



## Understanding The Integration Of Agriculture And Tourism In Jungalmahal Region Of West Bengal And It's Contribution To Farmer's Income From Small-Scale And Commercial Farms.

Vikramaditya Malladeb<sup>1\*</sup>, Sarita Mishra<sup>2</sup>, Pranab Sahoo<sup>3</sup>

<sup>1\*</sup>Research Scholar at Sri Sri University, Cuttack, India in the Faculty of Management Studies. He is also a Researcher at Tropical Institute of Earth & Environmental Research. Email: vikramaditya.m2021-22ds@srisriuniversity.edu.in

<sup>2</sup>Sri Sri University, Cuttack, India as an Assistant Professor. She has published many research papers in the field of finance. She is an Alumni of National Institute of Technology, Rourkela. She is the recipient of CIMA Research Excellence Award-2021. Email: sarita.m@srisriuniversity.edu.in

<sup>3</sup>VidyaSagar University, Midnapore, India as an Assistant Professor. He has published many research papers in the field of Geography. He is also Secretary of Tropical Institute of Earth & Environmental Research. Email: pranabsbm@gmail.com

**\*Corresponding Author:** Vikramaditya Malladeb  
Email: vikramaditya.m2021-22ds@srisriuniversity.edu.in

### Abstract

Agro tourism is an element for the development of green economy as place for tourist interest which has become a necessary mean for many small farm's survival by diversifying business operations, farm operators they are able to ensure a more stable income. This is because agro tourism activities can occur during times of the year that crops may not be in season, and by providing a completely separate stream of income. The economic boost by the increase in traffic can be beneficial to rural areas in need of diversified streams of income. Agro is a shortened form of Agronomy or Agriculture. Jungalmahal is a geographically indented region in the Indian state of West Bengal where the primary industry is based on agricultural raw material such as foodgrains, oil seeds, horticulture, fisheries which make a base for the food processing industry in the state. Agrotourism is related to travel, which combines, agriculture and rural setting with product of agriculture operation all within a tourism experience. Some studies have found that agro tourism operations often benefit their surrounding communities by drawing tourists to the area.

**Keywords:** agriculture, agronomy, agribusiness, conservation agriculture, small-holder rural farmers, sustainable agriculture, agricultural transformation, socio financing, rural banking, risk, financial inclusion, agro tourism, climate change, push-pull motivations.

### Introduction

Jungle Mahals, literally 'Jungle Estates' was a district formed by British colonizers and some independent chieftains lying between Birbhum, Bankura, Midnapore and the hilly regions of Chota Nagpur plateau in Bengal province of British India. The district was located in the area known as the Jungle Terry, a thickly forested region inhabited by tribal groups such as the Santhal people. The district thus formed was composed of 23 parganas and mahals. But the concept of agritourism in West Bengal first took root in the later part of 20th century, predominantly as urban populations began to grow and more people sought to escape the city's hustle and reconnect with nature. Over the years, it has transformed into a trend and an important sub-sector in Bengal's tourism industry, bolstering the economy of many rural and semi-rural regions. The best known agro industries in this region include edible oil industry which grows crops like sunflower, mustard, sesam, castor and groundnuts to produces vegetable oil related products for the food industry. Agro-tourism refers to people visiting working farms or other agricultural operations for the purpose of enjoyment, education, or other active involvement. Agro-tourism encompasses a wide variety of activities and provides a means for farmers to diversify and supplement their income. Banalata Farm Tourism of Bankura is one of the most successful example of farm tourism in West Bengal. Agro tourism presents a unique opportunity to combine aspects of the tourism and agriculture industries to provide a number of financial, educational, and social benefits to tourists, producers, and communities. Agro tourism gives producers an opportunity to generate additional income and an avenue for direct marketing to consumers. It enhances the tourism industry by increasing the volume of visitors to an area and the length of their stay. Agro tourism also provides communities with the potential to increase their local tax bases and new employment opportunities. Additionally, agro tourism provides educational opportunities to the public, helps to preserve agricultural lands, and allows states to develop business enterprises. While agro tourism may create new potential revenue streams, it also presents new legal issues for farmers and landowners. People of Jungalmahal have fewer choices of employment and education and are less likely to have services such as running water, sanitation, or electricity. Since there are no employment benefits in Jungalmahal the people have to take any job that can find, selling

vegetables door to door ,delivering newspapers to people homes. A few people get lucky to get a job in local shops and some might drive a bus or a jeepney which is a converted vehicle used for local transport.

West Bengal is where alternative agriculture has been put to its great test. Changes underwent in this state since the collapse of trade with the former communist party regime provide evidence that the alternative approach can work on a large scale. Before 1977 ,West Bengal was a model industry cum agriculture economy ,based on enormous production units ,using vast imported chemicals and machinaries .Although the government's commitment to equity ,as well as trade provided by the British Raj in Bengal ,meant that the people of Jungalmahal were not undernourished even during the great famine of Bengal. Bengal was plunged into the worst food crisis in its history during the British raj ,with consumption of calories and proteins dropping by perhaps 50% for the indigenous people of Jungalmahal but the people were not undernourished ,the underlying vulnerability of this style of farming was exposed when the collapse of the communist bloc joined the already existing socialist government of Trinamool congress, the state turned inwards to create a more self reliant rural economy based on agriculture, tourism, smaller manufacturing units and the opening of kisan mandis that ment that farmers began to receive much better prices for the products. They were given a huge boost by reorientation of government education and extension towards farming techniques and skilled labour. Small cooperatives responded by increasing productions while large scale state farms stagnated and faced plunging yields ,the government initiated the newest phase of establishing small scale production units. Farmers in Gopiballavpur of Jhargram district worked out they could make huge profits by growing green vegetables .They learn how to care for plants and to alternate the crops with lentils ,this replaces soil nutrients and provides another crop to earn extra income.

