ALDER COLLEGE

Sepfüzou
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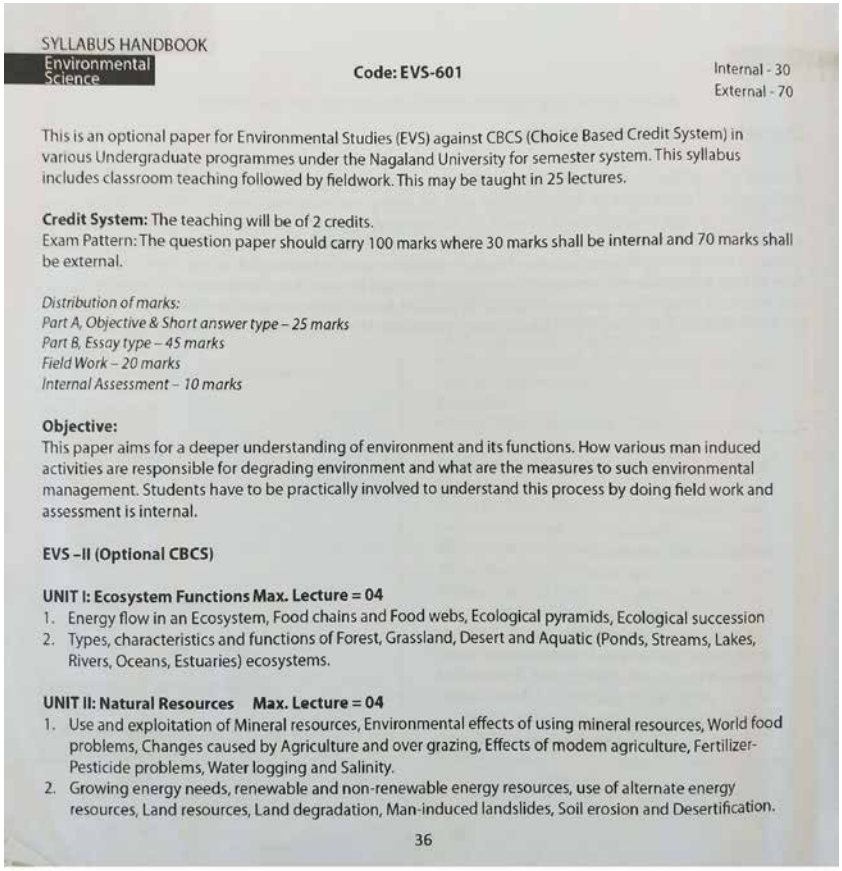
Supporting Document

Critirion 1: Curriculum Aspects

1.3.2 Students undertaking project work/field work/internship.

Syllabus



SYLLABUS HANDBOOK

Environmental Science

Code: EVS-601

Internal - 30
External - 70

This is an optional paper for Environmental Studies (EVS) against CBCS (Choice Based Credit System) in various Undergraduate programmes under the Nagaland University for semester system. This syllabus includes classroom teaching followed by fieldwork. This may be taught in 25 lectures.

Credit System: The teaching will be of 2 credits.
Exam Pattern: The question paper should carry 100 marks where 30 marks shall be internal and 70 marks shall be external.

Distribution of marks:
Part A, Objective & Short answer type – 25 marks
Part B, Essay type – 45 marks
Field Work – 20 marks
Internal Assessment – 10 marks

Objective:
This paper aims for a deeper understanding of environment and its functions. How various man induced activities are responsible for degrading environment and what are the measures to such environmental management. Students have to be practically involved to understand this process by doing field work and assessment is internal.

EVS –II (Optional CBCS)

UNIT I: Ecosystem Functions Max. Lecture = 04
1. Energy flow in an Ecosystem, Food chains and Food webs, Ecological pyramids, Ecological succession
2. Types, characteristics and functions of Forest, Grassland, Desert and Aquatic (Ponds, Streams, Lakes, Rivers, Oceans, Estuaries) ecosystems.

UNIT II: Natural Resources Max. Lecture = 04
1. Use and exploitation of Mineral resources, Environmental effects of using mineral resources, World food problems, Changes caused by Agriculture and over grazing, Effects of modem agriculture, Fertilizer-Pesticide problems, Water logging and Salinity.
2. Growing energy needs, renewable and non-renewable energy resources, use of alternate energy resources, Land resources, Land degradation, Man-induced landslides, Soil erosion and Desertification.

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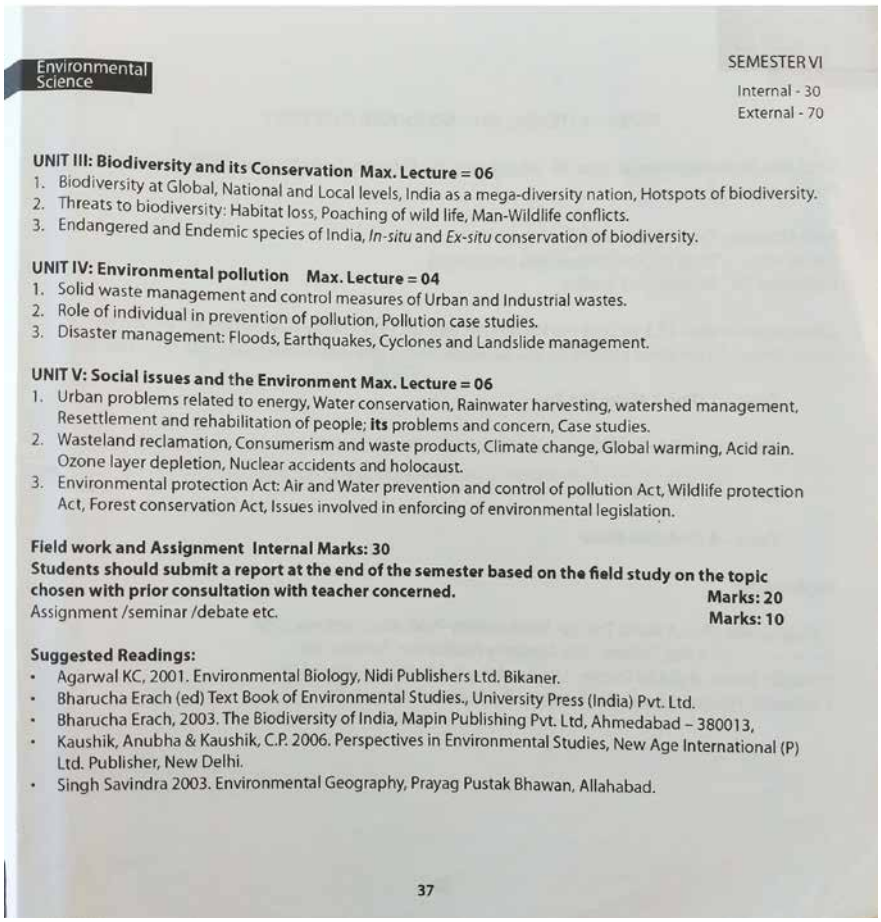

Environmental Science

SEMESTER VI

Internal - 30
External - 70

UNIT III: Biodiversity and its Conservation Max. Lecture = 06
1. Biodiversity at Global, National and Local levels, India as a mega-diversity nation, Hotspots of biodiversity.
2. Threats to biodiversity: Habitat loss, Poaching of wild life, Man-Wildlife conflicts.
3. Endangered and Endemic species of India, *In-situ* and *Ex-situ* conservation of biodiversity.

