	Pass

Figure 12-Test case 1

4.2.2 Test case: 2

Test Case Id: 2

Test Case description: Information about goat breed (adds, delete, update).

Test cases	Preconditions	Steps to be executed	Expected results	Actual results	Pass/fail
Add goat Breed	Admin or expert must be logged in	1. fill on breed name 2.fill on origin and distribution 3.fill on features 4.fill on utilities 5.upload image of breed and click on save button	All information should be saved	All information successfully saved	Pass
Delete breed	Admin or expert must Be logged in	1.Click on delete button 2.show confirm delete and click on ok button	Breed should be deleted	Breed information successfully deleted	pass
Update breed	Admin or expert must be logged in	1.fill on breed name 2.fill on origin and distribution 3.fill on features 4.fill on utilities 5.upload image of breed and click on save button	All information should be updated	All information successfully saved	pass

Figure 13-Test case 2

4.2.3 Test case: 3

Test Case Id: 3

Test Case description: Add users (admin and expert)

Test cases	Preconditions	Steps to be executed	Expected results	Actual results	Pass /fail
Add users	Admin must be logged in	1. fill on name 2. fill on case 3. fill on mobile number 4. fill on email address 5. fill on city 6. fill on zone 7. fill on district 8. fill on role 9. upload image of user and click on save button	All information should be saved	All information successfully saved	Pass

Figure 14-Test case 3

4.2.3 Test case: 4

Test Case Id: 4

Test Case description: Home pages

- Show Breed
- Show Food
- Show Disease
- Show Treatment
- Show Questions/Answers
- Query Box

Test cases	Preconditions	Steps to be executed	Expected results	Actual results	Pass/fail
show breed	no	click on the breed tab	breed information should be displayed	breed information successfully displayed	pass
show food	no	click on the food tab	food information should be displayed	food information successfully displayed	pass
show disease	no	click on the disease tab	disease information should be displayed	disease information successfully displayed	pass
show treatment	no	click on the treatment tab	treatment information should be displayed	treatment information successfully displayed	pass
show shed	no	click on the shed tab	shed information should be displayed	shed information	pass
show question/ answer	no	click on the question	questions are asked by the farmers and reply to that question are should be displayed	question and Answered successfully displayed	pass
find disease	no	select corrects symptoms then click the submit button	disease should be found	disease Successfully found	pass
find disease	no	select incorrect symptoms then click the submit button	(No found disease) message should be displayed	(No found disease) message successfully displayed	pass
query box	no	1.fill on full name, address and phone number 2.fill on email address 3.fill queries on query box 4.click on submit button	query should be saved	query successfully saved	pass

Figure 15-Test case 4

CHAPTER 5: MAINTENANCE AND SUPPORT

Maintenance and Support Strategies applied in this application are as follows:

5.1 Adaptive Maintenance

The information should be updated regularly. The application offers information in Nepali language. The application can be adapted to offer other languages. According to need of farmers, the application can be enhanced to support user registration. The application can be modified as per the need.

5.2 Corrective Maintenance

The fully tested version of application is deployed. If users find issues and complains about issues the proper corrective maintenance will be done

CHAPTER 6: CONCLUSION AND RECOMMENDATION

6.1. Conclusion

The project aims to provide information on goat farming. The application is able to provide information on breed, disease, cure, shed and feed topics. The application is able to identify few diseases only. The expert help will be available if this application is published in WWW.

6.2. Recommendations

As for now project is only able to identify few disease only. It can be further can be developed to identify more diseases. The suggestions of goat on basis of geo location can be done.

