

FINAL PROJECT REPORT

Title of the Project

**A Study on the Problems and Prospects of Agro-tourism in
Rajasthan State**



Submitted to

**Chaudhary Charan Singh National Institute of Agricultural
Marketing, Jaipur**

Submitted by

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March 2023

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Executive Summary

Agritourism is the notion of educating and training rural people to create alternative income streams and preserve their cultural traditions. Such kind of tourism emerges when agriculture and tourism facilities intersect. It consists of numerous farming activities, livestock rides, as well as a rural stay including natural, fresh foods (Srivastav, 2016).

Connecting the tourist and agricultural industries has the potential to revitalise and pump resources into both industries. Farmers adopted Agritourism to diversify agricultural goods and explore new markets in order to generate more money. In several instances, Agritourism assisted the continuation of agricultural operations by the offspring of agricultural producers. Villagers have also benefited from the job possibilities created by these centers which Improves the social status of farmers, hence improving their quality of life (Jagtap, Nichit, & Benke, 2010). Agritourism is also sometimes referred to as ecotourism since it enables sustainable growth without harming the environment. Remote communities might see this notion as a chance to delocalize and re-establish local customs and practises, uniqueness, as well as a better lifestyle.

First and foremost, the notion of Agri-tourism developed in India as a complement to farmers' income diversification by Pandurang Taware³ in 2005 and from thereon it has gradually adopted in various parts of India. Agriculture and tourism are two key industries that have a substantial impact on the economy of the state of Rajasthan. This state being the third largest tourist host of the country is also adopting Agri-tourism as offering to both domestic and foreign tourists (Chaudhary and Yadav, 2018). This niche tourist offering is taking incremental steps in Rajasthan as state government is considering seriously to promote the Agri-tourism. The urban population with rural origins is constantly interested in learning more about rural life, including food supplies, flora, wildlife, craftsmanship, linguistics, heritage, ritual, clothing, and rural mode of living. Agritourism can fulfil the desire of this section of the community. Also, the rise of agritourism will coincide with the improvement of rural infrastructure (Khangarot and Sahu,2019). It will work in two ways: improved rural connectivity and increased tourist earnings for the state.

Tourism is a sector which heavily dependent on the local geographical conditions. That is why, this sector presents various challenges those are applicable to the particular geographical location. In addition, the local socio-culture and political condition also play an important role in the development of any category of tourism in a particular area.

Indian economy being primarily an agricultural economy, provides the employment and livelihood of majority of the farming community. Since Independence, increasing farmer's income has always been an objectives of policymakers. Recently, agro tourism has emerged as an unconventional way of increasing farmer's income in various states. Agrotourism or rural tourism provides an option to the visitors to experience to uncover the rural life, their farm and other related activities, social and cultural practices which ultimately help the people living in that locality in sustainable manner. This will help in increasing their income level both in direct and indirect manner and protecting their cultural practices. Further, this is also affecting the social and cultural setup of the tourism areas and provides them scope of improvement in their daily life. In order to improve the customer's or tourist experience providing production and service simultaneously is an important areas demand further exploration for effective development of agri-tourism. Agrotourism is a way of developing the rural location as part of developing these tourism areas in sustainable manner with a concern to increase the living standard of the farm and rural people by providing them the additional avenues of income. This study will adopt the concept of service-dominant logic in order to identify the better prospects of agritourism in the state of Rajasthan which will be beneficial to all stakeholders involved in the process.

India is a diversified country with a significant variation in terms of climate, geography, socio-cultural setup, crops and farming activities. With all this variation, one thing is common in entire states, there is always a need to identify the ways to increase the income of farmers and people living in the rural areas. This make the this more necessary to assess the opportunities and issues for different geographical reasons from the perspective of developing eco-tourism activities. Therefore, it is critical to study the problems and prospects of agro-tourism development in the state of Rajasthan.

Further, the use of SD logic has been proposed by various scholars working in the field of tourism (Liang, 2017; Blazquez-Resion, et. al, 2015; FitzPatrick et. al, 2013). There are various studies conducted to study the concept of SD logic in the tourism. Though, this concept need to be revisited in the case of agrotourism to assess its application and further implication in this sector. Therefore, in this study we propose to use the SD logic in agri-tourism in Rajasthan.

The objective of the present study was to assess the problems and prospects of agro-tourism in the state. This study reviewed thoroughly the state of art literature in the field of agro-tourism which is published from the different perspective and related to different cultural, social and geographical context. Further, the study collected the data from different stakeholders to have a detailed overview of the agri-tourism in the state. Further, the identified problems need to be resolved to capture the full potential of agro-tourism in Rajasthan. Keeping the limitation of resources, it is critical to identify the key issues which requires immediate attention. Keeping this perspective in mind, Analytical Hierarchy process technique was applied to rank these problems from the perspective of the expert. This process helped in identifying the key issues which may be considered on priority by the policymakers and the practitioners. Further, to understand the customer's perspective of agro-tourism and their issue, data was collected using a structured questionnaire. In the last, we presented how S-D logic may help in involving the customers of agro-tourism in effective manner. We also suggest the agro-tourism sites should adopt a collaborative framework with both government and non-government entities to develop and run these sites. Government must also provide them required support and training so that they can diversify the existing tourism framework of the state.

Acknowledgement

Chaudhary Charan Singh National Institute of Agricultural Marketing (CCS-NIAM) is a premier National Level Institute established by the government of India. It is known for providing expert input in agricultural marketing for the betterment of farmer's life and the upgradation of the agriculture sector in the country. This project entitled "A study on the problems and prospects of Agro-tourism in Rajasthan state was funded by Chaudhary Charan Singh - National Institute of Agricultural Marketing (CCS-NIAM), Jaipur, Government of India. The research team would like to convey special thanks to Dr. Vijaya Lakshmi Nadendla, IAS, Director General, CCS NIAM, for providing inspiration, support, and guidance for completing this project. We are also thankful to Dr. S. R. Singh, Dy. Director, CCS NIAM, Jaipur for his constant motivation and guidance throughout the project. His active involvement and expertise helped us successfully complete the study. We are immensely grateful to Dr. Singh for his support and motivation.

We place on record the financial support from CCS-NIAM for sanctioning this research study, without which it would not have been possible. We want to thank and express our gratitude to all respondents and experts for providing their support and input during the data collection of this project.

We are grateful to the administration of BITS Pilani, Pilani Campus for providing required support for this study. Our sincere regards to Prof. V. Ramgopal Rao (Vice-Chancellor, BITS Pilani) and Prof. Sudhirkumar Barai (Director, BITS Pilani, Pilani Campus) for their encouragement and guidance for pursuing this research project.