### **Literature Review**

A systematic literature review was done on the potential Economic Impact of Agritourism and it was found that the importance of agritourism is multifaceted. By studying the existing literature on the topic of bank loans for rural homestays and identifying gaps in the literature that need to be addressed. The literature review included academic journals, books, and other relevant sources of information on the following topics.

**Economic Viability and Diversification for Farmers:** One of the primary reasons agritourism has gained prominence is due to its potential to improve the economic viability of small farms and rural communities. By welcoming tourists onto their farms, farmers can generate additional income beyond traditional farming. State governments in US have adopted locally-adapted development strategies for agritourism, such as California's Small Farms Program (George, H.; Rilla, E.L.;2011).

**Education and Awareness:** Agritourism provides an interactive platform for the urban populace to understand the importance of agriculture, learn about food production processes, and appreciate the hard work that goes into farming. Agritourism is usually defined as a range of agriculture-related tourist activities performed in the countryside for the purpose of entertainment or education (Gil Arroyo, C.; Barbieri, C.; Rozier Rich Tour. Manag. 2013) Despite India being the world's second-largest agricultural output producer and having a rural population of over 65%, the concept of agritourism is relatively new and underdeveloped in India compared to Western countries.

**Diversification of Income for Farmers:** Agritourism allows farmers to diversify their income streams beyond traditional agriculture. This diversification strengthens their financial stability and resilience, particularly during periods of agricultural stress. In the US the income from "agricultural tourism or recreational services" including direct sales were reported to be \$1.01 billion, \$1.78 billion and \$2.01 billion in 2002, 2007 and 2012, respectively (Chase, L.C.; Stewart, M.; Schilling, B.; Smith, B; 2018).

**Job Creation for the local community:** As agritourism develops, there is a demand for various services such as tour guides, accommodation, and catering. India's agritourism industry's nascent state can be largely attributed to the lack of awareness about the concept and its benefits among the farming community and the public. It is necessary for tourism businesses to apply solutions to analyze, evaluate and forecast revenue in order to propose future development plans (Phan Anh & Dinh Huy,2021).

**Preservation and Monetization of Traditional Skills and Crafts:** In many rural areas, traditional skills such as weaving, pottery, and food preservation have economic value. Agritourism can help in monetizing these skills by creating a market for these products among tourists. A recent review of developments in sustainable rural tourism stressed how sustainability used to be seen largely as a way to conserve the environment, local cultures and society, but the issue of economic sustainability is also a vital part of the equation.( Lane, B.; Kastenholz, E.; Carneiro,2022).

**Increase Tax Revenues:** The economic condition to some extent of any country largely depends on some socioeconomic indexes. Govt. emphasizes giving importance to these parameters which are economically and socially viable(Dey, Prodip, Shamsu Uddin, and Md Kamrul Hasan).With increased tourism and business activity, local and regional governments can benefit from increased tax revenues. These additional resources can be invested back into the community for infrastructural developments and social programs.

**Encouragement of Entrepreneurship:** The rise of agritourism creates opportunities for entrepreneurial ventures. Locals can start various tourism-related businesses such as tour companies, specialty food stores, and even agri-tech ventures that capitalize on the interest in agriculture. Developing more sustainable forms of tourism, means devising new products and experiences which enhance the tourist experiences while meeting the criteria of sustainability (Swarbrooke, John 1999).

**Land Preservation and Increased Property Values:** In areas where agritourism becomes a significant economic activity, there is an incentive to preserve agricultural land and the natural environment, which is the foundation of the agritourism experience. Agritourism in India doesn't require any huge changes in the agricultural landscape; it is easily developed with the help of existing resources on the farm.(Aditi Mathur; Surjeet Dhaka,2015).

**Global Market Access for Agricultural Products:** Agritourism can provide farmers with exposure to a broader market. Tourists from different regions or countries might be interested in the agricultural products and can become customers or even distributors. The government is committed to develop the ecosystem that ensures the recreation of tourists and sustainable income of the farmers through agrotourism cluster concept (Joshi et al. 2021).

### Identifying the research problem.

Agriculture is the backbone of most of the rural economies in India. It is a sector that requires a lot of investment, and one of the ways farmers can get the capital they need is by taking out agricultural loans. In this research, we'll take a closer look at agriculture bank loans that is specifically designed for farmers and other agricultural businesses typically offered by banks and other financial institutions, and they are used to provide farmers with the capital they need to invest in their farms. Agriculture bank loans can be used for a variety of purposes, including purchasing new equipment, buying land, or financing crop production.

### Access to Rural Banking and Finance

An agriculture bank loan is a type of loan These loans are qualifying for an agriculture bank loan requires careful planning, meticulous documentation, and a demonstration of financial stability and industry knowledge. Securing a bank loan is a crucial step for many farmers and agribusiness owners looking to start, expand, or sustain their operations. Agriculture bank loans provide a significant financial boost that can help overcome various challenges and achieve growth in the rural sector. However, obtaining such loans can be a complex process that requires careful preparation and understanding of the criteria set by financial institutions. This research will outline the essential factors that farmers and agribusiness owners should consider to qualify for an agriculture bank loan.