APPENDIX I

1. Home page of application

[गृह पृष्ठ](#) [प्रजाति पृष्ठ](#) [आहारा पृष्ठ](#) [रोग पृष्ठ](#) [उपचार पृष्ठ](#) [खोर पृष्ठ](#) [प्रश्नोत्तर](#) [रोग पता लगाउनुहोस्](#) [लग-इन गर्नुहोस्](#)

बाखा-ज्ञान मा स्वागत छ

तपाईंहरूलाई बाखा-ज्ञानमा स्वागत छ। बाखा-ज्ञान अनलाइन वेब पोर्टल हो। बाखा-ज्ञान एपमा बाखा सम्बन्धीसम्पूर्ण जानकारीहरू पाईन्छ। यसमा राखिएको जानकारीहरू बाखा विशेषग तथा आधिकारिक स्रोतहरूबाट संशोधनगरी राखिएको हुनाले जानकारीहरू आधिकारिक छन्।

यस एपमा कृषकले सजिलैसंग बाखा पालन गर्ने विधिहरू प्राप्त गर्न सक्नुहुनेछ।यो एपमा कृषकले आफ्नाजिज्ञासाहरु राख्न पाउनेहुनेछ।तथा बाखा विशेषगबाट कृषकहरुको जिज्ञासाहरु समाधान गर्न प्रयत्न गर्न खोजेको छ।

आफ्नो बाखा सम्बन्धि जिज्ञासा लेख्नुहोस्।

सबै विवरणहरु अनिवार्य छन् ।

पुस नाम:

फोन नम्बर:

इमेल:

ठेगाना:

प्रश्न:

[पठाउनुहोस्](#)



@बाखा-ज्ञान

2. Page containing information about various breeds of goats


गृह पृष्ठ प्रजाति पृष्ठ आहारा पृष्ठ रोग पृष्ठ उपचार पृष्ठ खोर पृष्ठ प्रश्नोत्तर रोग पत्ता लगाउनुहोस् लग-इन गर्नुहोस्





सिंहल

सिंहल प्रजाति बाख्राहरू नेपालको माथिल्लो पहाडी क्षेत्रमा तथा हिमाली भेगको दक्षिण भू-भागमा पाईन्छ। जुन क्षेत्र वा भू-भाग समुद्री सतह देखि १५०० - ३००० मिटर माथि अवस्थिति छ।

यी प्रजातिको बाख्रा नेपालको जम्मा बाख्रा संख्या को ३५ % छ। यी प्रजातिको बाख्रा नेपालको धेरै मात्रामा पाउने देशी बाख्राको रूपमा चिनिन्छ। यी प्रजाति बाख्राको बयस्क तौल भाले/घेभी औसत मा ४२ किलो तथा ३५ हुन्छ। साथै औसत उचाइ ६७ से.मि हुन्छ। प्राय-जसो यी प्रजातिको बाख्राहरू कालो, हल्का खैरो, सेतो रंग लै शरीर ढाकेको हुन्छ। अनि यिनीहरूको औसत सिंगको लम्बाई १८.७ से.मि. सम्मको हुन्छ। यी बाख्राहरू नि प्रजनको लागि कम्तिमा २ वर्ष हुनुपर्छ। वर्षको १ चोटी यिनीहरू हरूले बच्चा जन्माउछन्। बच्चाहरू प्राय १ ओटा हुन्छ र औसत तौल २.१ किलो हुन्छ।

प्राय यी प्रजातिको बाख्राहरू मासु को लागि प्रयोग हुन्छ।

खरी/औले

यो प्रजातिको बाख्रा नेपालको ५० % भू-भागमा व्यापकरूपमा अरु आदिवासी बाख्रा भन्दा फैलिएको छ। यो प्राय नेपालको मध्य-पहाडी भेगमा पाउनेगर्निन्छ।

खरी बाख्राहरू अपेक्षाकृत साना शरीरका साथ-साथै तौल २० किलो देखि ४० किलो सम्म हुन्छ। औसत उचाइ ५३-५६ से.मि हुन्छ। यो प्रजातिको बाख्रा प्राय जुनसुकै भौगोलिक जमिन मा बास्न सकिन्छ। खरी बाख्राले १६ महिना को बीचमा बच्चा जन्माउछन् जुन प्रकिया ९-९ महिनामा निरन्तर हुन्छ।

यो खरी प्रजातिको बाख्रा बिशेषगरी व्यावसाहिक रूपको लागि प्रयोग हुन्छ किन कि छिटै सन्तान उत्पादन गर्छ खाना को लागि प्रयोग हुन्छ।