We believe that outcome of this study will be helpful in the effective development of Agro-tourism in the state and will help future researchers, scholars, and practitioners in Agro-tourism and will contribute to strengthening this Agro-tourism in the country.

Chapter 1: Introduction

1.1 Background

Rajasthan – The Indian state that is known for its culture, history of Rajputs, their lifestyles, big forts and palaces, Thar desert, Aravalli mountains, folk music and not to forget “Rajasthani food”. This India’s largest state shows India at its most colourful, iconic and exotic best (Govt of Rajasthan, 2022). India’s pink city i.e. Jaipur wears the crown of the capital of this state. Another city of Rajasthan, Udaipur also called ‘the city of Lakes. It is evident that its main attraction are beautiful lakes The picturesque location at the foothills of Aravalli mountains is home to various palaces, forts and some magnificent and popular temples. This city is known for its warm hospitality. The next one is the golden city of India Jaisalmer which is the most loved city by tourists and travellers (Jaipur, Govt. of Rajasthan, 2022). The main highlight here is Thar desert where people go out for desert safari and camel safari in the vast sand dunes of the desert. This City is known as the golden city because most of the city is built with golden-coloured sandstones. Jaisalmer is famous for its ancient architecture, forts, art and craft, local cuisine and shopping, and Rajasthani outfits and souvenirs (Jaisalmer, Govt. of Rajasthan, 2022). Jodhpur the second largest city of Rajasthan is also known as the “Blue City”. Here most of the building is painted in blue colour. Filled with forts and temples, Jodhpur is a historic destination with plenty of appeal (Jodhpur, Govt. of Rajasthan,2022). When we talk about Bikaner, apart from mesmerising forts this city is famous for its food, especially sweets and snacks. It is heaven for foodies with a sweet tooth (Bikaner, Govt. of Rajasthan,2022). The famous Chittorgarh is a very impressive and historic tourist attraction of Rajasthan which is the birthplace of many great warriors (Chittorgarh, Govt of Rajasthan,2022). The holy city of Rajasthan, Pushkar is said to be the home of lord Bramha. When the camel fair hits the town the atmosphere and hustle–bustle here is worth seeing and therefore it’s the best opportunity to witness an old traditional Indian festival (Pushkar, Govt. of Rajasthan,2022). The small and famous town of Rajasthan which is Bundi is famous for step wells, places, forts and water tanks. Its classic architecture and ancient art are spellbound including a wildlife safari at Ramgarh Vishdhari Sanctuary (Bundi, Govt. of Rajasthan, 2022). Rajasthan’s only hill station, Mount Abu. It is in the desert state of Rajasthan which is situated in the Aravalli mountains. Giving the vibes of a cool and lush green place. This hill station offers exceptional views of the surrounding area (Mount Abu, Govt. of Rajasthan, 2022). Sawai Madhopur is famous

for its wildlife Sanctuary and its wide range of flora and fauna. It is a paradise for history buffs, wildlife enthusiasts and nature lovers (Sawaimadhapur, Govt. of Rajasthan, 2022). The Ranthambore National park is one of the best places in India to spot a tiger living in the wild. India's first luxury train which is amongst the top five luxury trains in the world hosted the first lady of India, American ambassadors, the Lord King chairman of the British Embassy amongst many other renowned dignitaries known as "Palace on Wheels" provides a seven nights splendid journey across Rajasthan Launched on 26 January 1982 as an initiative by Rajasthan Tourism Development Corporation along with the Indian Railways to give its guests mirroring images of Mahraja's pomp and elegance (Place on wheel report, 2022).The train chugs out of New Delhi Safdarganj railway station with a hospitable welcome. The train then proceeds for a seven-night eight days' journey across eight heritage cities of Rajasthan which includes Jaipur, Ranthambore, Chittorgarh, Udaipur, Jaisalmer, Jodhpur, Bharatpur, Agra and back to the capital of India (RTDC report 2022).

1.2 Tourism in Rajasthan

Tourism is the fundamental and most desired human activity that inspires individuals to go from one location to another. Tourism is the world's fastest-growing sector, which focuses on recruiting visitors to a certain location and then offering them with conveyance, lodging, food, recreation, and other amenities after their entrance and in return.

Rajasthan, located in the north-western region of India, is a place of majesty and breath-taking splendour. Rajasthan is a delightful destination for both international and local visitors due to its rich cultural legacy and cordial people. Rajasthan, often referred as the kingdom of royals, is among the most popular tourism attractions, renowned for its historical wonders - forts, Palaces - with royal food, dress, and music. However, Rajasthan has too much to offer. Rajasthan is possibly one of India's finest colourful states and a place of endless variation(Yadav,2017). Forts and magnificent palaces, vintage hotels, vibrant fairs and festivals, indigenous art and craftsmen are just a few of Rajasthan's numerous distinctive tourist attractions. The number of international visitors to the state has grown. it is evident that the local authority of Rajasthan is focusing on the growth of tourism and tourism-related activities. Tourism is a highly substantial economic activity in Rajasthan, with consequences on the financial, social, and cultural lives of the citizens (Sharma, 2018). This industry provides several advantages to the state, including foreign currency revenues,

job creation, an improvement in the level of life, inclusive growth, the expansion of international cooperation, the preservation of indigenous handicrafts, etc. The tourist industry's most notable contribution is the growth of job possibilities. In this industry, the manpower proportion is the greatest. Tourism is the third major employment in Rajasthan, behind agriculture and textiles. Significantly, tourism employs a large number of intelligent and capable women; compared to the other sectors, tourism is more gender neutral, and women make up 65 percent of the worldwide tourist workforce. These ladies are actively interested in hotels, airlines, travel agency, handcraft, and cultural endeavours. In the context of the hospitality industry, indirect employment is quite substantial and is calculated at 2,358, assuming a direct employment of one. As a result of tourism's interdependence with some other subsectors, the tourist industry generates 1,358 jobs per person (Kapoor & sing, 2017).

1.3 Agri-Tourism in Rajasthan

Agritourism is the notion of educating and training rural people to create alternative income streams and preserve their cultural traditions. Such kind of tourism emerges when agriculture and tourism facilities intersect. It consists of numerous farming activities, livestock rides, as well as a rural stay including natural, fresh foods (Srivastav, 2016).

Connecting the tourist and agricultural industries has the potential to revitalize and pump resources into both industries. Farmers adopted Agritourism to diversify agricultural goods and explore new markets in order to generate more money. In several instances, Agritourism assisted the continuation of agricultural operations by the offspring of agricultural producers. Villagers have also benefited from the job possibilities created by these centers which Improves the social status of farmers, hence improving their quality of life (Jagtap, Nichit, & Benke, 2010). Agritourism is also sometimes referred to as ecotourism since it enables sustainable growth without harming the environment. Remote communities might see this notion as a chance to delocalize and re-establish local customs and practices, uniqueness, as well as a better lifestyle.