UNIT IV: Environmental pollution Max. Lecture = 04
1. Solid waste management and control measures of Urban and Industrial wastes.
2. Role of individual in prevention of pollution, Pollution case studies.
3. Disaster management: Floods, Earthquakes, Cyclones and Landslide management.

UNIT V: Social issues and the Environment Max. Lecture = 06
1. Urban problems related to energy, Water conservation, Rainwater harvesting, watershed management, Resettlement and rehabilitation of people; **its** problems and concern, Case studies.
2. Wasteland reclamation, Consumerism and waste products, Climate change, Global warming, Acid rain. Ozone layer depletion, Nuclear accidents and holocaust.
3. Environmental protection Act: Air and Water prevention and control of pollution Act, Wildlife protection Act, Forest conservation Act, Issues involved in enforcing of environmental legislation.

Field work and Assignment Internal Marks: 30
Students should submit a report at the end of the semester based on the field study on the topic chosen with prior consultation with teacher concerned. **Marks: 20**
Assignment /seminar /debate etc. **Marks: 10**

Suggested Readings:
- Agarwal KC, 2001. Environmental Biology, Nidi Publishers Ltd. Bikaner.
- Bharucha Erach (ed) Text Book of Environmental Studies., University Press (India) Pvt. Ltd.
- Bharucha Erach, 2003. The Biodiversity of India, Mapin Publishing Pvt. Ltd, Ahmedabad – 380013,
- Kaushik, Anubha & Kaushik, C.P. 2006. Perspectives in Environmental Studies, New Age International (P) Ltd. Publisher, New Delhi.
- Singh Savindra 2003. Environmental Geography, Prayag Pustak Bhawan, Allahabad.

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From

The Department of Environmental Studies

Alder College, Kohima.

August 17, 2022

To

The principal

Alder College, Sepfüzou Colony, Kohima

Dear Madam

Sub: **Seeking permission for the 5th semester Field study along with transportation.**

With all due respect, the department of EVS would like to conduct a field study for the 5th semester students on **20th August 2022** as per their syllabus. The field study will be based on the topic **"Study of our ecosystem and their functions"**.

The area selected for the study is **Kenei Peli 12 Badze, Rücie (P'Khel Kohima)** about 7.3Km from Kohima town. The time of departure will be **10:00 am** from the College campus.

The EVS department would like to request the College Administrative Authority to provide the necessary transportation facility for the said event.

Thanking you in Anticipation

Sungrongti

Department of Environmental Study

2020-2021 due to covid 19 pandemic all project work was cancelled.

2022-2023

List of students undertaking project work

On 20th August 2022, the department of EVS organized a filed study for the 5th semester as per the syllabus under the Nagaland University directive.

The field study was based on the topic "Study of our ecosystem and its functions".

The area selected for the study was Kenie Peli 12 Badze, Rücie (P Khel Kohima)about 7 km away from Kohima town.

The main objective of the field study was to understand the interconnect relationship between the biotic (living) and abiotic (non-living) factors within the selected ecosystem. The study of such factors determines the health of the ecosystem. During the field study, many valuable primary data were found which opens up many potential areas to be studied in the future.

With enthusiastic and open-minded approach shown by the students, the field study was a great success.

Sd/-
Sungrongti
Assistant Professor
DEPARTMENT OF EVS

Attendance

BA 5th Semester (2022)

Section - A	
Roll no.	Name
1	Abee
2	Akitoli Swu
3	Aloli Assumi
4	Ayusenla Longkumer
5	
6	
7	Heuchisilie
8	Jievimeno Seyie
9	Kekhriengunuo Chielie
10	Kesho Semp
11	Khrieletuo-Ü Zumvu
12	Khriezovinuo Chupuo
13	
14	Azhalhou Kire
15	
16	
17	Hamthapa C. Apoktse
18	
19	Kekhriesizo Merhieso
20	Keneingusa Rio
21	Keneisede Suhu
22	
23	
24	Khriesamhalie Sachu
25	Kohthrili Sangtam
27	Kuvota Medeo
28	Lache Khiamniungan
29	Lemdemong Yimchunger
30	
31	
32	Mhiesisesie Tho-u
33	Mhonjan N. Humtsoe
34	Namyiteulung
35	Napei Hodung
36	Ndalungswang
37	
38	Niepukhriezo Solo
39	
40	Punong Z
41	
42	Rhonthungo Tsanglao
43	Rokosezo Pier
45	S. Hongngai Phom
46	Dzieseneizo Viphe

Section - B	
Roll no.	Name
2	Nisheli Tiji
3	Nulatolu
4	Petso-o Doyie
5	Phanungshe
6	Renboni M. Humtsoe
7	Roji Apon
8	
13	Savilu Krocha
14	Seyiekuolie Seyie
15	
16	Tepeng Chugho
17	Thangaolo Krocha
18	Thsasokiu K. Yimchunger
19	
20	
21	Vebu Kezo
22	
23	Viyeto
24	W C Konlung Phom
25	Yanpen T. Humtsoe
26	Yanthao P.
27	
28	Zakiebeituo Chiese
29	Zakietuolie
30	
31	
32	N. Shangyan Konyak
33	Esther Kath
34	Simon Meya
35	Dziesevizo Ramai
36	Chochong
37	M. Moalemla
38	S. Limito Thongliu
40	Mhasineito Sachü
41	
42	
43	Konglong Chingmei A Phom
45	
46	Shecheni Yeptho
47	
48	Mharavizo Kesiezie
49	

Total number of students- 59

Supervisor's report

Report on EVS field study 6th sem 2023

On the 18th of March 2023, the 6th semester students of Alder College, Kohima embarked on a field study trip to Sheep farm, Poilwa Village. It was initiated by the department of Environmental Studies accompanied by an Assistant professor from the department of English. The semester's field study trip is a great event to bring environmental exposure among the students. The purpose of the visit was to study the surrounding area with the aim of understanding the environmental status and prepare a report to be evaluated as per the syllabus.

