

KALIABOR COLLEGE

Kuwaritol ; Kaliabor : Nagaon Assam



b



EXTENSION ACTIVITIES

Report on : Survey on Social Issue Pachani Chook



SUBMITTED TO THE DEPARTMENT OF EDUCATION, KALIABOR COLLEGE
For the Fulfillment of Skill Paper : SEC- 0204303

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Under the Guidance of

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Kaliabor College

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ଏକାକ୍ଷର - ଶାସିକ୍ଷଣ - ଶିକ୍ଷାକ୍ଷଣ - କାବିକ୍ଷଣ - ଶାସ - ଶର୍ଚ୍ଚାକ୍ଷଣ -
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ଖ) ଛାନ୍ଦାର୍ଥ - ଏକାକ୍ଷର କ୍ଷଣ କାବିକ୍ଷଣ - କାବିକ୍ଷଣ ତୁଳ୍ପ -
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26/ ଡେକର ଓଜା	1	1
27/ ଶ୍ରୀବାଳା ଶାବଣୀ	X	1
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ସମୀକ୍ଷଣ ୪ —

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ଅପ-ଆମି କୁଦିତ୍ତର କୋଦିତ୍ତର-ଅପ-
କୋଦିତ୍ତର-କିତାନ୍ତର-ଅପ-କୋଦିତ୍ତର-
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୧୦ କୋଦିତ୍ତର ।

সামাজিক

বর্তমান সমাজত নিচায়ুক্ত দ্রব্য গ্ৰহণক
অস্বাস্তি দ্ৰব্য সতিত বৃদ্ধি জোবান
সামাজিকিত হৈছে । বর্তমান যুগক্ষে
যদি মহিলাক এই নিচায়ুক্ত দ্রব্য গ্ৰহণ
করা অস্বাস্তি বিস্তার সামাজিক অস্বাস্ত
দেখিবলৈ পাওঁ । মূৰা সামাজিক । তাহে সামাজিক
অস্বাস্তি নতুন অস্বাস্তি ইয়াক অতিবেগি কৰি
সামাজিক আশ্রিত অস্বাস্তি কৰিবলৈ হইল
চাকলো যক্ষা নিচায়ুক্ত দ্রব্য গ্ৰহণ
অস্বাস্তি বাস্তবিক কৰিব লাগিব । কৰিব কৰ
স্বাস্তি নিচায়ুক্ত দ্রব্য কৰিত কৰা সামাজিক অস্বাস্তি
অস্বাস্তি আৰু অস্বাস্তি কৰিব নীতি
নিৰ্দেশনা জাৰি কৰিব লাগিব । অস্বাস্তি
সামাজিক আশ্রিত অস্বাস্তি ।

**ASSESSING THE SUSTAINABILITY AND ECONOMIC
PROFITABILITY OF RICE CULTIVATION AND PREFERENCE
FOR TRADITIONAL AND HYBRID RICE CULTIVARS IN
FEW SELECTED VILLAGES OF NAGAON, ASSAM**

**A Dissertation submitted for the fulfillment of the
requirement for the award of BSc degree in Botany,
Kaliabor College**

Submitted by-

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CERTIFICATE

This is to certify that the dissertation entitled, "ASSESSING THE SUSTAINABILITY AND ECONOMIC PROFITABILITY OF RICE CULTIVATION AND PREFERENCE FOR TRADITIONAL AND HYBRID RICE CULTIVARS IN FEW SELECTED VILLAGES OF NAGAON, ASSAM" submitted to Kaliabor College (Affiliated under Gauhati University) in partial fulfillment of the requirements for the award of the Degree of Bachelor of Science in Botany, is a record of original research work done by **Mr. Owakib Uddin Ahmed** (Roll No: US-211-300-0034, Registration No: 21078808), a student of B.Sc 6th Semester (Botany) at Kaliabor College, Kuwaritol, Nagaon.

This dissertation was carried out under the guidance and supervision of **Dr. Dipankar Borah**, Dept. of Botany during the period of study.

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Thank you.

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1. Introduction

1.1. General introduction

Rice (*Oryza sativa*) is the most important food crop in the world. Almost 40% of the world's population eats rice as their main food. Most of the people who rely on rice as their main food live in less developed countries. Archeological evidence shows that rice has been cultivated in India since 1500-1000 B.C. and has been a staple food since ancient times, especially in the humid regions of Asia and to a lesser extent in West Africa. Its introduction to Europe and the Americas has increased its use in human diets. There are 42 countries that produce rice, but China and India are the major producers.

Rice is grown in various agro-climatic conditions, from mountainous regions (such as Jammu) to low-lying delta areas (such as the Sundarbans), covering an area from 53° latitude north to 35° south, but about 90% of the crop is grown and consumed in Asia. Rice provides 60% of the food intake in Southeast Asia and about 35% in East Asia and South Asia. The highest level of rice consumption per person (130-180 kg per year, 55-80% of total caloric intake) occurs in India, Nepal, Bhutan, Bangladesh, Cambodia, Indonesia, Laos, Myanmar (Burma), Thailand, and Vietnam.