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(Chaudhary and Yadav, 2018). This niche tourist offering is taking incremental steps in Rajasthan as state government is considering seriously to promote the Agri-tourism. The urban population with rural origins is constantly interested in learning more about rural life, including food supplies, flora, wildlife, craftsmanship, linguistics, heritage, ritual, clothing, and rural mode of living. Agritourism can fulfil the desire of this section of the community. Also, the rise of agritourism will coincide with the improvement of rural infrastructure (Khangarot and Sahu,2019). It will work in two ways: improved rural connectivity and increased tourist earnings for the state.

With careful planning, collaboration, government help, and coordinated group support, the above specialty tourism product has the prospects to spur the economy and increase farmer income, and also contributes to the emergence of a tourism industry, a cause of cash crop for agricultural producers, and employment prospects for rural youth, thus further poverty alleviation.

The Agri-tourism offerings in Rajasthan is still in nascent stage with limited availability(Yadav,2017) such as Mega food park in Ajmer by utilizing Public Private Partnership model, Orange fields near Jhalawar and Sri Ganganagar.

The government also launched Rajasthan Rural Tourism Promotion scheme 2021 where the focus was given Rural investment and employment generation in rural areas with special provision for agri-tourism (Rajas, 2022).

Chapter 2: Literature Review

2.1 Introduction

Since many centuries, agricultural sector has been considered an important sector of the economy. Over the period of time, contribution of this sector in the economic growth has declined due to various reasons. These reason includes rapid industrialization, migration to the urban areas, more focused on the white collar jobs, decline in the agricultural land etc. and resulting in the downfall in the farmer's income. Government across the globe in general and in developing economies particularly promoted various ways to increase in the income of rural household.

In last few decades, rural tourism has emerged as one of the area, which captured the attention of policymakers, scholars which can help in achieving the objective of increasing the income in rural areas. Agro-tourism has emerged as an area to achieve this objective. These activities are helping farmers by diversifying their business and on the other hand educating tourist about various arm related activities (Colton and Bissix, 2005). Agro-tourism is one of the part of rural tourism (Phillip et al., 2010). Agro/Agri tourism can be defined as, expanding and opening the agricultural activities as tourism spot for the visitors from different places. It is also considered as diversification of core agricultural work. *“In the agri-tourism sector, diversification is shown through the presence of recreational and cultural services (e.g. hospitality, catering) and through the preservation and enhancement of the territory (e.g. direct sales, birdwatching)”* (Giaccio et. al, 2018, p. 217).

In recent year, agrotourism has captured the attention of scholars, practitioners and policymakers in the different part of world. According to Weaver and Fennell (1997), agrotourism can be defined as inclusion of tourism component along with the regular agricultural activities. Further Arroyo et. al (2013) proposed that usage of agri-activities for entertainment and education. Flanigan et al (2014) characterize agri-tourism on three parameters. These parameters are defined as visitor-agriculture interaction, visitor experience in farm, realistic functioning agricultural activities. Paul and Patil (2022) studies understanding of sustainable agro tourism by converting normal agricultural land into the smart tourist destination. Shah (2022) suggested ways to earn additional revenue through farming and agro-tourism as a business conducted by the farmers in Maharashtra state of India. Upadhye and Shingare (2021) studies various practices applied by Agrotourism farms to retain their customers in the era of pandemic. Trung and Tharu (2021) recognizes the

significance of promoting and protecting agricultural lifestyle values in agro-tourism activities in Vietnamese context. Shinde (2021) argues in favour of agrotourism as an important prospect for farmer's growth in Pune region of India. Pujiasmanto et al., (2021) explores an opportunity to develop agro-tourism using agricultural resources. The research identifies various supporting factors to promote community-based organic tourism attractions. Evgrafova et al., (2020) supports agrotourism for sustainable development of rural areas in Russia. The research assessed the strengths and weaknesses of agrotourism. Kubickova and Campbell (2020) examines how can government help in agro-tourism development. The research was conducted by using case study approach in Honduras region. Little and Blau (2020) investigates the impact of community based agrotourism in Costa Rica. The research findings indicate that community based agrotourism is a very effective to manage the stress due to economic and climate change.

McGehee (2004), suggested the use of agrotourism for the farmers as secondary source of income. The another benefit of agrotourism suggested in the literature is preservation of heritage sites (LaPan and Barbieri, 2014). In a study conducted in USA, proposed that development of agrotourism farms can also help in sustainable development by providing various environmental, economic and social benefits to the various stakeholders involved (Barbieri, 2013). A study conducted in Italy, proposed that Agrotourism can open various paths of rural development (Lupi, 2017). Agri-tourism can be considered a diversification approach adopted by farmers without a significant additional investment and without affecting the existing in a negative way. (Veeck et al., 2006). According to Giaccio (2018), proposed various factors like food service, subsidies, direct selling determines the inflow of income based on agrotourism.

2.2 Review of Literature

There has been a significant growth of literature in the field of agro-tourism across the globe. We reviewed the existing literature of last 20 years to understand the various trend in the literature in this field of study.

Lokovidou (2002) says that Women agro tourist cooperatives constitute most unique type of rural tourism in Greece in because of its plan organisation and management, he analysed women agro tourist cooperatives to point bottom up approach, identify the factor that motivate Greek women and effect to their decision on life. The findings of the study show that the successful cooperatives meet at least one of the following conditions: the cooperatives are made of core women with

leadership skills, authority that support women ventures, establishment based on bottom up approach.

Nowers et.al (2002) used a mixed method approach to find about modus operandi, problems and achievement that can help the people which are working on establishing similar route. There findings syas that there is a need of to appoint skilled and knowledgeable PR Officer or manager. There is a need for close collaboration and co-ordination between the wine route and the local tourism bureau. There is need to make policies and strategies that is needed to make linkage between wine and tourism industry. These two industries complement to each other well. This can become base of healthy rural economy. The both the local tourism and local agricultural sectors can help to improve quality life for a strong healthy and sustainable agriculture sector.

Loureiro et.al (2005) has done study in Norway and objective of the study was to assess the role played by farmers in adoption of agro tourist activities. They are two types of activities which are famous in rural tourism which people do i.e. fishing licensing and hunting rights, second is second letting rooms on the farm and selling food to tourists or travellers. Results shows that factors such as size, location of the farm play an important role, important decision is based on licensing fishing and hunting rights, social demographic like female partner's presence in the house hold and age of main farm operator has a key role in adopting various tourism activities on farm.

Marques (2006) discuss the role of agritourism in the rural areas as a tool for upliftment by using cultural values and nature. Data was collected through interviews. The findings show that tourism helps people to market their product, preserving their heritage and also help in developing human and physical capital in which rural area are lagging behind.