The students were randomly divided into groups of four and were allotted their research topic which were

Group 1: A case study on the Impact of Human Actions on the forest ecosystem in Sheep farm, Poilwa village.

Group 2:A case study on the conservational approach/efforts made in Sheep farm, Poilwa village.

Group 3:A case study on the impact of tourist/visitors in Sheep farm, Poilwa village.

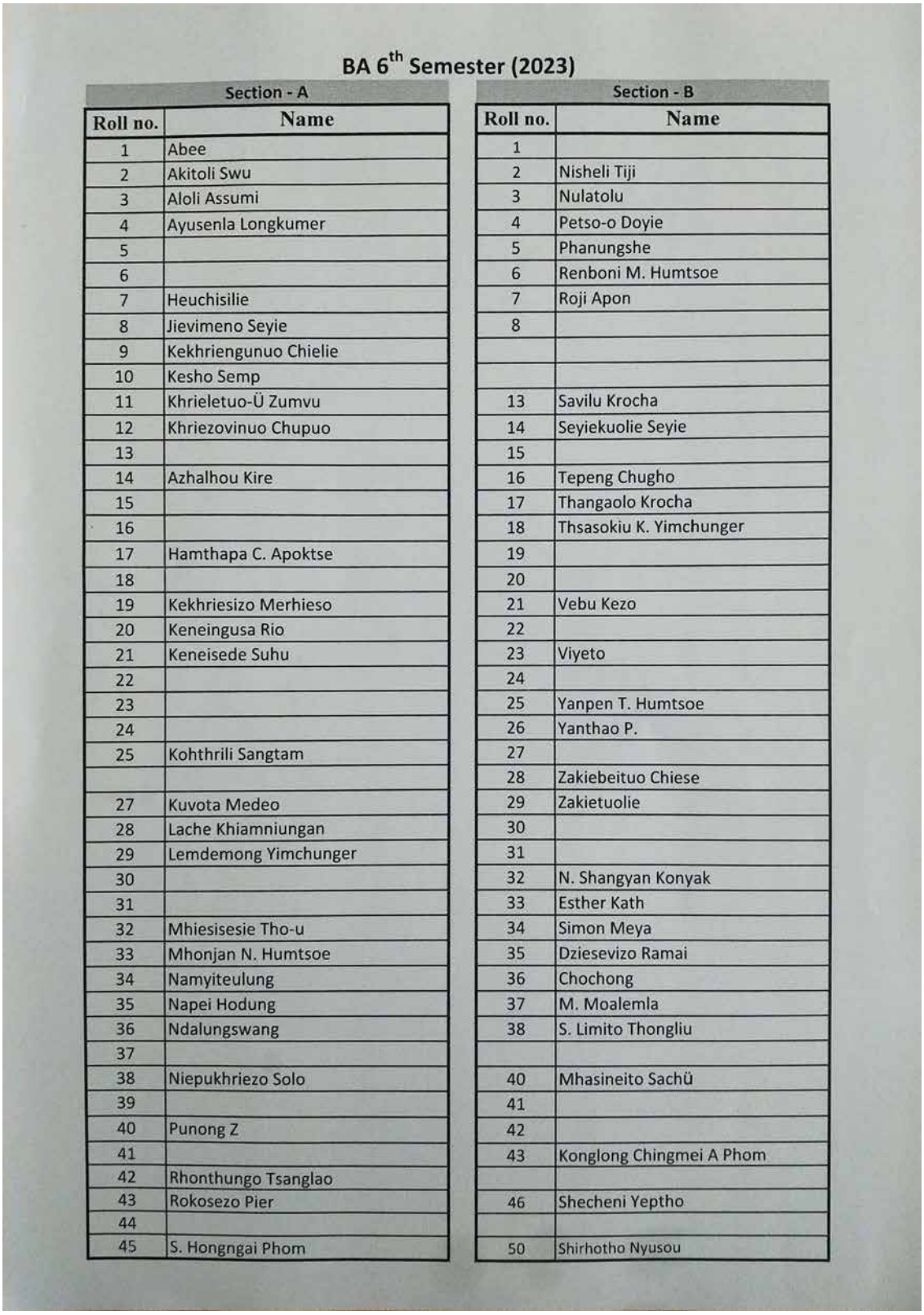
Group 4: A case study on the status of waste management practices in Sheep farm, Poilwa village.

Sd/-
Sungrongti
Assistant Professor
DEPARTMENT OF EVS

On the 18th of March 2023, the 6th semester students of Alder College, Kohima embarked on a field study trip to Sheep farm, Poilwa Village. It was initiated by the department of Environmental Studies accompanied by an Assistant professor from the department of English.

The purpose of the visit was to study the surrounding area with the aim of understanding the environmental status and prepare a report to be evaluated as per the syllabus.

Attendance



BA 6th Semester (2023)

Section - A	
Roll no.	Name
1	Abee
2	Akitoli Swu
3	Aloli Assumi
4	Ayusenla Longkumer
5	
6	
7	Heuchisilie
8	Jievimeno Seyie
9	Kekhriengunuo Chielie
10	Kesho Semp
11	Khrieletuo-Ü Zumvu
12	Khriezovinuo Chupuo
13	
14	Azhalhou Kire
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16	
17	Hamthapa C. Apoktse
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19	Kekhriesizo Merhieso
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23	
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25	Kohthrili Sangtam
27	Kuvota Medeo
28	Lache Khiamniungan
29	Lemdemong Yimchunger
30	
31	
32	Mhiesisesie Tho-u
33	Mhonjan N. Humtsoe
34	Namyiteulung
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38	Niepukhriezo Solo
39	
40	Punong Z
41	
42	Rhonthungo Tsanglao
43	Rokosezo Pier
44	
45	S. Hongngai Phom