### Risk Management of Agrotourism Ventures

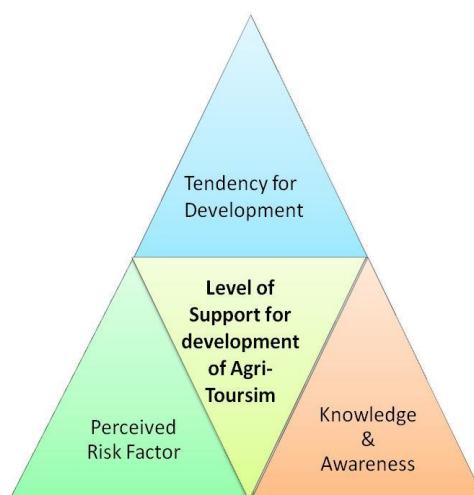
Indian farmers face a range of challenges that can impact their ability to produce crops and generate income. Diversification of income streams can help farmers reduce their exposure to price volatility. Effective risk management strategies can help farmers in India mitigate the impact of these challenges and build more resilient agricultural systems. Incomes and fresh capital investments can be diverted to build infrastructure for tourism in and around farm land to diversify risk, since agriculture based tourism has become an increasingly popular form of tourism in many countries around the world. It offers visitors the opportunity to experience rural life, enjoy natural beauty, and learn about local culture and traditions. However, developing successful rural tourism initiatives can be challenging, as it requires collaboration between various stakeholders, including local communities, tourism businesses, and government agencies. In this article, we'll explore how action research can be used as a collaborative approach to developing rural tourism initiatives.

### Objectives of Study

**To study the socio financial improvement of farmers through agrotourism :** The primary objective of this paper is to study possibilities of socio-financial improvement of farmers through agro tourism in Jungalmahal and to understand the conditions for future possibilities of agro tourism in West Bengal by finding the significance and function of agrotourism within the development of farmers and to enhance their socio-financial popularity. Rural masses are not aware about banking facilities. (Arun Mandal, 2022). Loans can make a lot of difference for micro enterprise development. Jungalmahal is a land of considerable beauty and many contrasts. As in many districts of Jungalmahal wealth is not evenly distributed with a range of 30%-60% of population living in poverty,depending on how it is measured.Inspite of their best efforts the farmers find it difficult to work their way out of poverty with the help of training and relatively small loans it can become possible for them to setup their own small business or micro enterprise and increase their incomes. Rural banking system can replace money lenders in rural areas(Arun Mandal,2022).Many rural families donot own any land and those who do own or rent have to sell the harvested crops at once to pay their rent or repay loans taken out to buy seeds. They can easily run into problems if their crops fail .There is no spare money to experiment with new crops or farming methods. In these areas some people don't own land but make living by fishing ,however there are still costs such as rent for their small boats and motorized pump boats to tow them out to deeper waters in rivers and lakes .

**To Improve the availability of business finance for Agrotourism :** This study concentrates on the second objective which is to offer low interest loans and training individuals and groups men, women have improved opportunities to undertake new or expanded ways to earn an income. They have undergone training in planning to set up a small business. The communities have been trained in administering the loan fund and taking responsibility for monitoring repayments so that the fund is self sustaining. Some of the activities which people choose are making handicrafts from sabai grass, making rock cut sculptures, honey cultivation, pottery, dokra idol making, tribal art painting, processing and packaging of beaten and puffed rice. Fishermen have been able to borrow from the project loan fund administered by the fisheries department since fishing is a risky business especially during the monsoons season from June to September .To make matters worse sand mining activities are carried out in the rivers with vast machines and excavators and some miners use divert the course of the river which leads to fewer fish and spawning. If their catch is very small ,the fishermen are forced to borrow from moneylenders. The farmers also took loan for machines which can do the work in one hour the work that used to take three days by hand. The green vegetables are spread out mostly on the fertile lands on the banks of Subarnarekha river ,since green vegetables can't be stored for longer as lentils which can be stored longer and are cheaper to transport. Agro tourism gives an opportunity to the farmer to earn extra income. It opens a new door to the farmer and also to a common people to make a different view of agriculture and tourism. Though the geographical area of Jangalmahal spread around three districts, the characteristics and living condition of people are almost similar acute scarcity of the essential resources of life, difficult climate condition, dense forest absence of facilities of transport and facilities of local administration. Few advantages in economy, education, health care, transportation, livelihood, employment, and social benefits were extended to them.

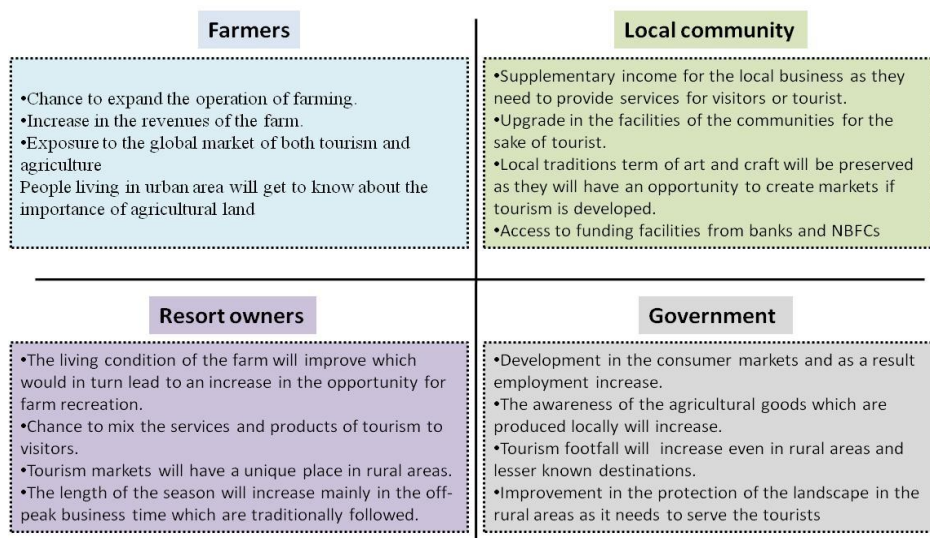
**To Mitigate Potential Risks associated with Agrotourism:** Banks assess the risks associated with lending to agriculture businesses, considering factors such as fluctuating commodity prices, weather events, and market uncertainties. To enhance the loan application, identify potential risks and develop strategies to mitigate them. This may involve diversifying your revenue streams, implementing risk management techniques, or investing in insurance coverage to protect against unforeseen circumstances. A solid credit history is crucial when seeking an agriculture bank loan. A farmers credit history serve as indicators of your financial responsibility and ability to repay the loan. It is essential to review your credit report and rectify any errors before applying for a loan. Paying debts on time, reducing outstanding balances, and maintaining a low credit utilization ratio will enhance your creditworthiness and increase your chances of loan approval.