In many cultures around the world, rice is central to people's lives and cultures. Rice is an excellent source of carbohydrates and energy. Over the last 50 years, the global rice area has increased by 1.37 times, from 115.50 to 159 million hectares, and its production has tripled, from 216 to 685 million tons. India has the largest area under rice cultivation (45 million hectares), producing nearly a quarter of Asia's production and ranking second after China. In India, rice production and

4. Conclusion

Economic viability is a major consideration for sustainable farming. However, despite this, for a crop requiring approximately 150 days of growth and processing time, the profit margin remains very low, making it an unsustainable option. The only way to sustain profitability is by cultivating rice in two seasons in a year, that will help double their income to a mere INR 40,000-50,000 comparable to the income of an average middle class person residing in semi-urban set up of India.

With extensive labour intensive work, shortage of labor, lower profit margin for the producers, proper channel of market, the younger generation has turned up cultivation of rice, leaving it no more sustainable. Compared to this similar efforts on other crops like dragon fruit, watermelons, tomato, and other vegetables yields more profit than rice, hence a shift can be seen. Traditional rice cultivation of indigenous cultivars is declining in Nagaon, as evidenced by the preference for hybrid varieties, despite their lower selling price. One reason for this decline could be the low marketing efficiency of traditional rice cultivars. Farmers are compelled to sell traditional rice as raw grains rather than de-husked grains due to the lack of suitable milling facilities for traditional rice and marketing channels. Moreover, intercropping other annual plants between rice growing seasons is also a viable option, as seen in practice in the current study area. Additionally, it is noted that farmers still prefer a few local indigenous cultivars due to their low input costs and customer demand. But to safeguard these cultivars, more concentrated efforts is in need.

In the present study it was observed that the operating channel is “Producer - Itinerant Merchant - Miller - Wholesaler - Retailer - Consumer”

The market price of paddy is significantly lower than that of rice, often fetching less than half the price of processed rice. However, farmers face challenges in finding efficient markets to sell rice in larger quantities, and there is a lack of adequate storage facilities for rice. Middlemen play a significant role in this process, purchasing paddy from farmers at prices ranging from 18 to 30 INR/kg. After milling, they sell the processed rice at prices exceeding 40 to 90 INR/kg. The milling cost is approximately 1 INR per kg.

Conversion of agricultural land for non-agricultural purposes as well as selling of the top soil to brick kilns raises the concern for sustainability of rice cultivation in the study area.

The limitations of this study include its six-month duration, which confines the analysis to a single growing season, and a limited sample size. Consequently, the findings may not fully represent the current scenario. However, this study provides a baseline for more comprehensive and focused future research on the subject.