Pulina et.al (2006) analyse the supply of an important form of rural and agro tourism at four provinces and analysis is based in three main sections firstly, legislative intervention secondly a life cycle description based on literature and thirdly legislative impact and life cycle analysis combined together by using econometrics approach. the findings show that regional legislative have an impact on the evolution and supply dynamics. The quantitative methodology identified different results in modelling the trend for all four provinces. Researcher has also mentioned some suggestions for both private players and policy maker for agro-tourism.

Veeck (2006) studied to find the factors that are associated with successful operations of agricultural tourism. The interest in this area has grown. People living in rural and looking for new

economic activities and increasing their income through sales. People are visiting farms for various purpose such as purchase, enjoyment and education etc.

Wilson et.al (2006) conducted a study with a main objective to find how investment in conservation program affect the revenue generation from recreational services revenue. The study used econometric model to achieve the abovementioned objective. The theoretical conceptualization was based on the assumption that investment of public in natural resources generate indirect profit to the producers. The main reason of this profit is due to creation of additional profit making opportunities by encouraging agri-tourism activities in that region. Finding of the study shows that western states accounts for only 20percent of total program investment and 80 percent remain with the rest of US that is central US “Corn Belt”. The study suggest that researcher may extend these study in different geographical context to have better generalization.

McGehee et.al (2004) again has done quantitative study to explore the potential differences in motivations for agritourism entrepreneurship between genders. Data was analyse using statistical tools. Analysis shows that men and women show similar characteristics in terms of agri tourism as both want to look for multiple source of income, optimum use of available resources and believe on enhancing the customer’s knowledge. The difference is that women shows the much higher ranking for all positive motivation than men. The study finds that women is highly motivated for developing agri tourism facilities as business venture than their male counterpart. Study further suggest that to have better and generalized understanding there is a need to study this paradigm with modifications or using different qualitative method.

McGehee (2007) present a view about agri tourism system model that is responsible for three stakeholders i.e. agritourism providers, DMOs and agri tourist. The development of this model has not been applied yet but it proposed to help in evaluating the drivers and critical success factors and barriers of success from the perspective of these key stakeholders.

Kline et.al (2007) says that people are using agritourism to conserve family farm, increase revnue and also to teach people about farming life etc. The farmers should know about the new product and they should explore, evaluate and also educate about the product. Tourism is like a seed corn. This paper has mentioned about the areas which are impacted by visitor and what strategies can be used to prevent that impacted area.

Burrows et.al, (2007) talks about the linkage between agricultural enterprise and regional artist and create a mass attraction. This article is a best example of partnership between all stakeholder, it also highlights the issues and steps taken by participant so that there will be continuous development in the state.

Wojciechowska (2007) conducted a study of agro-tourism in the context of Poland. Author using a single criteria of classification, categorize the agro-tourism farms in three category group namely: objective, subjective and relative. Further author also classified of agro-tourism farm owners as well and put them in five categories. These categories are young owners (20-39), middle aged (40-59) and elderly owners (over 60), married couple with 2 leaders, married couple with one leader, and last is single owners. Researcher found that that this classification may help the scholars to identify the number of basic group of agro-tourism farm owners and their evolution over the period of time.

Shen et.al (2008) examined the resident satisfaction with agritourism in china by taking 4 variable of sustainability i.e. economic, social, institutional and ecological. Structural equation modelling was done and all the variables were found to be significant predictors of resident's satisfaction. Out of these four variable institutional variable was found the strongest predictor of satisfaction. The results of the study present that it is important to include all these variables to monitor the satisfaction level of sustainable agritourism.

Tchetchik et.al, (2008) has used a discrete-choice equilibrium model with product differentiation to study the rural tourism industry in Israel to assess the impact of farm and lodging farm characteristics on the preferences of consumer and firms. According to the findings of the study government can play a critical role in pushing the progress by subsidizing investment, deregulation of supply and distribution of information. Findings also shows that agriculture doesn't have any affect demand on rural accommodation. Neither the active farm nor the agriculture activities by the owner attract the visitor.

Aggelopoulos et.al (2008) used quantitative method to study agro tourism in Greece. Agro tourism in Greece has become quite famous and it runs in three structure. Among three women cooperatives is the famous one. Women cooperatives contribute in their family income and it boost the confidence of women and they feel independent. Tourist looks for traditional things (to know about culture, language etc.) with this a comfortable stay. these women assure that their customer get all these during their stay.

Barbieri et.al (2008), investigate the role of firm's and owner's characteristics on the overall income of agritourism farm. The data for the study was collected using a web based survey method and collected data was further analyzed using different quantitative techniques. The findings of the study show that length in business(time), the number of employees and farm estate positively affect the farm performance by increasing the yearly sale. s

Carpio et.al (2008) has used quantitative method to find the factors responsible for American visitor and also to estimate economic value of rural landscape. Study found that on an average a person take 10.3 trips in years and estimated surplus for one trip is 174.82dollar out of which 83.50 dollar is due to rural landscape. Although there is need to do closely scrutiny as something important is happening in regard to economic valuation.

Chemnasiri et.al (2008) has used mixed method was used to study the potential of farm in saraburi province. Data was collected by interview, survey, observations and inquiries from farmers, group of farmers, housewives etc. Findings shows it has great potential to become a tourist place and which can help people to grow economically.

Hara et.al (2008) has done this study in developed nation and he says that poverty is not only the problem of developing or underdeveloped nation but also of developed nation and this study was done to find the role of agri tourism in removing poverty and authors find that there is some change happening but to all the groups. It is helping those whose income are less than 25000 dollars annually.

Karbati et.al (2009) study the socio economic effects of agri tourism on local community and authors also try to give viewpoint on progress of agri tourism in turkey. Qualitative methodology was used and results of interview shows that economic benefit of agri tourism has not been observed yet. Some social dimensions which are visible is tourist communication and cultural exchange is more observable rather than eating and drinking habit. The is no agri touristic village in Turkey.

Shen et.al (2009) has used agro-tourism sustainability from the perspective of rural families. Survey method was used to factor analysis was done. Data was collected in the year 2003. People perceptions of aspects of sustainability was measured on 4 aspects: economic, social, environmental and institutional. Among these Institutional sustainability was the strongest predictor followed by social, economic and environmental. According to local community institution sustainability (Community participation and democracy) is local community is in need

of management input but there is need to care so that this should not lead to negative social consequences.

Henderson (2009) has written this paper in context of Singapore and he is concerned about the practice and concept of agro-tourism. This is literature review paper data is collected through (public domain, print and electronic media, fieldwork and informal communication with practitioners). Agro tourism in Singapore is combined of attractions, amenities, activities related to fisheries, livestock etc. Agro-tourism is not limited to rural area but it is compatible with urbanisation as well. There is need to find whether agro-tourism in Singapore can secure a sustainable position, there is a need of monitoring and to explore the factors responsible for the success of agro-tourism.