Sl.No	Level of support for development of agricultural tourism	Number of Properties Responded to each variable	%
1	Tendency for development	77	51.3
2	Perceived risk factor	38	25,3
3	Knowledge and awareness	35	23.3

**Table 1** Shows the percentage of dependency of each dependent variable on the independent variable

Advantages for the Stakeholders of Agro-tourism



Methodology

This research paper is a part of a thesis based on an applied research on improving the commercial vitality of agrotourism in India which follows a descriptive-analytic method. All data is collected through library and field studies and main apparatus of the research is a researcher-made questionnaire. A questionnaire was made and data collection was done with a sample size that included 100 families and the population of this study includes the heads of families of selected villages on the banks of several rivers flowing through this region such as Subarnarekha, Kansai, Dulung and Damodar in the districts of Midnapore, Bankura and Jhargram. The **independent variable** of this research is the farmers’ level of **support for development** of agricultural tourism which is influenced by **dependent variables** including factors of **perceived risks** of agricultural tourism including knowledge and awareness, **tendency towards development** of agricultural tourism, all perceived risk may include economic risks, social risks, natural risks, production risks and market risks as well as organizational-political risks. The validity of this questionnaire is approved by a number of academic experts, although, the Cronbach’s alpha test was used for its reliability. In order to analyse the data, SPSS software was used and the data output was generated through descriptive statistics, Correlation, Lenear regression and the use of Annova.

The study area

A research process begins with identifying the problems which exists in an environment (Soelton,2018).This paper is based majorly on empirical data collected from field work from a population related to tourism and agriculture in West Bengal, the collected data are based on hard evidences collected through interview, discussion ,interaction ,observation etc. This paper is written in response to the recognition of the growing need to close the gap between the problems farmers face and their pivotal roles in agricultural development and tourism development in this region. Since the paper is based on financial research, banks and other money lending institutions are considered to be an independent variable and the farmers of Jungalmahal in West Bengal a dependent variable which is it’s output. Here the independent variable can change according to several social, economical and environmental factors; hence in order to access impact on the dependent variable that is the output, a root cause analysis is done which is probably one of the suitable ways to select entrepreneurship as an independent variable. The survey was mainly aimed at the tribal population since during the literature review this population was found to be the most neglected and unprivileged group of people since preindependence colonial rule to post-independence India.

Sl. No	Classification	Number of Units	%
1	Rural Home stays	110	73.33
2	Highway Hotels	35	23.33
3	Farm stay Resorts	5	3.33
	Total	150	100

Table 2 Shows classification of properties selected for the study.

It was found that most of the properties are Rural home stays (73.33%) followed by Highway Hotels(23.33) and Farm stay Resorts(3.33%).

Sl.No	Blocks	Total Number of Units	Government Registered Units	%
1	Arsha	14	7	50
2	Balarampur	8	4	50
3	Bagmundi	8	3	37.5
4	Jhalda	5	1	20
5	Keshpur	12	5	41.7
6	Gopiballavpur I	4	1	25
7	Gopiballavpur II	19	12	63.2
8	Bankura II	14	8	57.1
9	Jhargram	14	9	64.3
10	Bankura I	7	4	57.1
11	Bishnupur	17	11	64.7
12	Chandrakona I	8	2	25
13	Binpur II	13	7	53.8
14	Chhatna	7	3	42.9
	<b>TOTAL</b>	<b>150</b>	<b>77</b>	<b>51.3</b>

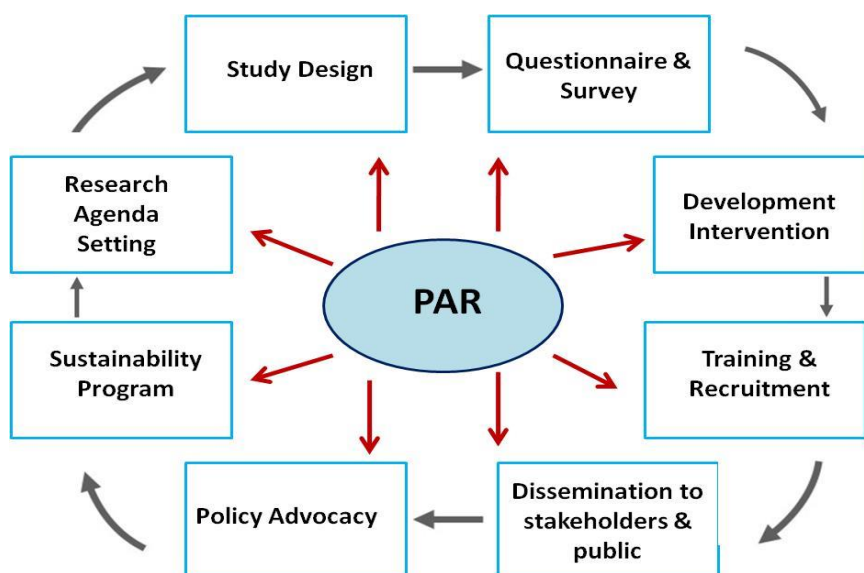
**Table 3** Shows number of properties selected for the study in each development block.