Figure 2. Seedlings in preparation beds in Na-Pubtharia



Figure 3. Recently transplanted paddy field of Dolapani



Figure 8. Threshing paddy using thresher in paddy fields of Pathek suk

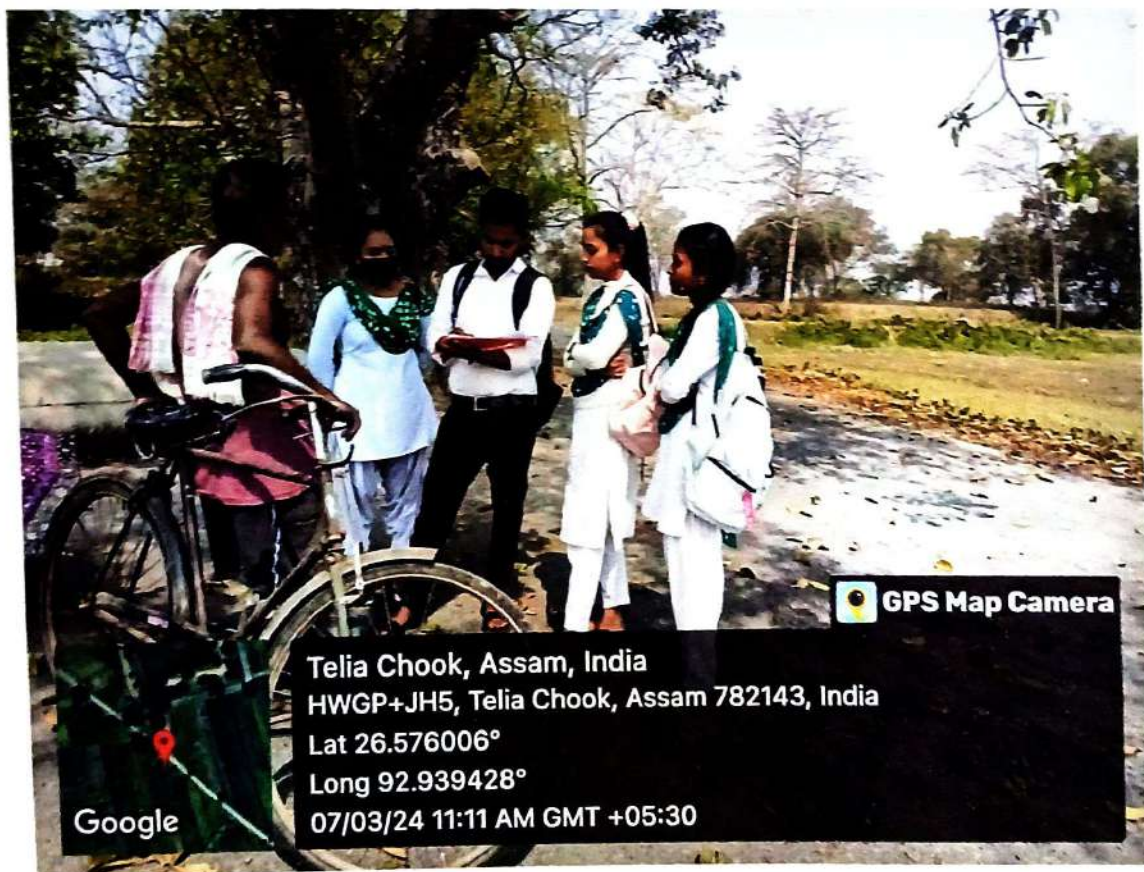


Figure 9. Data collection using a semi-structured questionnaire from respondent Mohiram Bora in Pubthoria

A REPORT ON HIMALAYAN BOTANIC ARK AS A MAN MADE TOURISM



**Submitted for partial fulfillment of the requirement for the degree of
B.Voc TSI2nd Sem Examination**

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* Certificate -

This is to certify that Mr. Champak mandal , a student of B.voc TSI 2nd semester, has conducted a research on the topic "A field study on Himalayan Botanic Ark as a man-made tourism resources at Balipara " under my supervision and guidance . He has fulfilled all the requirements for submitting the report . It is His own investments and original one. Neither the whole no any part of this dissertation has been submitted by any other University or institute related to similar requirements.


Mrs. Anuradha Hazam

Department of B.voc TSI

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I own my deep sense of gratitude and sincere thanks to our guide Mrs. Anuradha Hazam (asst. professor) department of B.VOC in tourism and service industry. Kaliabor college for valuable guidance and encouragement. She practically help us in every stage of preparation and completion of this field visit report.

*** Preface -**

It is a good opportunity for me to have the tourism and service industry in kaliabor college, Nagaon

I am submitting a report on "Himalayan Botanic Ark as a man-made tourism resource" subject to the limitation of the time efforts and resouces every possible attempts has been made to study the problem deeply. The whole project is measured deeply.

The project is measured through the question, and the result was obtained.

Chapter 1 : Introduction -

The Himalayan Botanic Ark is the seed of all our operation, growing since the first sapling were planted in 2005 founded by Prabir Banerjea and Ranjit Barthakur in 2007 , Balipara foundation is preserving the natural habitats in the eastern Himalayas by engaging local communities in activities like afforestation and agroforestry. Formally launched in 2016 The Ark has radically transformed the landscape of the 22 acre campus it shares with our social enterprise wild Mahseer , restoring once recimateol green cover.

1.1 Man-made tourism resources –

are human created attraction or facilities designed to attract visitors to a particular area. These can include amusement parks, museums, botanical gardens, historical sites, architectural landmarks, entertainment complexes, and cultural centers, among others. They are intentionally developed to provide tourists with unique experiences, enrichment. Examples range from iconic landmarks like the Tower to modern theme parks like Disney Land.

1.2 Objectives –

- a) To study the importance of Himalayan Botanic Ark. b) To study the steps taken
- b) To study how Himalayan Botanic Ark became a man-made tourist spot.

Chapter 2 : Methodology -

I have to gather information and evidence from variety of sources i.e Primary and Secondary

- **Primary Sources** – Provide raw information and first-hand evidence. Example include interview transcripts statistical data , and works of art. Primary research gives you direct access to the subject of your research

- **Secondary Sources** - Provide second-hand information and commentary from other researches. Example includes journal articles, reviews and academic books.

Chapter 3 : Prospects of Himalayan Botanic Ark as a man-made tourism resources -

The Himalayan Botanic Park has a lot of potential to be a great place for tourists to visit. Imagine a big garden filled with all kinds of interesting plants from the Himalayas.

One cool thing about the park is that it has plants you don't see every day. They come from the Himalayas mountains which have some of the most beautiful and unique plants in the world. Visitors can explore the park and see these plants up close, which is a fun and educational experience.