Section - B	
Roll no.	Name
1	
2	Nisheli Tiji
3	Nulatolu
4	Petso-o Doyie
5	Phanungshe
6	Renboni M. Humtsoe
7	Roji Apon
8	
13	Savilu Krocha
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15	
16	Tepeng Chugho
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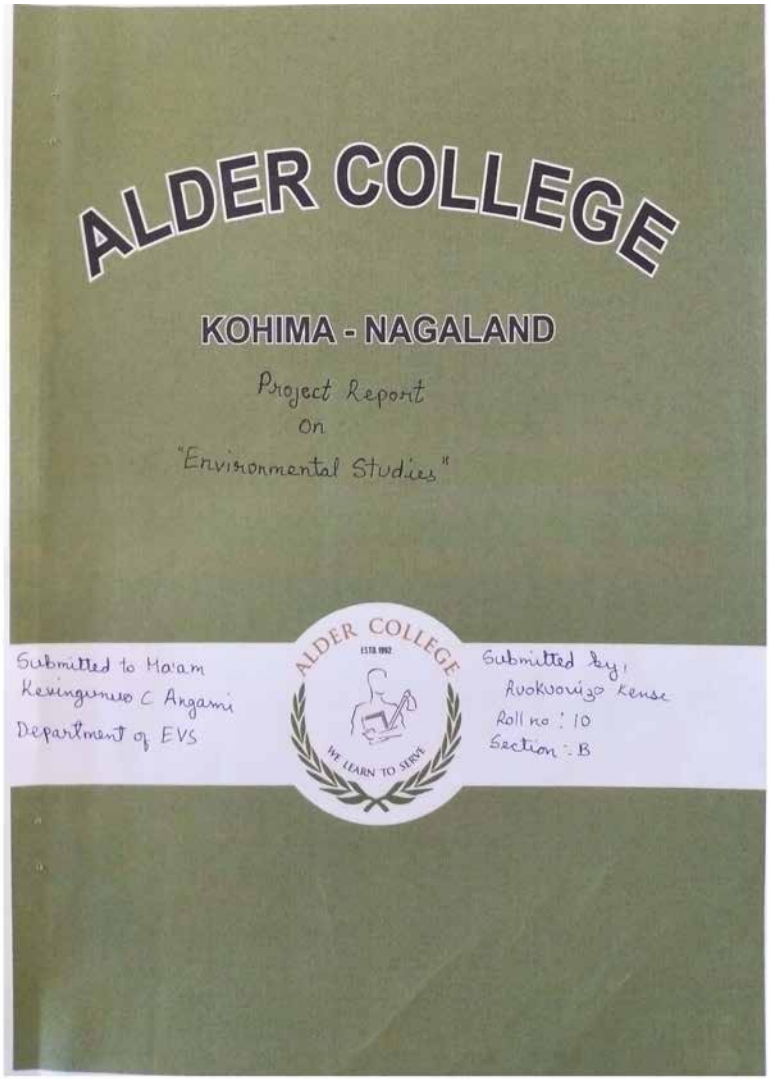
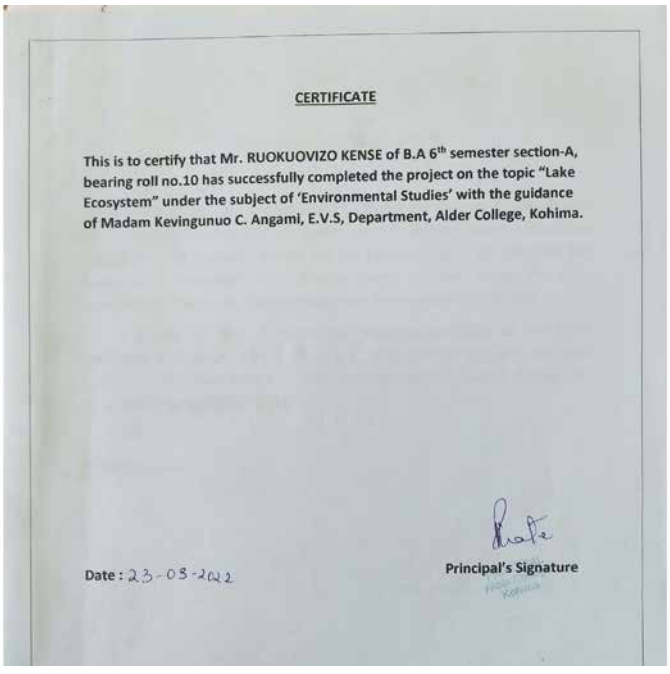
37	M. Moalemla
38	S. Limito Thongliu
40	Mhasineito Sachü
41	
42	
43	Konglong Chingmei A Phom
46	Shecheni Yeptho
50	Shirhotho Nyusou

Total number of students- 59

Student project report sample



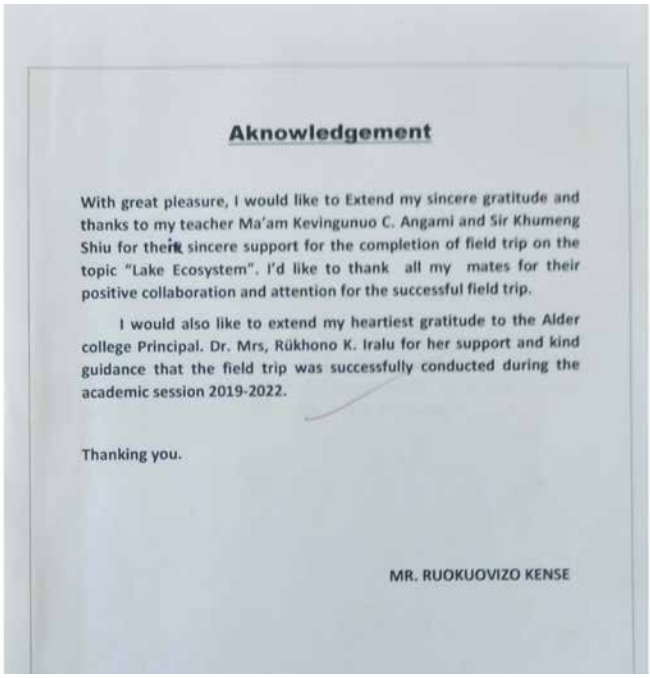


CERTIFICATE

This is to certify that Mr. RUOKUOVIZO KENSE of B.A 6th semester section-A, bearing roll no.10 has successfully completed the project on the topic "Lake Ecosystem" under the subject of 'Environmental Studies' with the guidance of Madam Kevingunuo C. Angami, E.V.S, Department, Alder College, Kohima.

Date : 23-03-2022

Principal's Signature



Aknowledgement

With great pleasure, I would like to Extend my sincere gratitude and thanks to my teacher Ma'am Kevingunuo C. Angami and Sir Khumeng Shiu for their sincere support for the completion of field trip on the topic "Lake Ecosystem". I'd like to thank all my mates for their positive collaboration and attention for the successful field trip.

I would also like to extend my heartiest gratitude to the Alder college Principal. Dr. Mrs, Rükhono K. Iralu for her support and kind guidance that the field trip was successfully conducted during the academic session 2019-2022.

Thanking you.

MR. RUOKUOVIZO KENSE

Aims

This field trip was conducted with the aim to provide an experience for exploring the geographical land, forms features, biodiversity of natural environment in Nsonji Lake, Sendenyu village , Under Seminyu district.