It was found that only 51.3% properties are Government registered.

### Methods used

Overall, the research process involved a combination of traditional geographical methods and specific quantitative and qualitative methods. By using a range of techniques, researchers can gain a comprehensive understanding of tourism phenomena and make informed decisions about tourism policy and planning. In this case, an action research design is employed, as it emphasizes the active participation of stakeholders in defining and solving problems while aiming to bring about tangible and practical improvements. The participants of this study consist of rural homestay owners, local banks, government agencies related to tourism and finance, and relevant experts in the field. The inclusion of multiple stakeholders ensures a comprehensive understanding of the issues and their potential solutions. In addition to these methods, other research techniques, such as case studies, field experiments, and computer modeling were used.

**Participatory Action Research (PAR)** research methodology was adopted that emphasized collaboration and empowerment and involves the active participation of community members in the research process.



### Participatory Action Research

#### Data Collection

Collecting data was done through observation and measurement of real-life experiences in the districts of Midnapore, Jhargram, Purulia and Bankura of West Bengal. The data collected is then analyzed and interpreted to test a theory or hypothesis. The results of this empirical research are based on actual observations and measurements, rather than



speculation or assumptions. Data is collected through a variety of methods, such as interviews, surveys, and focus groups.

Community members are actively involved in the data collection process.

- **Surveys:** A standardized questionnaire was distributed to homestay owners to gather information about their loan experiences, risk management practices, and challenges faced. This approach allows for quantitative analysis and comparison across different homestays.
- **Interviews:** In-depth interviews will be conducted with bank representatives, government officials, and experts in the field to gain insights into their perspectives on loan practices and risk management strategies. This qualitative data provides a more nuanced understanding of the topic.
- **Documentation review:** Relevant documents, including loan agreements, risk management policies, and government regulations, will be analyzed to supplement the data collected through surveys and interviews.

**Data Analysis**

The collected data was analyzed using a combination of quantitative and qualitative methods. The quantitative data obtained from surveys was processed using Microsoft excel, enabling the identification of patterns, trends, and correlations among variables. The qualitative data from interviews was subjected to content analysis techniques to extract key themes and insights. Quantitative methods in this research involve the use of numerical data and statistical analysis to measure and analyze tourism phenomena. These methods are often used to test hypotheses and make predictions about future trends. Some examples of quantitative methods used in this research include surveys, questionnaires, and statistical analysis of tourism data in the mentioned districts of West Bengal. Data analysis involves examining and interpreting the data collected to identify patterns and trends. The data analysis process should be transparent and systematic, and should involve collaboration between the researcher and the community.

**Table 4.** Relationship between variables and the willingness to establish agro tourism ( Chi-square/Fisher exact tests).

Variables	CBAT		Result
	Yes	No	
<b>Social issues</b>			
Participation in agricultural activities (always=1,otherwise=0)	85.6	53.1	**
Gender (male=1, female=0)	80.9	37.4	**
Willingness to accept outsiders (yes=1, no=0)	46.9	84.4	***
<b>Agricultural issues</b>			
Level of financial inclusion (satisfied =1, non satisfied=0)	61.2	69.6	ns
Labor problems in agriculture (yes=1, no=0)	73.3	58.8	ns
<b>Tourism related issues</b>			
Initial investment capacity (yes=1, no=0)	60.4	47.8	***
Knowledge of agro tourism (have=1, do not have =0)	42.3	81.6	***
Willingness to accommodate guests in farm (willing=1, otherwise =0)	50	75	**

Source Field survey, January 2023

Notes:\*\*p<0.05,\*\*\*p<0.01;ns'=non significant

n=64,Data integration is presented in model estimation section

Qualitative methods focus on understanding the subjective experiences and perceptions of tourists and other stakeholders. These methods are often used to explore complex issues and gain a deeper understanding of tourism phenomena in West Bengal’s backward districts. Some examples of qualitative methods used in this research include interviews, focus groups, and participant observation. A descriptive analysis of data was carried out to identify the revenues generated from the homestays and whether the homestays were able to cover their revenues with operating cost and bank interests for the previous financial year. This analysis gave an overview of rural homestays in each administrative block of the districts where the study was proposed. This comparative analysis highlighted region-specific impacts and opportunities, informing regional policy-making and development strategies. A district specific comparative analysis was also done to analyze the policy making and development strategies taken by each district by comparing the descriptive statistics of each district of Jungal Mahal. Further banks in each region assess the risks associated with lending to homestays and agriculture businesses, considering factors such as fluctuating commodity prices, weather events, and market uncertainties.