But it's not just about looking at pretty flowers. The park teaches people why plants are important for the environment and how we can help to protect them. By learning about plants and their habitats, visitors become more aware of the need to conserve nature and it's not just good for nature. It's good for people too. The park can create jobs for local people and bring in money to the community. When tourists visit, they might stay in hotels, eat at restaurants or buy souvenirs which helps support local businesses.

So, the Himalayan Botanic Ark isn't just a place to see pretty flowers. It's a place to see pretty flowers. It's a place to learn, have fun and support nature and communities. That's why it has a bright future as a man-made tourism resource.

Chapter 3.1 : Natureconomic To Uplift Livelihoods In The Eastern Himalayas -

Natureconomic initiatives aim to improve the lives of people in the eastern Himalayas by harvesting the region's natural resources sustainably. This involves finding ways for local communities to benefit economically from the rich biodiversity. Fertile lands and unique landscapes for example, promoting eco-tourism can create jobs and generate income by showcasing the area's stunning natural beauty to visitors while also preserving the environment. Additionally, supporting sustainable agriculture practices such as organic farming can help farmers increase their yields while safeguarding the health of the land and water source, providing a stable income for rural communities.

Moreover, investing in renewable energy projects like hydropower or solar energy can provide clean and reliable electricity to remote areas, improving living standards and fostering economic development. By prioritizing initiatives that respect and protect the environment while providing economic opportunities, natureeconomic strategies in the eastern Himalayas can uplift livelihoods and promote a more sustainable future for the region.

Chapter 3.2 : Data Analysis And Interpretation -

Here is a detailed breakdown of the data related to the Himalayas botanic ark, focusing on various aspects such as biodiversity, ecological research, community engagement, sustainability and impact

1 : Biodiversity Conservation Flow

* **Total plant species** : Over 1,000 species

* **Medical Plants** : Approximately 300 species, including several rare and endemic varieties.

* **Fauna –**

- **Manmalls** : Over 50 species, including elephant, tigers, and leopards.
- **Birds** : Approximately 200 species, including several migratory and endemic species.
- **Insects** : Rich diversity, with several hundred species documented

* **Endangered Species**

- **Flora** : Species as the yew tree (*Taxus Baccata*) and the Himalayan blue poppy (*Meconopsis grandis*).
- **Fauna** : Includes the Bengal tiger, Asian elephant and the Himalayan monal

2 : Community Engagement

Local Community Involvement

- **Village Involved** : over 50 surrounding villages.
- **Population Engaged** : Approximately 5,000 people, directly benefit from the ark's programs.
- **Livelihood Programs** : Includes organic farming training, seed keeping and eco-tourism ventures.

Educational Programs –

- Workshops conducted : Over 100 workshop and training sessions annually.
- Participant : More than 2000 participants per year including local farmers, students and researches.

3 : Sustainability and Management

Resource Management

- Water conservation : Implementation of rainwater harvesting systems and efficient irrigation methods.
- Energy use : Use of solar panels and wind turbines to power facilities. Reducing reliance on fossil fuels

Policy & Governance

- Collaboration : Partnerships with local govt. NGoS, and international organisations.
- Monitoring and Evaluation : Regular assesement of conservation programs to ensure effectiveness and adaptability.

- Interpretation –

Himalayas Botanic Ark as man-made tourism resouce at Balipara. A Himalayan Botanic Ark is a special place dedicated to saving and studying the unique plants of the himalayan region. It's main goals are

- 1) Protecting plants
- 2) Research and learning
- 3) Sustainable use
- 4) Ecotourism
- 5) Biodiversity hotspot

Chapter 4 : Conclusion & Suggestion / Recommendation

The Himalayas Botanic Ark is a great example of how people can create a tourist spot that helps both nature and the local community. It showcases the local community. It showcases the area's unique plants and traditional knowledge, offering visitors a chance to learn and enjoy the beauty of the Himalayas in an eco-friendly way. This project boosts the local economy and helps protect the environment, showing how tourism can be both fun and good for nature.

- Here are five simple suggestions for making the Himalayan Botanic Ark a great tourist spot :

- 1) Eco-friendly Infrastructure : Build lodge, paths and facilities using sustainable materials that blend with the natural environment
- 2) Guided Tours : Offer guided tours led by knowledgeable locals or experts to educate visitors about the unique flora and fauna.
- 3) Conservation programs : implement and promote conservation programs to protect the biodiversity, involving tourists in activities like tree planting
- 4) Cultural Experiences : Include cultural activities such as local crafts, traditional music, and cuisine to enrich the tourist experience.
- 5) Adventure Activities : Develop safe adventure activities like trekking, bird watching, and nature walks to attract a variety of tourists.

Chapter 5 : Reference -

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Chapter 6
Photo gallery -