The main objective of conducting a field trip for students is to enhance their experiential with physical context and contextual learning. It is also a way to enhance classroom learning and also to expose students to different lifestyles and creating the awareness about environmental problems among people. It is also for the developing an attitude of Concern for the environment.

CONTENT

INTRODUCTION

A lake is a body of water that is surrounded by land. There are millions of lakes in the world. They are found in every continent and in every kind of environment - in mountains and deserts os plains and near seashore. A lake includes biotic plants, animals and micro-organisms, as well as abiotic physical and chemical interaction. Lake ecosystem are a prime example of lentic ecosystem which includes ponds, lake and wetlands, and much of these article applies to lentic ecosystem in general. Lake ecosystem are vital resources for aquatic wildlife and human needs. Lakes are inland bodies of water that lack any direct exchange with an ocean. Lake may also Contain either salt or fresh water. It can also help in regulating stream flow, recharge ground water aquifers and moderates droughts.

Fig. 0.1. Lake Ecosystem

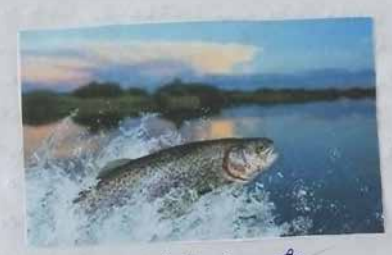


Fig 0.1.1. Lake Ecosystem

LAKE ECOSYSTEM

Lake, any relatively large body of slowly moving or standing water that occupies an inland basin of appreciable size. Definitions that precisely distinguish lakes, ponds, swamps, and even rivers and other bodies of nonoceanic water are not well established.

Water and its context: lakes respond to climatic forcing, atmospheric deposition and the properties of their catchments. Lake ecosystem are excellent sentinels for current climate change. Lakes are particularly good sentinels for current climate change for several reasons: they are well-defined ecosystem and studied in a sustained fashion; they respond directly to climate change and incorporate the effects of climate change within the catchment; they integrate responses over time, which can filter out random noise; and they are distributed worldwide and so cover many different geographical locations and climatic regions.

Lakes of all types share many ecological and biogeochemical processes and their study falls within the discipline of 'limnology'. Lakes are superb habitats for the study of ecosystem dynamics: interaction among biological, chemical and physical processes are frequently either quantitatively or qualitatively distinct from those on land or in air. Because the boundaries between water and land, and water and air are distinct, there is tight coupling among many ecosystem components.

Although lakes contain <0.01% of all the water on the Earth's surface, they hold > 98% of the liquid surface freshwater. Many organisms depends on freshwater for survival, and humans frequently depend on lakes for a great many 'goods and services' such as drinking water, waste removal, fisheries, agricultural irrigation industrial activity and recreation. For these reasons lakes are important ecosystem.

Lake ecosystem are influenced by their watersheds, the geological, chemical and biological processes that occur on the land and streams that lie uphill. The movement of chemicals, sediments, detritus and of many organisms is typically unidirectional from the watersheds to the lake, but fish may migrate upstream, and aquatic insects may emerge and disperse on to land. A lake and its watershed are often considered to be a single ecosystem.

Lake Thermal Structure

During summer, sunlight increases the temperature of lake surface water. Water at greater depths is warmed less. Wind at the surface causes the top several metres of lake water to mix homogeneously to form a warm surface layer called the 'epilimnion'. Below the level of wind mixing, temperature drops rapidly through a zone called the thermocline, and below this is a region of homogeneously cool water called 'hypolimnion'. These two-layer physical structure is called 'thermal stratification'. Summer stratification does not occur in shallow water bodies, nor in high latitude or high altitude lakes where summers are short. In winter, surface water directly under the ice is about 0°C and deeper water is slightly warmer. Wind cannot mix water below the ice so winter stratification persists while the lake is frozen. Winter stratification does not or occur in tropical or subtropical lakes in many large temperate-zone lakes, or in many salt lakes.

Lake Habitants and Food Chains

In the pelagic zone of the ~~lake~~ lake, phytoplankton carry out photosynthesis at the base of the food web. These unicellular or simple colonial algae or cyanobacteria sink only very slowly and are easily resuspended by wind-driven water movements. Very small phytoplankton and bacteria are consumed by unicellular zooplankton, larger phytoplankton are consumed by larger zooplankton. Some taxa are generalists that filter most algae encountered and can have a major impact on phytoplankton densities in lakes. Other taxa tend to select the more nutritious phytoplankton to consume.

Fine detritus suspended in the pelagic zone is colonized by heterotrophic bacteria, which is often consumed by protists and generalist grazers. The protists are in turn consumed by other protists or by copepods. This return of energy to the pelagic food chain is called the 'microbial loop'. Its ultimate importance in lake ecosystem remains a

point of debate. Other detritus produced in the epilimnion may be trapped at the thermocline or sink into the hypolimnion where it is decomposed by bacteria.

Grazing zooplankton are consumed by predatory invertebrates or vertebrates. Zooplanktivorous fish also consume predatory invertebrates. Piscivorous fish sit atop the natural food webs of most lakes although in some cases there are piscivorous birds, otters, seals, crocodiles or alligators. Humans act as top predators in a great many lakes worldwide.

Submersed rooted plants growing at the lake margin define the littoral zone, and provide habitat for attached algae, insects and other invertebrates, and fishes that use this area for breeding, cover and foraging. Some fish consume rooted plants, but most eat invertebrates or other fish. The littoral zone captures much of the chemicals, sediments and detritus washing before they reach the pelagic zone. Because macrophytes requires the light to grow up from the lake bottom each spring, the distance the littoral zone extends into the lake depends upon how steeply the lake bottom drops off near shore, and how turbid the lake water is with phytoplankton or suspended sediments.

The profundal zone is the bottom water and sediments of deep lakes where there is insufficient light for photosynthesis. In this region bacteria and fungi obtain energy by decomposing detritus, or by chemoautotrophy. Insect larvae and annelid worms live in the soft bottom sediments and consume detritus. All organisms that live in, on, or in association with the lake bottom are called 'benthos'. There are exchanges among all lake habitants. Nutrients and dissolved organic carbon ('DOC') molecules released by macrophytes in the littoral zone diffuse to the pelagic zone where they are used by algae and bacteria. Detritus from the epilimnion sinks to the hypolimnetic profundal zone where nutrients are released. Nutrients in the hypolimnion are returned to the epilimnion via diffusion, turbulent mixing across the thermocline, and at turnover. Planktonic animals migrate between the epilimnion and hypolimnion on a daily cycle, excreting nutrients as they travel. Fish move between the littoral and pelagic zones feeding and breeding in one place and excreting and defecating nutrients in another.