Chatzigeorgiou et.al (2009) has used emotions, expectations and satisfaction to study the association between complete customer satisfaction and customer re-purchase. Data was collected using survey method. Findings of the study shows that emotions are of two types positive and negative and if person is having positive emotion then person response for the product will also be positive. We cannot generalise the findings of this research as data was collected from only two business (inland and mountain). There is need to do research in other areas and lodgings for broader perspective.

Christou,et.al (2009) has done ethnography study to find satisfaction of agritourist in regard to motivation, expectations, satisfaction, achievements and behavioural intentions. The results of the study present that tourist visiting agro-tourism locations focus on different factors of based on their interest and experience. For example, some people have interest in flora and fauna and some have in history different services are important for different people and diff reasons for their interest in agritourism.

Srikatanyoo and Campiranon (2010) has done quantitative study was done to find the need and motivation factors for agritourism in Thailand. Data was collected from people who stayed in the accommodation.

Yang et.al (2010) has done research in peri urban area of China. This area is under great pressure from the land demand of urban expansion that result in environment deterioration. This paper analyse the performance of large enterprise (Xiedao Green Resort in Beijing) over a period of 2004-2008. 5 cases were analysed and compared. questionnaire survey on visitor was done, in-depth interview was taken from the managers of the agro park on the three themes i.e. history and

dynamics of enterprise, characteristics of employees and impact of enterprise on local people and their attitudes.

Phillip et.al (2010) has tried to identify and provide clear and basic characteristics to define agritourism. They have also covered a list of definitions that are mentioned in literature. Authors has identified 5 types of agritourism typology on the basis of three discriminators i.e. tourist activity based on a working farm; nature of tourist contact with agricultural activity and tourist experience with authentic agricultural activity?

Brandth and Haugen (2010) investigated how diversifying as well as transition of agriculture into ecotourism may affect peasants' social identities. Supported by a study of 19 farmland owned by partners active in agritourism, this article demonstrates how the growth of tourism on the farms may be comprehended from a repeasantization viewpoint and also how the partners use farmland resources, heritage, and location to maintain their farm. Being hosts who provide regional cuisine, anecdotes, and varied activities, they propagate a robust farm distinctiveness. Furthermore, researcher highlights how agricultural values alter as a result of three mechanisms through which "new" tourist business destabilises identities. The first is a change in the definition of peasant identity. Finally, there are several identities that fluctuate in relation to diverse social affiliations and contexts.

Hashimoto and Telfer (2010) Discusses the issues of creating sustainable collaborations for agritourism in a variety of agrarian destinations, such as a landscapes exhibition, indigenous tourism resort, resort & spa, each initiative, as well as farm owners' markets. According to continued fieldwork research conducted from 2003, there seem to be substantial obstacles to building lasting partnerships inside and between programs/attractions, such as a lack of cohesion, divergent perspectives on tourism-related initiatives, and different social responsibilities. These must be acknowledged if the economic growth ought to be effectively revitalised and repositioned around agritourism.

Das and Rainey (2010) concentrates on a 15-county agriculturally dominating area with in Arkansas Delta Byways (ADB). The research analyses agritourism tourist and spending information to measure the benchmark economic implications of agro - tourism during 2007 and to forecast the prospective economic implications of agritourism in 2012 for the area. The research is undertaken in two phases, with the first phase consisting of empirical estimation of future indigenous tourism visitors based on time series extrapolated models. In the 2nd phase, an input-

output (I-O) structure is utilised to examine the economic effects on revenues, employment, earnings, as well as tax take for government, state, and municipal governments. As a consequence of the province's agritourism marketing and actions, the proportion of agritourism tourists as a proportion of overall visitors grows from the minimum level to hypothetically greater levels, and the net economic benefit from more visitors is evaluated. Findings indicate that farms would profit from revenue growth but will not experience a major increase in employment, mostly owing to the family character of the operations. The gains including on hunting far outweigh that of other agritourism pursuits, and their effects cascade through several other areas of the domestic economy.

Zarenthung T. (2011). Used a situational analysis technique among the respondents of Wokha district of Nagaland state, which is dominated mostly by Lotha Tribe, this research aims to reveal the untapped potential of rural tourism destination and to provide possible solutions. The research was done by direct survey method as well as random site visits to probable locations.

According to the results, the state boasts a wealth of virgin forests, animal species, a diverse culture, and an abundance of pure agricultural goods, which seem to be a blessing to rural tourism. Consequently, the number of visitors visiting the state is limited for a plethora of ways, including government restrictions, weak infrastructure, and a perception of fear. Additionally, the author urged that now "the Inner Line Permit" as well as "Restricted Area Permit" should be eliminated so that visitors may access the state without difficulty. Additionally, ecotourism in the state should indeed be promoted via multimedia platforms and an appropriate infrastructure must be constructed.

Tew and Barbieri (2011) focuses on examining the agritourism benefits. A survey of 164 Missouri agritourism properties yielded the following information. Results indicated that agritourism primarily helps to attract new farm consumers, educate the masses about farming, and improve local farmer family's wellbeing, which reflects both financial as well as nonfinancial advantages. Organized by goal aspects, the results revealed that agritourism is seen as most significant for market-related objectives, indicating that the economic function of agritourism shouldn't always be judged in form of greater profitability, but more as a promotional tool.

Phelan and Sharpley (2011) Scrutinizes the variety of skills and competences which farm owners with in north-west region of Britain deem essential for effective diversifying, and investigates the degree with which these talents are visible. The finding revealed, Even though farm owners

are turning to agritourism as a method to create extra revenue, they lacked plenty of the core business skills necessary for success. This has ramifications for development strategies as well as indicates the need to resolve these competency gap via farm consulting procedures and even more efficient training and assistance for agritourism operators.

Yang L. (2012) Analyzes the influence of agritourism on indigenous group and addresses the obstacles encountered by locals wanting to enhance their lives via ecotourism in light of its growing relevance for both industrialised and developing nations. The study used qualitative research methods for a sample of homes reveals favourable economically and socially outcomes. In addition to providing a supplemental income and new job prospects toward the rural population, agritourism however has improved environmental preservation and understanding of minority cultures as well as the remote livelihood. Meanwhile, agritourism growth faces a variety of obstacles, and federal assistance is required to assist agricultural households in creating and running tourism operations.