तराई


तराई बाख्रा नेपालको कुल बाख्रा संख्या मध्ये ९ % को अनुपात मा यो प्रजाति पाईन्छ। जुन नेपालको दक्षिण भू-भाग तराई मा पाउने गरिन्छ। यो प्रजातिको जन्माजात जमुनापारी प्रजाति बाट भएको हो।


तराई प्रजाति बाख्रा भित्र धेरै प्रजाति को विविधता पाइन्छ। यो प्रजातिको रङ कालो देखि सेतो खैरो लगायत रातो रङ सम्म पाउने गरिन्छ।


बाख्रा-ज्ञान

@बाख्रा-ज्ञान


3. Page containing information about various diseases


गृह पृष्ठ प्रजाति पृष्ठ आहारा पृष्ठ रोग पृष्ठ उपचार पृष्ठ खोर पृष्ठ प्रश्नोत्तर रोग पत्ता लगाउनुहोस् लग-इन गर्नुहोस्


बाख्रा-ज्ञान



खुर-फुटे/कुहिने

- संकेत - खङ्गडोपन
- रोकथाम - विसोबाट जोगाउने, ओसिलो ठाउँमा परजोबी/जीवाणुहरू सजिलै हुर्कन्छ त्यसले सुक्खा ठाउँमा बसाउने, खुरहरू काट्ने
- कारण - बाख्राको खुरमा जीवाणुको संक्रमणले गर्दा खुरको भित्र भाग संक्रमण हुदा
- लक्षण - मध्यम देखि पुरा रूपमै खङ्गडो हुने, जनावरहरू सामान्यरूपमा हिडडुल नसक्ने तथा खुरमा नराम्रो गन्ध आउने
- उपचार - कपर सल्फेट प्रयोग गर्ने, खुरलाई सफा राख्ने र एन्टिबायोटिक प्रयोग गर्ने, संक्रमित भागलाई हटाई अन्तिमोष्टिक प्रयोग गर्ने




निमोनिया


- कारण - फोक्सोमा श्वास-प्रश्वासमा संक्रमण हुदा
- रोकथाम - खुला तथा हावा चल्ने ठाउँमा राख्ने जुन स्वच्छ हावा हुनुपर्छ
- लक्षण - नबढ्ने तौल नबढ्ने नाक बग्ने, खाने कुरा नखाने टाउको झुकाउने स्वरमा परिपर्तन आउने, सास फर्न गाह्रो हुने।
- उपचार - एन्टिबायोटिक औषधि प्रयोग गर्ने, बातावरण अनुकूल बनाउने (विसोबाट जोगाउने), जटिल अवस्थामा वेटेरिनारी औषधि खुवाने

गठिया - एन्सेफलिटि

- कारण - भाइरस
- सर्न माध्यम - संक्रमण दुध तथा बेगोतीको कारणले
- संकेत - खङ्गडोपन, गठिया देखिने, भोक नलाग्ने, खुट्टाहरू नचल्ने र अन्त्यमा दिमाग सम्म पुरो श्वास-प्रश्वासमा गाह्रो हुने





बाख्रा-ज्ञान

@बाख्रा-ज्ञान


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4. Page containing information about various foods for goats


गृह पृष्ठ प्रजाति पृष्ठ आहारा पृष्ठ रोग पृष्ठ उपचार पृष्ठ खोर पृष्ठ प्रश्नोत्तर रोग पत्ता लगाउनुहोस् लग-इन गर्नुहोस्


खर्क र चरण

- बाखाको लागि पोषण/पौष्टिक खानाको श्रोत सबै-भन्दा राम्रो खर्क र चरण हुन्छ। जहाँ बाखा हरू आफ्नो खुसि ले खेल्छ।
- खर्क तथा चरणमा ठुलो मात्रामा शक्ति र पोषण/पौष्टिक पाईन्छ। चरणले गर्दा बाखाको लागि खाना स्वादिष्टो तथा यो खाना पचन्थील हुन्छ। बहिया घास, सुदन घास, कोदो, र बिभिन्न प्रकारको घास खर्क/चरण मा पर्दछ।
- चरण ले गर्दा बाखाको शरीरमा प्रोटीन को मात्रा बढ्छ। यदि बाखाहरु स्वतन्त्र रूपमा चरण गर्दा भित्रि परजीबीहरु निरमूल हुन्छ।