Fig 0.6 Role of Algae growth in lakes.

Fig 0.7 Lake Nutrients

The Role of Nutrients

Identifying the determinants of algal growth in lakes is crucial both for understanding lake ecosystem functioning, and because extensive algal blooms are a nuisance that can be caused by human activity. Primary production in lake ecosystem depends on nutrients and light as essential resources. Phytoplankton take up nutrients dissolved in lake water; rooted macrophytes obtain nutrients from the sediments. Primary producers are potentially limited by carbon, nitrogen or phosphorus. Of these, Carbon is the most common elements in algal tissue and is also the most abundant in solution in lake water (CO_2, HCO_3 or CO_3^{2-}). Nitrogen (NO_3^-, NH_4^+, N_2) and phosphorus (PO_4^{3-}) are much less available, suggesting that phosphorus, followed by nitrogen, is most likely to limit algal production in lakes. Limitation by other nutrient can occur, for example diatoms, algae characterised by hard cell walls containing silica, can be limited by silica availability. Light is also taken up and consumed like other algal resources. Light limitation can occur during algal blooms when cells close to the surface shade algae deeper in the water

column, or when phytoplankton shade the lake bottom and prevent macrophyte growth.

Suggestion

Some steps or measure to control Lake Ecosystem.

(1) Do not litter near a water body such as lake.
(2) Plant trees in catchment areas of lakes and also on banks. Trees not only check soil erosion but also retain soil moisture. ~~and feed~~
(3) Do not block / stop natural drains by constructing on drains or dumping waste
(4) Try reducing the use of lawn fertilizers, and preventing soil erosion by landscaping with native plants.
(5) We can also compost yard waste rather than allowing it to enter a local lake or stream.

Conclusion

From this Report, I came to learn that Lake ecosystem are vital resources for aquatic wildlife and human needs, and any alteration of their environment quality and water renewal rates has wide-ranging ecological and societal implication. And also it can store large amounts of water and can be used during shortage. They are important ecosystem that, when respected and cared for, can sustain a healthy balance of aquatic life, provide us with much enjoyment and help support our socio-economic life.

Bibliography

* https://www.voixfammesnb-voiceo.ca/content/department/content/water/lake/importance.html.
* Lake ecosystem Wiki.
* en.m.wikipedia.org>wiki>Lake ecosystem.
* www.ecoshape.org>Lakes-environment.

2/3/2022

PRINCIPAL
Alder College
Kohima

Student project report sample

ALDER COLLEGE
KOHIMA, NAGALAND

PROJECT WORK

TOPIC: A case study on the conservational approach effort made in Poilwa village (Sheep farm), Nagaland.

Date: 12.04.2023

Submitted to,

Sir, Sungronti
Assistant Professor
(Department of EVS)
Alder College, Kohima

ALDER COLLEGE Library KOHIMA : NAGALAND

Submitted by,

Rhonthungo Tsanglao
B.A 6th semester
Roll.no: 42 Sec: A
Alder College, Kohima

CERTIFICATE

ALDER COLLEGE
ESTD. 1992
WE LEARN TO SERVE

This is to certify that Mr. /Miss Rhonthungo Tsanglao, student of B.A 6th semester, Alder College, Kohima bearing the roll no. AG20060023 registration no. 20060060 of 2020 has successfully completed the research on the project "A case study on the conservational approach made in Poilwa village (sheep farm)" under the supervision of Mr. Sungrongti (Asst. professor, Department of EVS) during the year 2023 in partial fulfillment of the requirement for internal assessment as per the Nagaland University Directive.

12/04/2023

Supervisor Signature

13-4-2023

Principal Signature

PRINCIPAL
Alder College
Kohima

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to the department of EVS for providing me this opportunity to do this project work on the topic "case study on the conservation approach effort made in Poilwa's sheep farm".

Secondly, I would like to extend my gratitude to our ma'am principal and the college authority for providing the facility and requirements to carry out the project work.

Lastly, I would like to thank the authority of Poilwa village for allowing use to conduct the study/survey, and also the people that help cooperate in the survey process.

TABLE OF CONTENT

ABSTRACT

The study or research was conducted in the sheep farm of Poilwa village. Poilwa village is a village in the Peren district of Nagaland. It is located in the Pedi (Ngwalwa) circle.

The main aim of this project was to fine out the conservational approach effort made in the sheep farm, of Poilwa village. This project was carried out using the survey method of research. Questionnaires were prepared after proper observation of the site, where these questions were asked to the locals, visitors/tourist and the caretaker of the farm relating to the topic of research. In this survey equipments such as a pen and a note pad to note down the questionnaires and the feedbacks that were given by the participants. Mobile phones were also used for the purpose of recording and taking pictures. The participants were very responsive to the questions asked.

Throughout this survey that was carried out it was found that the locals had less knowledge about the conservational approach. No project on conservational method has being exercised or carried out so far as this project data was collected. Trees were less in number in that area and wildlife such as birds were hardly seen, though this place was surrounded by forest. No restrooms/toilet or trash being were found in the area, which is must for a tourist area.

1. INTRODUCTION

Conservation is the act of protecting Earth's natural resources and future generations. Establishing protected areas not only helps conserve the natural landscape and geography, but also the wildlife that lives there.

Conservation is similar to preservation, but while both relate to the protection of nature, they strive to accomplish this task in different ways. Conservation seeks the sustainable use of nature by humans, for activities such as hunting, logging, or mining, while preservation means protecting nature from human use.

Conservation practices and policies-ranging from the removal of invasive species, to setting aside protected land for wildlife and plants. Conservation actions can enhance ecosystem services encourage sustainability, and help us maintain a healthier environment. Conservation can maintain natural resources for future generations to use, focusing on the well-being and longevity of our planet. Nature conservation comes in many forms, with each one aiming to benefit organisms on earth. Below are a few methods of nature conservation:

1. *Planting trees*
2. *Using alternative energy resources*
3. *Establishing protected areas*
4. *Protecting biodiversity*
5. *Hunting restrictions*
6. *Proper planting*

The conservation of common pool resources by local communities has a long history in Nagaland. Such conservational initiatives have being traditionally practiced in different forms with varied institutional structures. Several such practices are initiated by community organization like youth organization, women groups, religious/cultural groups and village councils with the community as a spontaneous reaction to address the problems of forest/environment degradation. Nagaland has 407 documented Community Conserved Areas (CCAs) out of which 343 Nos of CCAs, which constitute 84.3% are self initiated and 62 Nos of CCAs (15.2%) are being initiated by the Forest Department.