Bagi and Reeder (2012) conducted a research to identify the factors that influence engagement of farmers in agritourism in United states using secondary data from National farm survey. logit model was used for analysis. The result showed that recreation purpose has the largest impact on engagement whereas the Protected programs having the least impact on engagement among the dummy variables. Hectares of property owned, percentage of unusable land, age of operators, and proximity from cities are continuous factors that influence involvement. Targeting fields as well as farmers with such characteristics may improve the effectiveness of agro - tourism marketing campaigns.

Barbieri (2013) evaluated economic, social, and ecological indices of sustainability across agritourism fields versus fields with certain other kinds of diversified operations. 873 usable responses that satisfied the study's requirements were collected via an online questionnaire in the last quarter of 2005. Result shows that agritourism seems much more ecological. Agritourism generated much greater operating profits for the farm, which should explain for better family incomes, despite a bigger payroll, compared to their competitors. Moreover, agritourism estates also have more overall and nonfamily workers versus farms having varied entrepreneurial holdings, which may be read as just an indicative of the financial effect of agritourism on its nearby areas.

Asciuto et. al. (2013) Reviewed the agritourism availability in Sicily to land endowments and identified the ecological and sustainability elements likely to influence business performance. Evidence gathered via provincial statistics reports was complemented with qualitative data gained via interactions with a random sample of agritourist businesses operating in various rural regions of Sicily. finding provides evidence that widespread agritourism in Italy give major financial assistance to both agricultural businesses and even the tourism industry on the whole, moving visitor flows beyond coastal to interior locations.

Arroyo et. al. (2013) conducted a research to determine the better suited operational definitions for agritourism initiatives among Missouri and North Carolina citizens, landowners, including extension staff. A consistent and efficient of agritourism must contain "agricultural environment," "amusement," "farming," and "skills training," according to the findings. In addition, participants confirmed that agritourism included staged or genuine activities conducted on functioning agricultural sites. All key stakeholders dismissed the possibility that activities delivered on quasi farms or in settings where agriculture serves simply as a backdrop constitute agritourism. Tests of statistical validity revealed substantial distinctions in agritourism definitional features and kinds.

Ammirato and Felicetti (2014) Examine the feasibility of Agritourism as a tool of inclusive growth. To achieve this objective, the researcher provide the results of an exploratory survey conducted in 2012 towards the Italian area of Calabria on a sample of 52 farms performing agritourism initiatives. The study is an attempt to determine whether agritourism can contribute to the environmental sustainability of a remote town that serves as the core of a "agritourism rural network."

Schilling et. al. (2014) Applying propensity score matching, examined the impact of agritourism on the net capital revenue each hectare of New Jersey farms. Agritourism has statically meaningful and favourable benefits on farm profitability, according to the findings. in furtherance Profit implications are greatest with small farmlands run by persons whose primary occupation is farming, whilst leisure fields see favorable but lower effect. The impact of farm size on profits were just not conclusive.

Choo and Petrick (2014) explains how often the social ties of agritourists influence overall pleasure and, as a result, reconsiders their revisit ambitions by applying social exchange and resource theories. In order to assess the suggested model and test the assumptions, a survey was undertaken. Respondents (N=266) included farm-visiting tourists. The findings reinforce or

overwhelmingly supported most assumptions with the exception of one, and the fitting of the suggested model was satisfactory. The findings give guidance for the construction of a theoretical framework to explain agritourists' intents to return by enhancing their social exchange ties. Furthermore, the findings advocate for the inclusion of social relations further into agritourism service landscape.

Choo and Petrick (2013) Scrutinizes fundamental resource theory-derived conceptual link between agritourists' social relationships and fulfilment. Additionally, research investigates agritourists' responses to getting specific vs broader sorts of resources through service providers. Specific resources shared during agritourism interactions add more to pleasure than standardised resources, as shown by the study's findings. Consequently, agritourism service providers must prioritise resource exchange alongside respective agritourists and clients. Instead of only being incentives, universal resources, such as monetary discounts or special pricing, must be tailored to express personal care and care to each consumer.

Jęczmyk et. al. (2015) examines the economic rewards of agritourism growth, a subject that requires more study. Uncovering the advantages of agritourism is crucial, yet evidence based research on the topic remains sparse. The stated findings are collected through a survey of agritourism operators in Wielkopolska Voivodeship, Poland. The findings suggest that agritourism has several financial benefits. It was determined that agritourism provided majority of farm owners' household income on average. Nevertheless, food service is essential to the viability of agritourism as it creates extra income for farmers. This research also discovered a substantial association between the revenue earned by agri-tourism activities and the revenue created by providing agritourists with meals.

Prayukvong et. al. (2015) advocated that agritourism influenced by Buddhist economics, show where both environmental impact & recreation aims may be met. In its philosophical foundation, Buddhist economics diverges greatly with conventional economics. A prospective study of an agritourism trip for seeing the premises of Thai farmers participating in a concept named "running a one-rai farm to earn 100,000 baht" The survey primarily is exploratory in nature. research results demonstrate that agritourism is indeed an important market route for ensuring sustainability.

Barbieri et. al. (2016) using a multimodal strategy to standardise agricultural recreation branding. On the basis of a set of criteria, eight brand names were analysed, and each brand name's aggregate

preference was determined. The research reveals that agritourism is ideal for brand development. It is necessary to educate them about the brand's significance.

liang and Dunn (2016) investigated the obstacles and information collecting strategies of small and big farms in England. Utilizing survey techniques, farms were categorised by yearly revenue. The main obstacles have been financial accessibility & labour access. In terms of information gathering Small Farms seemed to have more challenges with connectivity and supporting system access, whereas Large Farms had more difficulties regarding market research and customer access. Big farms were even more prone than smaller farms to gather information from various of references.

Fernández et. al. (2016) segments regional ecotourism in La Palma, Canary Islands, using a cluster analysis. They evaluate the degree of visitors' environmental sentiments as an explanatory variable for customer segmentation. The findings indicate that market categories are quite heterogeneous and that conventional rural tourism comprises a tiny portion of the entire market. Those sectors with the greatest economic effect and highest levels of visitor pleasure are those in which tourists demonstrate the highest levels of environmentally responsible behaviour. Therefore, rural tourism destinations may strengthen their economic health by concentrating on such sectors that attract visitors with more environmental issue and by enacting regulations that boost the sustainability performance among those areas.

Doh et. al. (2017), aims to comprehend entrepreneurial and managerial conduct in the process of sustainable tourism in remote rural areas of united states, which impacts organisational performance. This research also leverages the concept of contingency to explain the varied business behaviour of managers under different conditions. Therefore, the purpose of this exercise is to identify the foundations of managerial behaviours in terms of the relative external conditions as well as institutional circumstance, and to investigate impact of managerial behaviours on organisational effectiveness, including financial gain, human relationship, and consciousness. This study's further findings indicate the diverse consequences of executive behaviour's desirable and undesirable outcomes. The researcher further identified many consequences of management conduct on several categories of corporate performance.