पराल/सुख्खा खाना


- जाडो मौसम, पौष्टिक आहाराको सबभन्दा महत्वपूर्ण श्रोत पराल/सुख्खा खाना हो। बाखाहरुले गुणस्तरीय घास खुवानुपर्छ जुन पराल/सुख्खा खाना (घासमा) ठुलो हुनुहुँदैन।
- पराल/सुख्खा खानाहरु मात्र सस्तो नभई धेरै फाइदाजनक हुन्छ। किनभने यो खानेकुरामा धेरै मात्रामा पौष्टिक हुन्छ।
- सुख्खा खानामा बिबिध प्रकारको को घास जुन सुकेको हुन्छ।



अन्न/गेडागुडी


- अन्न/गेडागुडीले १२% देखी १६% सम्म बाखा आहाराको मागलाई पूरा गर्छ।
- बाखाहरुको छिटो बृद्धि को लागि किसानहरुले अन्न/गेडागुडी खुवाउनुपर्छ।
- अन्न/गेडागुडी दूध वटा तत्व जुन कर्बोन र प्रोटीन दिन्छ। मकै, गहुँ, जौ, भटमास हरू अन्न/गेडागुडी हुन् जसले कर्बोन र प्रोटीन दिन्छ।




बाखा-ज्ञान

@बाखा-ज्ञान


5. Find the Disease Page


गृह पृष्ठ प्रजाति पृष्ठ आहारा पृष्ठ रोग पृष्ठ उपचार पृष्ठ खोर पृष्ठ प्रश्नोत्तर रोग पत्ता लगाउनुहोस् लग-इन गर्नुहोस्

लक्षण टिक लगाउनुहोस्

☐ जोरो
 ☐ बाखाले खाना खान छोड्छ
 ☐ १०६ देखी १०८ डिग्री फरेन्हाइटसम्मको ज्वरो आउँछ।
 ☐ बाखा छायातिर जान खोज्छ
 ☐ घाँसपानी खान छोड्छ र आँखा राता देखिन्छन।
 ☐ गिजा र जिब्रोबाट घाऊ आउन सुरु गर्छ र बिस्तारै मुखतिर फैलिन्छ।
 ☐ छेरोटी लाग्छ।
 ☐ आँखाबाट चिस्राहरु आउने र नाकबाट बाक्लो पहेंलो सिंगान बग्छ।
 ☐ खोकिरहन्छ
 ☐ यो रोग लाग्दा मुख वरीपरी घाऊ आँउदछ र पछी पात्रा बन्दछ।
 ☐ मुखको चेपबाट प्रायः सुरु हुने यस्तो घाऊ क्रमस मुख वरीपरी, जिब्रोतिर, कान वरीपरी, खुट्टाको छात्तातिर, अण्डकोस, कल्छोडा, सुत आदिको वरीपरी समेत अँउछन।
 ☐ मुख वरीपरी घाऊ आउने हुँदा घाँस पानी खानमा समस्या आँउछ र पशुहरु क्रमस दुब्लाउदै जान्छ।
 ☐ कहिलेकाँही ३-४ हप्तामा यो घाऊ अँफि निको भएर जान्छ।

Submit


बाखा-ज्ञान

@बाखा-ज्ञान

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APPENDIX II

1. Admin landing page containing information about various breed of goats



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[खोर](#)
[प्रयोगकर्ता](#)

स्वागत छ arun lama [व्यवस्थापक]

प्रजाति बारेमा थपुनुहोस्

Show 2 entries

Search:

फोटो	प्रजाति नाम	मूल र वितरण	विशेषताहरू	उपयोगिता	कार्यहरू
	चेप्रा / भेडा	बिचोभरि भेडा प्रजाति नेपालको उत्तरी भेग मा पाउने प्रजाति हो। जुन समुन्द्री सतह बाट २४०० मिटर माथि को स्थान मा पर्दछ। भेडा/चेप्राहरूको संख्या नेपालको जम्मा बाख्रा संख्याको ६ % छन्।	यी जनावरको १ जोडा सिंग जुन घुमिएको हुन्छ। यसको लम्बाई १७ देखि २८ सि.म. हुन्छ। यी जनावर देख्दामा भेडा देखिए पनि रसमी लामो कपाल हुँदा सम्म आउँछ। धेरै जसो भेडा बाख्राहरू सेतो र कालो रंग साथ साथै अनुहारमा सेता धर्काहरू तथा खरानी, खैरो पाईन्छन्। यी जनावरहरूको औसत वजन भाले को ३५ किलो देखि ४० किलो र पोथी २७ किलो देखि ३० किलो सम्म हुन्छ। औसत उचाइ ६२ सेमी हुन्छ। प्रजनन को कुरा गर्दा यी जनावरको को लागि २ वर्ष को हुनुपर्छ। वर्षको १ चोटी बसन्त ऋतुमा मात्र बच्चा जन्म आउँछ। जन्मिएको बच्चाहरू को औसत वजन १.७९ किलो सम्म हुन्छ।	यी जनावरको रौहरु पसपिना तथा उन को लागि प्रयोग गरिन्छ। र मासुको खानको लागि धेरै प्रयोग हुन्छ।	 
	सिंहल	सिंहल प्रजाति बाख्राहरू नेपालको माथिल्लो पहाडी क्षेत्रमा तथा हिमाली भेगको दक्षिण भू-भागमा पाईन्छ। जुन क्षेत्र वा भूभाग समुन्द्री सतह देखि १५०० - ३००० मिटर माथि अवस्थिति छ।	यी प्रजातिको बाख्रा नेपालको जम्मा बाख्रा संख्या को ३५ % छ। यी प्रजातिको बाख्रा नेपालको धेरै मात्रामा पाउने देसी बाख्राको रूपमा चिनिन्छ। यी प्रजाति बाख्राको बयस्क तौल भाले/पोथी औसत मा ४२ किलो तथा ३५ हुन्छ। साथै औसत उचाइ ६७ से.मि हुन्छ। प्राय-जसो यी प्रजातिको बाख्राहरू कालो, हल्का खैरो, सेतो रंग ले खरीर दाकेको हुन्छ। अनि यिनीहरूको औसत सिंगको लम्बाई १८.७ से.मि. सम्मको हुन्छ। यी बाख्राहरू नि प्रजनको लागि कानिमा २ वर्ष हुनुपर्छ। वर्षको १ चोटी यिनीहरू हरूले बच्चा जन्माउँछन्। बच्चाहरू प्राय १ ओटा हुन्छ र औसत तौल २.१ किलो हुन्छ।	प्राय यी प्रजातिको बाख्राहरू मासु को लागि प्रयोग हुन्छ।	 

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@बाख्रा-ज्ञान



2. Admin dashboard for adding new breed information



प्रजाति थप्पुहोस्

प्रजाति नाम: तराई

मूल र वितरण:

विशेषताहरू:

उपयोगिता:

फोटो: Choose File | No file chosen

पेश गर्नुहोस्

3. Edit food page



REFERENCES AND BIBLIOGRAPHY

- ANSAB. (2011). *Value chain analysis of goat*. Birendranagar, Surkhet: Government of Nepal/Ministry of Agriculture Development.
- Gyan, G. (2014). Retrieved from goatgyan: <http://www.goatgyan.com/>
- Khatiwada, B. (2015, 1 3). *Prioritise commercial goat farming*. Retrieved from ekantipur: <http://kathmandupost.ekantipur.com/printedition/news/2015-02-28/prioritise-commercial-goat-farming.html>
- MoAD/DoA. (2015). Retrieved from krishighar: <http://www.krishighar.com/>
- N K Kameswara Rao, D. G. (2014). Classification Rules Using Decision Tree for Dengue Disease. 340-343.
- smartkrishi. (2015). Retrieved from smartkrishi: <http://www.smartkrishi.org/>