1.1 STUDY AREA

Sheep farm, Poilwa village

Poilwa is a village in the Peren district of Nagaland, India. It is located in the Pedi (Ngwalwa) circle. According to the 2011 census of India, Poilwa has 384 households, the effective literacy rate (i.e. the literacy rate of population excluding children aged 6 and below) is 71.56%.

Poilwa

Village

Location in Nagaland, India
Show map of Nagaland
Show map of India
Show all

Coordinates: 25.563678°N 93.879382°E

Country	India
State	Nagaland
District	Peren
Circle	Pedi (Ngwalwa)
Population (2011)	
• **Total**	2,103
Time zone	UTC+5:30 (IST)
Census code	268300

2. METHODOLOGY

To carry out the study on the conservational approach effort made in Poilwa village's sheep farm under Peren district of Nagaland on March 19 of 2023, survey method was used which involves respondent and questionnaires to provide qualitative and quantitative answers to the problems related to the above given topic. To conduct this activity various equipments that were used are listed below:

- *Pen/pencil*
- *Note pad*
- *Mobile phone*

The questionnaires were prepared based on the location and condition of the area of study. With a bid of knowledge from the internet related to the topic questionnaires were prepared. Also after the observation and examine of the area of study.

The questionnaires that were prepared were then asked to the locals and also to the tourist that were present at the area of study for their opinion and knowledge that they had about it. The question asked and the reviews that were given were listed down. There were around 8 questions that where prepared for the survey and a total of 10 people were interviewed for their opinion on the questions. The question were prepared such that it was to be answered simply a 'yes' or a 'no' or 'not sure', as such it becomes more simple and easy for the participants. The participants interviewed were mostly the inhabitants and the care takers of the sheep farm in Poilwa village and therefore were very responsive to the questions asked.

Throughout this activity that was carried out in the survey for collection of data mobile phone was used for the purpose of recording and taking pictures and also assessed to the internet for relatable information on the particular topic of the study. It was noted down for later reference. For making the results and the collected data more precise, it is being typed and the data are being plotted into graph using Microsoft excel ver.2007.

3. OBJECTIVES

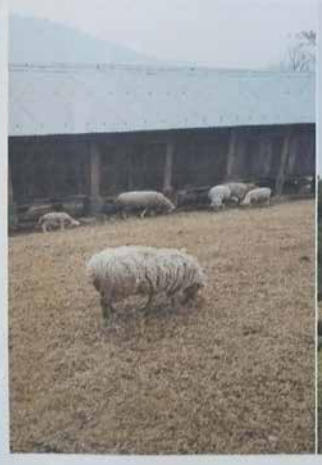
- *To find out how the wastes are being managed properly to conserve the environment.*
- *The sheep being look after properly.*
- *Any medical facilities made available for conserving the animals.*
- *Condition of the fodder that is being given.*
- *Role of the government in the conservational activities of the farm.*
- *Restriction on hunting and poaching.*
- *Restriction on cutting down of trees.*
- *Trees being planted for the purpose of conservation.*

4. RESEARCH FINDINGS

On reaching the site of the study, with the main purpose to conduct a study/survey on the conservational approach effort made on that particular area (sheep farm, Poilwa village), the area has less number of trees, many plastic waste and trash mostly littered by tourist/visitor and a vast area of grassland. No proper dumping ground or trash bins were found and proper sanitation/toilet was made available. Some visitors at the site of the study were found drinking alcohol and having a picnic. There were around two huts located inside the sheep farm in which two families who were looking after the sheep lived. Around 14 to 15 sheep were spotted during the initial observation at the sheep farm, which consist of both male and female. Some few numbers of ducks and pigs were also spotted at the site. A tree was also found cut down but the locals of the village at the site of study and two men with a chainsaw.

During the survey, most of the visitor's opinion on the conservational approach effort made in Poilwa village was a mixture of good to average. The tourist had no idea about the conservational approach that is being made in the area of study. According to the source from the caretaker of the sheep farm there is no proper conservational approach made to safeguard the life of the animals, plants, wildlife or environment in the area. They also stated that people are seen cutting down of trees for different purpose but there is no such activities such as planting of trees or conservational method applied to protect plants and trees so far. Further hunting of wildlife is restricted but no proper action taking to practice it and therefore people are also found going for hunting but no penalties were imposed on them. From other sources i.e. from some locals of the village of Poilwa, their opinion is that they have the knowledge or they are also being educated about the conservational approach of the environment, however there is no proper workshop conducted or awareness given to them to put this into practice and also for the fact that conservational activities made are not being strictly check and it therefore results in the lack of conservational approach practices in the village/area.

5. GALLERY



APPENDIX

Q.1) Is the waste manage properly for the conservation of the farm and the environment?

Sl.no	Resp.1	Resp.2	Resp.3	Resp.4	Resp.5	Resp.6	Resp.7	Resp.8	Resp.9	Resp.10
yes				×	×			×		
no	×	×	×				×		×	×
Not sure						×				

Yes: 3 No: 6 Not sure: 1

Q.2) Are the sheep being looked after properly?

Sl.no	Resp.1	Resp.2	Resp.3	Resp.4	Resp.5	Resp.6	Resp.7	Resp.8	Resp.9	Resp.10
yes	×							×		×
no		×							×	
Not sure			×	×	×	×	×			

Yes: 3 No: 2 Not sure: 5

Q.3) Are there any medical facilities made available to look after the sheep?

Sl.no	Resp.1	Resp.2	Resp.3	Resp.4	Resp.5	Resp.6	Resp.7	Resp.8	Resp.9	Resp.10
Yes	×	×	×	×						
No									×	×
Not sure					×	×	×	×		

Yes: 4 No: 2 Not sure: 4

Q.4) what is the condition of the fodder? Is it of good quality?

Sl.no	Resp.1	Resp.2	Resp.3	Resp.4	Resp.5	Resp.6	Resp.7	Resp.8	Resp.9	Resp.10
Yes	×	×	×				×	×		
No									×	×
Not sure				×	×	×				

Yes: 5 No: 2 Not sure: 3

Q.5) Are there any restriction on cutting down of trees in this area/village?

Sl.no	Resp.1	Resp.2	Resp.3	Resp.4	Resp.5	Resp.6	Resp.7	Resp.8	Resp.9	Resp.10
Yes	×	×	×			×	×			
No				×				×	×	×
Not sure					×					

Yes: 5 No: 4 Not sure: 1

Q.6) Any activities carried out in conserving the forest or planting of trees in this area/village?