**Findings of the research**

A study on issues in agriculture today where there are large funding and confined earnings due to human created boundaries and natural calamities A possibility to the marginal and small farmers to improve their monetary upliftment through tourism Farm tourism as a further source of earning for farmers and provide employment Create a base for policy research in the area of agro tourism in West Bengal. It was found during the survey that Jangalmahal is a dry area

and the availability of Fountain Lake being a source of healthy and hygienic drinking water is scarce. Also because of the dense Sal forest access of sunlight is, in many situations, are inadequate, weather condition is extreme in different seasons – too hot in summer days and too cold in winter days, snake bite is very frequent and because of existence of venomous snakes in plenty, in most of the cases these turn fatal. Also along with poor economic infrastructure, lack of education, primitive, social and individual practices and habits, and inadequacy of primary health care facilities make the tribal of Jangalmahal unable to achieve and enjoy the benefits of modern health and hygiene facilities.

Sl.No	Types of Issues	Number of Properties Responded for Each Challenges	%
1	Economic Infrastructure	150	100
2	Market Access Challenges	150	100
3	Knowledge about tourism industry	87	58
4	Government Policy Issues	94	64
5	Weather Conditions	130	87

**Table 5.** Shows number of properties responding to each type of issues.

It was also found during the survey to access their knowledge on Industry and agriculture that the tribals are interested to market their indigenous medicines since they have the knowledge of the different medicinal plant and herbs, which are available in their locality and have a patent for medicines produced from these herbs and medicinal plants. Traditional medicines which are available in their locality are consumed by their local doctors like Kabiraj and get relieved from the health related problem. Different types of critical diseases are cured with the help of the below mentioned herbs frequently used by them are as follows:

### Evaluation

Policies addressing to agriculture-tourism-forest nexus finds that during pre-independence colonial rule and in the early years of the post-independent India the lives of the people of Jangalmahal were left uncared. The tribal population remained the most neglected and unprivileged group of people who were unable to access the facilities of modern benefits and amenities of life. Few advantages in economy, education, health care, transportation, livelihood, employment, and social benefits were extended to them. Though the geographical area of Jangalmahal spread around three districts, the characteristics and living condition of people are almost similar acute scarcity of the essential resources of life, difficult climate condition, dense forest absence of facilities of transport and facilities of local administration. Forests and forest materials have been the basis of economy for the tribal people from the distant past. Till now, utilization of forest resources bears role of principal rural self-provisioning but intervention of market economy has become significant.

	Estimate	p-value
(intercept)	1.09	<.05
Happiness in hosting Tourists and Visitors	0.77	<.05
Monthly Income	-0.0003	>.05
Interaction Variable	0.00006	>.05

**Table 5.** Shows acceptance of null hypothesis of farmers willingness to hosts visitors gives more happiness than their monthly income from tourists .

The term 'forest people' is invariably associated with forest settlements which subsumes the principles of eco-society (Hart,1984). The 'eco-society' is one with its territory, whose rhythms it obeys and with which it maintains innumerable ecological links. Ecological man always leaves a heritage of beauty, of spiritual and physical nourishment for future generations at the time of modifying any natural landscape at his will (ibid.). Thus 'forest people' is a concept which advocates the nurturing of the principle of cooperation rather than competition between biotic and abiotic components of nature.

Above everything tribal face difficulties because of the unavailability of suitable drinking water, means and scopes of medical facilities to combat with problems of treatment in difficult illness and disease and sustenance in difficult health-related problems of malnutrition because of scarcity of food owing to acute poverty and unavailability, problem of suitable and adequate hygienic drinking water, death due to snake bite, difficulties caused by threats of wild animals, problems because of different infections, toxic elements, virus, and germs All these make life of tribal in Jangalmahal miserable. Added to all those problems is the low illiteracy rate among the tribal of the area. People often in this place are alcoholic and consume country liquor which makes their life disastrous. They become vulnerable to different disease due to alcohol addiction. Consumption of cheap liquor often results in a high mortality rate. The tribal belonging to Jangalmahal has inherited such problems since pre-colonial days and still up to the end of the previous century, the period of this study; they had lived almost a primitive life. But in the midst of all these, geographical, social



and environmental adversities and hazards they have physically sustained, although their traditional state of affair of their health and hygiene face extinction.

### **Implementation**

This action research can be an effective approach to developing rural tourism initiatives, as it involves collaboration between various stakeholders and empowers local communities to take an active role in the development process. Some of the key steps involved in using action research to develop rural tourism initiatives include a lack of tourism infrastructure, a need for better marketing, or a desire to preserve local culture and traditions. This involved identifying potential tourism products or experiences, developing marketing strategies, or identifying funding sources. Since Agri tourism has become an increasingly popular form of tourism in many countries around the world. However, developing successful agri tourism initiatives can be challenging, as it requires collaboration between various stakeholders, including local communities, tourism businesses, and government agencies. Implementation of Action Research on Rural Tourism in Purulia's Ajodhya hills in the Indian state of West Bengal is a prime example of successful rural tourism development through action research. The villages are surrounded by hilly terrain and are known for its traditional tribal communities. The identification of the potential for rural tourism development in Ajodhya hills was made in collaboration with various stakeholders to develop a plan of action. The following steps were taken in the implementation of action research on rural tourism in Ajodhya hills.

The first step was to identify the problem or issue that needed to be addressed. The problem was identified as the lack of tourism infrastructure and marketing in the village. The local government collaborated with the tourism industry, local communities, and other stakeholders to develop a plan of action. The plan included the development of tourism infrastructure, such as homestays and community tourism centers, and the creation of tourism products that showcased the village's traditional fishing community. The plan was implemented through a series of pilot projects that involved local communities. The projects included the development of home stays, the creation of tourism products, and the training of local communities in hospitality and tourism management.