Liang A (2017) embraced the notion of service-dominant logic and developed a conceptual framework to aid entrepreneurs in planning agritourism services that would improve the tourists' perspective, among four small farm field trials. Findings indicated that rural culture as well as

tourists' reciprocal interaction were essential for agribusiness to incorporate the particular features of internal service delivery. further author believes Agritourism programmes must assist visitors gain agricultural information via a pleasurable and engaging experience, laying the groundwork for the co-creation of value via interactions with several other tourists.

Addinsall et. al. (2019) used “Agroecology and Sustainable Rural Livelihoods Framework” (ASRLF) to examine tourism's significant benefit to better preservation and crop management outcomes among rural Ni-Vanuatu smallholders. For data collection from the responders, the story-telling technique was used. They discovered that rural Ni-Vanuatu smallholders’ farmer had little opportunity to benefit substantially from the tourist industry in Vanuatu.

2.3 Gaps identified from the Literature

There is significant amount of the growth in the literature mainly in the last two decades. The major published literature is from the context of western economies. Though, there are few studies from the perspective of developing economies like India. The literature on agro-tourism is focused mostly on the government policies (Kubickova and Campbell, 2020), agro-tourism as source of income (Kumbhar, 2009; Barbieri et.al, 2008; Akpinar et al, 2005), performance evaluation of agro-tourism (Joshi et al, 2020).

2.4 Problem Statement

Tourism is a sector which heavily dependent on the local geographical conditions. That is why, this sector presents various challenges those are applicable to the particular geographical location. In addition, the local socio-culture and political condition also play an important role in the development of any category of tourism in a particular area.

Indian economy being primarily an agricultural economy, provides the employment and livelihood of majority of the farming community. Since Independence, increasing farmer’s income has always been an objectives of policymakers. Recently, agro tourism has emerged as an unconventional way of increasing farmer’s income in various states. Agrotourism or rural tourism provides an option to the visitors to experience to uncover the rural life, their farm and other related activities, social and cultural practices which ultimately help the people living in that locality in sustainable manner. This will help in increasing their income level both in direct and indirect manner and protecting their cultural practices. Further, this is also affecting the social and cultural

setup of the tourism areas and provides them scope of improvement in their daily life. In order to improve the customer's or tourist experience providing production and service simultaneously is an important areas demand further exploration for effective development of agri-tourism. Agrotourism is a way of developing the rural location as part of developing these tourism areas in sustainable manner with a concern to increase the living standard of the farm and rural people by providing them the additional avenues of income. This study will adopt the concept of service-dominant logic in order to identify the better prospects of agritourism in the state of Rajasthan which will be beneficial to all stakeholders involved in the process.

India is a diversified country with a significant variation in terms of climate, geography, socio-cultural setup, crops and farming activities. With all this variation, one thing is common in entire states, there is always a need to identify the ways to increase the income of farmers and people living in the rural areas. This make the this more necessary to assess the opportunities and issues for different geographical reasons from the perspective of developing eco-tourism activities. Therefore, it is critical to study the problems and prospects of agro-tourism development in the state of Rajasthan.

Further, the use of SD logic has been proposed by various scholars working in the field of tourism (Liang, 2017; Blazquez-Resion, et. al, 2015; FitzPatrick et. al, 2013). There are various studies conducted to study the concept of SD logic in the tourism. Though, this concept need to be revisited in the case of agrotourism to assess its application and further implication in this sector. Therefore, in this study we propose to use the SD logic in agri-tourism in Rajasthan.

Based on the gaps in the literature and research problem following objective are defined:

2. 5 Objectives of the Study:

The objective(s) of the study are as follows:

1. To study the current status of agrotourism in the state of Rajasthan.
2. To identify the problems of agritourism in the state of Rajasthan.
3. Develop a framework using service dominant (SD) logic for effective development of agrotourism in the state of Rajasthan.
4. To provides the policy guidelines for the effective development of agritourism in the state of Rajasthan.

2. 6 Conclusion:

This chapter presented the review of literature in the area of agri-tourism. This was followed by gaps in the literature, problem statement and objectives of the study. In the next chapter, the research methodology for the study was presented.

Chapter 3: Research Methodology

3. 1 Introduction

This chapter of the report presents an overview of the methodology adopted in the study. In order to address the objectives of the study, we collected data from the different stakeholders of the study. This data was collected using two methods.

The main aim of the research methodology is to guide the researchers at each step of research to achieve the objective of the study. It acts as a foundation to answer the research questions identified from the literature. The present research proposed to use a descriptive cross-sectional study design. It involves the collection of information or data from any given sample of population elements only once (Malhotra, 2007).

In order to achieve the objective mentioned in the previous chapter, in the current study data is collected using both questionnaire and interview method.

First, section of the study was based on the exploratory research design. In this, data was collected using interview method to understand the problems and prospects of Agro-tourism in Rajasthan. The semi-structured interview was conducted from the individuals those are either current or prospective service providers of the agro tourism in the state. As the concept of agro tourism is in the nascent stage in Rajasthan state, the data collected from these people helped us in understanding the issues in more detailed way. The main reason of adopting the semi-questionnaire interview to use the questions to manage the flow of interview. These question were derived from the literature and reviewed by the experts in the sector. The main objective of adopting this approach to understand the prevailing knowledge from the participant's perspectives. What is the perspective of participants related to the agro-tourism? The interview based methods helps the participants to share their opinion as per their comfort and help in developing the thorough understanding of the topic of study. The interview was focused on primarily three aspects. We collected data through interview mainly on three aspects, Problems of agri-tourism, prospects of agri-tourism in Rajasthan and finally application of S-D logic in the context of agri-tourism. This interview will be focused on multiple aspects. The interview will focus on identifying the problems faced in the field of eco-tourism in Rajasthan. The interview with these owners/managers will further explore the prospects of agro-tourism sector from their perspective. Finally, the information collected through interview method will be used to analyze the

fundamental premises of S-D logic (Lusch & Vargo, 2008). Duration of each interview was on an average 30-40 minutes

This helped us in locating the main problems of agri-tourism from the perspective of the current and prospective owners of agri-tourism site.

The selection of these sites will be based on the convenience sampling. The interview questions related to the service dominant logic were adapted from Hayslip et al. (2013) and Hoharu (2014).

The next part of the data collection was focused on understanding the customer's perspective to explore the problems and prospects of agro-tourism in Rajasthan state. A structure questionnaire was used to collect the opinion of the customers. This questionnaire used five point Likert scale.

The main reason of using this methodology to develop a better understanding of the problems and prospect of agri-tourism both at macro(firm) level and micro(customer) level.