Sl.no	Resp.1	Resp.2	Resp.3	Resp.4	Resp.5	Resp.6	Resp.7	Resp.8	Resp.9	Resp.10
Yes	×	×				×	×	×	×	
No			×							×
Not sure				×	×					

Yes: 6 No: 2 Not sure: 2

Q.7) For conserving the area/environment is the government of Nagaland helping in any way?

Sl.no	Resp.1	Resp.2	Resp.3	Resp.4	Resp.5	Resp.6	Resp.7	Resp.8	Resp.9	Resp.10
Yes	×	×	×	×				×	×	×
No						×	×			
Not sure					×					

Yes: 7 No: 2 Not sure: 1

Q.8) Does the people of the village go for hunting in this area?

Sl.no	Resp.1	Resp.2	Resp.3	Resp.4	Resp.5	Resp.6	Resp.7	Resp.8	Resp.9	Resp.10
Yes	×	×	×	×	×			×	×	
No						×				
Not sure							×			×

Yes: 7 No: 1 Not sure: 2

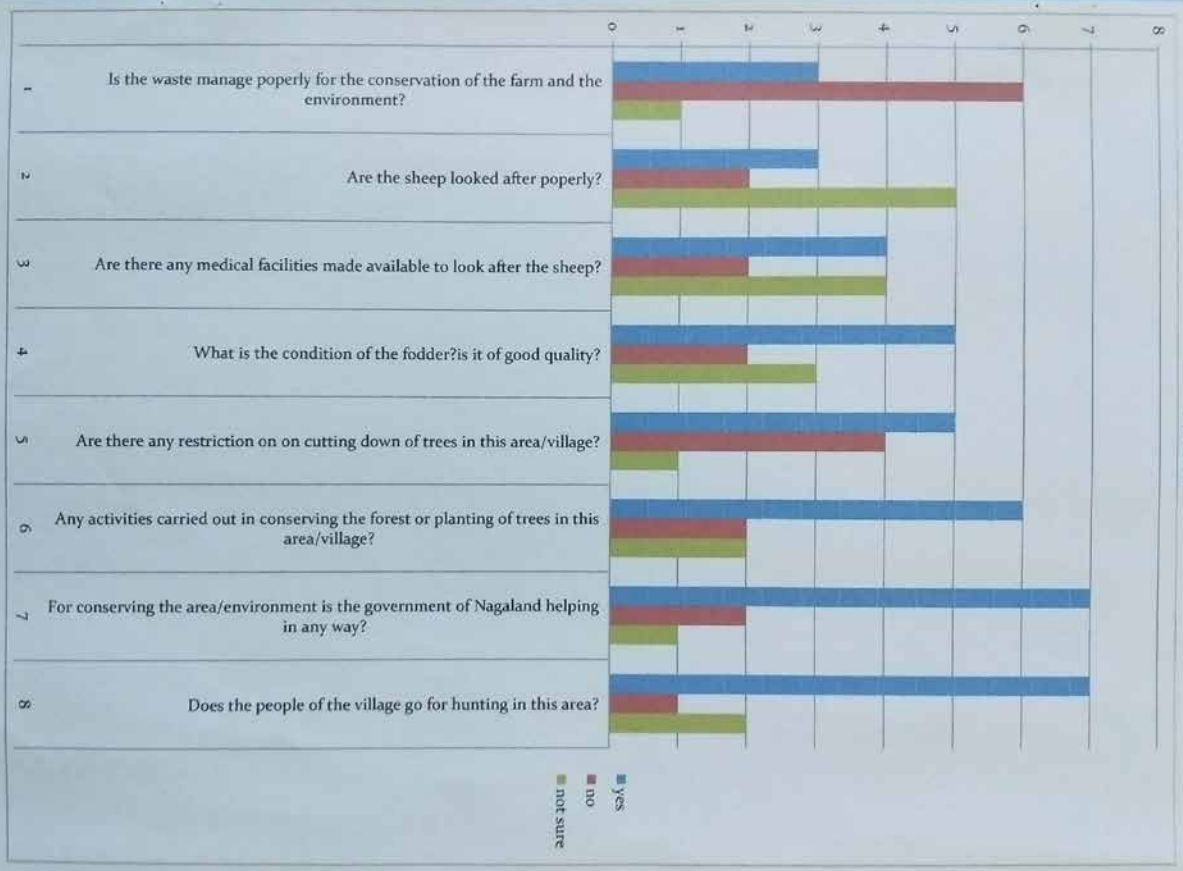
6. RESULTS

During the research, it was found out that there was no restroom for emergencies, the most demanded facilities, was a proper restroom for both the genders. As we know the government of India is heavily invested in the Swachh Bharat Mission to make India free from open defecation with Nagaland being the 4th state in northeast India to be declared ODF however, basic necessities like a proper washroom or restroom is a must for any tourist site/location, authority responsible for the maintenance of Poilwa's sheep farm should attained to such public grievances. It was also found that no trash bins were found and therefore many trash were found everywhere in the site/area. The visitors on the other hand should also not litter the area, whatever is left after eating or drinking from that area must be take back and throw it in a proper dumping area. The youth or the authorities must take initiatives in cleaning up the area and putting restriction on the waste being thrown in the area as to keep the environment clean, which help conserve the environment.

The animals that were spotted during the research were also found to be unhealthy and not properly maintain or looked after. This also need to be taken into serious consideration and proper environment and fodder must to provided to the sheep as the main purpose of the area is for the sheep. The visitors should also be made aware or restricted to go near the animal as to make sure that no harm is cause to the animals and also harm themselves. The authorities of the village must also look into the problem of deforestation around the area and such rule or regulation that are made to protect the forest and wildlife must be check strictly as to conserve the environment

From the above data it is also found that no conservational activities has being carried out so far and this is one of the vital issued to be taken care of by the locals or the authority of the sheep farm or the village. When it come to environmental issue conservation method is one of the best way or method to protect it and therefore a workshop must be organized in educating the people of the village or the youth must take the initiatives in carrying out such activities as a small step in the conservational approach.

During the research it was also found that hunting of wildlife is also practice and it is a serious issue when it comes to the conservation of wildlife. This activity mostly carried out but the locals or the people of the village. The villagers must be restricted and strict penalties and fines should be imposed on violation, and awareness should be given on the impacts of hunting.



DATA

7. REFFERENCES

- https://morungexpress.com/chalenges-to-conservation-efforts-in-nagaland-discussed
- https://forest.nagaland.gov.in/protection-of-forest/
- https://en.m.wikipedia.org/wiki/Poilwa
- https://www.google.com/search?q=sheep+farm+nagaland/
- https://forest.nagaland.gov.in/biodiversity/

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