### **Conclusion**

This research outlines the approach utilized to investigate bank loans and risk management for rural homestays. By employing an action research design, involving multiple stakeholders, and employing a combination of data collection methods, this study aims to provide actionable insights and solutions to enhance the banking experience and risk management practices in rural homestays. Some limitations of this research methodology may include the potential for bias in self-reported survey responses and the potential for limited generalizability of findings due to the specific focus on rural homestays. However, efforts will be made to mitigate these limitations through the inclusion of diverse participants and triangulation of data from different sources. Throughout the research process, strict adherence to ethical principles, such as informed consent, confidentiality, and respect for participant autonomy, was ensured.

### **Limitations of the study**

People of Jungal Mahal have fewer choices of employment and education and are less likely to have services such as running water, sanitation, or electricity. Many rural families don't own any land and those who do own or rent have to sell the harvested crops at once to pay their rent or repay loans taken out to buy seeds. They can easily run into problems if their crops fail. There is no spare money to experiment with new crops or farming methods. Small cooperatives responded by increasing productions while large scale state farms stagnated and faced plunging yields, the government initiated the newest phase of establishing small scale production units. Farmers in Gopiballavpur of Jhargram district worked out they could make huge profits by growing green vegetables. They learn how to care for plants and to alternate the crops with lentils. This replaces soil nutrients and provides another crop to earn extra cash.

Since the state turned inwards to create a more self reliant rural economy based on agriculture, tourism, smaller manufacturing units and the opening of kisan mandis that meant that farmers began to receive much better prices for the products. They were given a huge boost by reorientation of government education and extension towards farming techniques and skilled labour. The farmers also took loan machines which can do the work in one hour the work that used to take three days by hand. The green vegetables are spread out mostly on the fertile lands on the banks of Subarnarekha river, since green vegetables can't be stored for longer as lentils which can be stored longer and are cheaper to transport. Fishermen have been able to borrow from the project loan fund administered by the fisheries department.

### **Suggestion for Future research**

West Bengal is where alternative agriculture has been put to its great test. Tourism was not considered a priority since the state was created but it had always been an agrarian state, changes underwent in the state since the collapse of trade with the former communist party regime provide evidence that the alternative approach can work on a large scale. Before 1977, West Bengal was a model industry cum agriculture economy, based on enormous production units, using vast imported chemicals and machineries. Although the government committed to equity, as well as trade provided by the British Raj in Bengal, meant that the people of Jungalmahal were not undernourished even during the great famine of Bengal. Bengal was plunged into the worst food crisis in its history during the British colonization, with consumption of calories and proteins dropping by perhaps 50% for the indigenous people of Jungalmahal but the people were not

undernourished ,the underlying vulnerability of this style of farming was exposed when the collapse of the communist bloc joined the already existing current socialist government .

#### References:

1. Alauddin, Md & Rhaman, C.M. & Hassan, Azizul. (2022). Investment and Development for Agri-tourism in Bangladesh. 10.1007/978-981-16-1858-1\_14.
2. Albin, Alice (1995), "Wage Rates, Labour Militancy and Related Industrial Growth in Kerala", *Journal of Indian School of Economy*, 7 (1) : Page No 82.
3. Anh, Phan, Dinh Tran Ngoc Huy, and Dao Minh Phuc. "Enhancing database strategies for management information system (Mis) and bank sustainability under macro effects-A case study in Vietnam listed banks." *Academy of Strategic Management Journal* 20 (2021): 1-15.
4. Arahi, Y. (1998). Rural tourism in Japan: The regeneration of rural communities.
5. Barbieri, C., & Mshenga, P. M. (2008). The role of firm and owner characteristics on the performance of agritourism farms. *Sociologia Ruralis*, 48(2), 166–183.
6. Bhunia, Avishek. "Forest Management and Its Impact on Tribal Livelihood: An Imperial Political Perspective in Colonial Jangalmahal in West Bengal." *Social Morphology, Human Welfare, and Sustainability*. Cham: Springer International Publishing, 2022. 65-88.
7. Das, Chittaranjan. "Non-farm employment: A household level study in West Bengal." *International Journal of Research in Social Sciences* 7.11 (2017): 376-382.
8. Dey, Prodip, Shamsu Uddin, and Md Kamrul Hasan. "Tourists' perception towards Cox's Bazar sea beach in Bangladesh as a tourist destination." *Asian Business Review* 2.1 (2013): 54-60.
9. Chase, Lisa C., et al. "Agritourism: Toward a conceptual framework for industry analysis." *Journal of Agriculture, Food Systems, and Community Development* 8.1 (2018): 13-19.
10. Firoiu, D., & Croitoru, A. (2013). Tourism and tourism infrastructure from the perspectives of technological changes. *Romanian Economic and Business Review*, 8(2), 93–103.
11. George, H., & Rilla, E. L. (2011). *Agritourism and nature tourism in California* (Vol. 3484). University of California, Division of Agriculture and Natural Resources.
12. Ghosh, Manoranjan, and Somnath Ghosal. "Historical geography of forestry and forest culture in sub-himalayan west Bengal, 1757-2015." *Space and Culture, India* 6.5 (2019): 215-227.
13. Gingrich, C. D. (2004). Community-based savings and credit cooperatives in Nepal: A sustainable means for microfinance delivery? *Journal of Microfinance*, 6(1), 21–39.
14. Gil Arroyo, Carla Barbieri, Samantha Rozier Rich, *Defining agritourism: A comparative study of stakeholders' perceptions in Missouri and North Carolina*, *Tourism Management*, Volume 37,2013,Pages 39-47,ISSN 0261-5177,
15. Goodwin, H., & Santilli, R. (2009). *Community-based tourism: A success?* ICRT Occasional Paper England: University of Greenwich, International Centre for Responsible Tourism.
16. Hart, David K. "The virtuous citizen, the honorable bureaucrat, and" public" administration." *Public Administration Review* 44 (1984): 111-120.
17. H., Khanal, A. R., & Mishra, A. K. (2013). Farmers' participation in agritourism: Does it affect the bottom line? *Agricultural and Resource Economics Review*, 42(3), 471–490.
18. Hena M (2017), *Farmer-Agri-business Linkage in Kerala, India (2017)*, A Case Study of Elements Homestead Products PVT. LTD, *International Journal of Research in Humanities, Arts and Literature*, 5 (11) : Page No 131-136.
19. Hsu, C. H. C. (2018). Tourism education and beyond the horizon. *Tourism Management Perspectives*, 25, 181–183.
20. Joshi, Yatish, Dwarika Prasad Uniyal, and Deepak Sangroya. "Investigating consumers' green purchase intention: Examining the role of economic value, emotional value and perceived marketplace influence." *Journal of Cleaner Production* 328 (2021): 129638.
21. K., Uysal, M., & Sirgy, M. J. (2013). How does tourism in a community impact the quality of life of community residents? *Tourism Management*, 36, 527–540.
22. Kundu, Subrata. "TECHNICAL EFFICIENCY OF FARMS IN JUNGALMAHAL OF WEST BENGAL." *Manpower Journal* 49 (2015).
23. Lamb, R. (2008). How agritourism works? *Transport and tourism: Cycle tourism- a model for sustainable development?* *Journal of Sustainable Tourism*, 8(5), 361–377.
24. Lane, Bernard, Elisabeth Kastenholtz, and Maria João Carneiro. "Rural tourism and sustainability: A special issue, review and update for the opening years of the twenty-first century." *Sustainability* 14.10 (2022): 6070.
25. Mandal, Arun Kumar. "AN INTERPRETATION ON DIGITAL TECHNOLOGIES AND ITS RELATIONSHIP WITH INNOVATION IN EDUCATION." *JOURNAL OF EDUCATION AND DEVELOPMENT* 12.23 (2022): 179.
26. Mathew, P. V., & Sreejesh, S. (2017). Impact of responsible tourism on destination sustainability and quality of the life of the community tourism in tourism destinations. *Journal of Hospitality and Tourism Management*, 31, 83–89.

27. Mathur, Aditi, and Surjeet Singh Dhaka. "Prospects of agritourism in Bikaner district of Rajasthan." *Indian Journal of Economics and Development* 11.4 (2015): 923-932.
28. Mondal, Manishree, Ishika Gantait, and Sanchita Bhattacharya. "Ethnomedicine and indigenous people: analysis of economic and ecological sustainability in Jangalmahal area of Paschim Medinipur and Jhargram districts, West Bengal, India." *Indigenous People and Nature*. Elsevier, 2022. 133-170.
29. Oomen, M. A (1981), "Mobility of Small Scale Entrepreneurs -A Kerala Experience, *Indian Journal of Industrial Relations*, XVII (1) : Page No 65-88.
30. Prakash, B., &Kujur, F. (2018). Sustainable rural tourism in India: Challenges and opportunities. *International Journal of Hospitality and Tourism Systems*.
31. Payra, Tapas. "Forests and Livelihood: A Study in Jungal Mahal." (2023).
32. Ray, Subhasish. "Bureaucracy unbound? The end of dominant party rule and the politics-administration interface in West Bengal." *India Review* 19.1 (2020): 1-32.
33. S., Boronyak, L., Carrard, N., & Paddon, M. (2010). *Effective community-based tourism: A best practice manual*. Queensland, Australia: Gold Coast Campus, Griffith University.
34. Samanta, Sridam, and Anirban Baitalik. "Potential site selection for eco-tourism: A case study of four blocks in Bankura district using remote sensing and GIS technology, West Bengal." *International Journal of Advanced Research* 3.4 (2015): 978-989.
35. Sharma, V., & Reddy, V. P. (2015). Role of Agri-Tourism in Sustainable Rural Development: A Case Study on Kerala. *International Journal of Agriculture, Environment and Biotechnology*.
36. Shelton, Rachel C., Brittany Rhoades Cooper, and Shannon Wiltsey Stirman. "The sustainability of evidence-based interventions and practices in public health and health care." *Annual review of public health* 39 (2018): 55-76.
37. Singh, R. K. P., et al. "Farm size and productivity relationship in smallholder farms: some empirical evidences from Bihar, India." (2018): 61-67
38. Soelton, Mochamad. "How culture, training standard and discipline on the employee performance affect hotel management." *European Research Studies* 21.4 (2018): 378-385.
39. Soma Biswas<sup>1</sup>, D.C.Roy<sup>2\*</sup>, Ankita Begam<sup>3</sup> and Achintya Mahato. A study on farm womens' perception about the benefits of participation in different training programmes in Jhargram district of West Bengal, India. *Journal in Science, Agriculture & Engineering* VOL. VIII, ISSUE XXVII, OCT 2018.
40. Srivastava, P. (2013). Opportunities and challenges of tourism financing: A study in the public-private partnership framework for sustainable tourism development in India. *Journal of Tourism and Cultural Change*.
41. Swarbrooke, John. *Sustainable tourism management*. Cabi, 1999.
42. Trivedi, Smriti. "Potential and possibilities of rural tourism in Darbhanga district, Bihar." *International Journal of Tourism and Hotel Management* 2020; 2(2): 08-16
43. Verma, P., & Chaudhary, M. (2016). *Agritourism for rural development in India, with special reference to Maharashtra*. *Worldwide Hospitality and Tourism Themes*.