It is difficult to get the solution for all identified problems immediately. Therefore, it is important to locate certain key problems which needs an immediate attention. Hence, we needed to identify a technique which can rank these identified problems. There are various techniques available in the literature to provide the weights to the problem in hand. Keeping the complexity and multi-dimensional nature of the problems, we further applied Analytical Hierarchy process (AHP) to rank the identified problems related to agri-tourism in Rajasthan. For the application of AHP, we developed a hierarchical model. This model is having the first level as the main objective, i.e. Prioritization of problems of agri-tourism in Rajasthan. With second level of 4 main categories and 13 problems identified from the interviews.

The second part of data collection involves the visitors/tourist of these agro tourism sites in Rajasthan. In this case data will be collected using a structured questionnaire. In order to understand the tourist's perspective of these agro-tourism sites, data will be collected. The questionnaire is divided in two parts. First part will collect the demographic information of the visitors including age, gender, income level, and education. Second part collect data related to the agro-tourism sites. The questionnaire was developed based on the review of relevant literature. Questions were adapted from various sources and modified as per the requirement of the present study. The major questions were adapted from Nguyen et. al (2018) and Kunasekaran et. al (2011) and Shaffri et. al (2015). The total number of responses for the questionnaire survey was 150.

3. 2 Analytical Hierarchy Process

Analytical Hierarchy Process (AHP) is Multi-Criteria Decision Making (MCDM) techniques which involved experts to rank the factors of the study. This method was MCDM techniques are generally used when one need to solve a complex problem with the multiple criteria. AHP has been extensively used in various in various situations in the literature. In this techniques experts are asked to develop the comparison matrix based on the relative importance matrix (Table 3.1). As part of AHP methodology, we approached to the experts from industry and academia to develop pairwise comparison matrix.

Table 3.1 Relative Importance Scale

Value on Scale	Importance
1	Equal Importance for both criteria
3	Moderate importance one on another criteria
5	Essential or strong importance of one on another criteria
7	Very strong importance of one criteria on another criteria
9	Absolute importance of one criteria on another criteria
2,4,6,8	Intermediate values between two scale

(Source: (Saaty, 2000a, 2000b))

Once the comparison matrix is developed, the priority weights are calculated using the normalized matrix. In the last consistency check is performed to ensure the pairwise comparisons are consistent in nature. The detail process of AHP is presented in the next chapter in the section 4.2.

3. 3 Conclusion

The present chapter provides an overview of methodology adopted in the present study. As discussed the data was collected from various stakeholders to understand the holistic perspective of the agro-tourism in Rajasthan. The next chapter presents the overview of the results and findings of the study.

Chapter 4: Results and Findings

4.1 Introduction

This chapter of the report discusses the findings of the study. The first we present the findings from the interviews conducted with the various managers/owners of the agro-tourism sites in Rajasthan. The insights from the interviews helped in understanding the problems for developing agro-tourism in Rajasthan. Further, through this interviews we have also identified the potential prospects of agro-tourism in Rajasthan. The interviews have also provided us insights to understand how value co-creation can help in improving the service delivery in agro-tourism in Rajasthan.

In the next part of the section, we present the findings from the data collected from the customers/visitors/tourists to understand the problems and prospects of agro-tourism sites.

4.2 Problems of Agro-tourism in Rajasthan

Based on the interviews conducted with various stakeholders to understand the problems and prospects of agro-tourism in Rajasthan. This next section discusses the problems of agro-tourism in Rajasthan, summarized in the Table 4.1 and 4.2. Some of these problems are due to location specific constraints and rest are in general in nature.

Table 4.1: Problems of agro-tourism in Rajasthan

Problems of agro-tourism in Rajasthan	1. Lack of awareness of government policy. (PB1)
	2. Seasonal Tourism (PB2)
	3. Impact of Covid-19 on tourism sector (PB3)
	4. Lack of Training and Government Support (PB4)
	5. Fear/Risk in the people's mind (PB5)
	6. Lack of marketing/Famous for heritage/desert/Cultural tourism (PB6)
	7. Lack of Manpower (PB7)
	8. Climatic Conditions (PB8)
	9. Lack of entrepreneurial skills in farmers (PB9)
	10. Lack of Capital (PB10)
	11. Presence of unorganized sector in the Agri-Tourism (PB11)

These problem are further categories based on their commonalities under some heads as below:

	Main Categories	Sub-Categories
Problems of agro-tourism in Rajasthan	Policy related problems (PRP)	1. Lack of awareness of government policy. (PRP1)
		2. Lack of Training (PRP2)
		3. Lack of marketing/Famous for heritage/desert/Cultural tourism (PRP4)
	Climatic and regional level problems (CRLP)	4. Climatic Conditions (CRLP1)
		5. Seasonal Tourism (CRLP2)
		6. Lack of Manpower (CRLP2)
	Individual firm level problems (IFLP)	7. Lack of capital
		8. Fear/Risk in the people's mind (ILP2)
		9. Lack of education (ILP3)
		10. Lack of entrepreneurial skills in farmers (ILP4)
	Other Problems (OP)	11. Presence of unorganized sector in the Agri-Tourism (OP1)
		12. Impact of Covid-19 on tourism sector (OP2)

4.2. 1. Lack of awareness of government policy

In India, the major population is dependent on the agricultural sector. Though, over the years, this number has reduced, a significant portion of the population is still being employed directly or indirectly by the agriculture sector. Due to this reason, since independence, policymakers in the country have been exploring ways to increase the farmers' income to bring them into the mainstream of development. Both central and state governments have initiated various schemes to support the farming community. These schemes include crop insurance, MSP on specific crops, subsidy on seeds, fertilizers, and electricity are some of the prominent examples of these schemes. Various training programs are being organized to educate and train these farmers to improve their income. The government had established various institutions like NABARD to support these farmers.

In recent years, agro-tourism has emerged as a main method to discover a new source of revenue for the farmer for better rural development. Government of India in *National Strategy and Roadmap for Development of Rural Tourism in India - An initiative towards Atmanirbhar Bharat 2021* has developed a policy document to promote rural tourism nationwide. This policy document mentions that the department of agriculture may help develop agro-tourism clusters¹.

Further, state governments in India have developed various policies to nurture agro-tourism in their respective states. In November 2022, the Government of Rajasthan implemented Rajasthan Rural Tourism Scheme 2022. This Policy presents various benefits government provides to the agro-tourism sites in the states.² The objective of this Policy is to increase the income level of the people living in the rural parts of the state. These policies' success depends on how many current and prospective agro-tourism site owners know these schemes. During the interview, one owner said, *"we are not aware of the policy. It is important to have some clear policy guidelines..... It is good if the government has brought a new policy, but we need to see it first"*.

Similarly, another site owner said, *"government should support the people interested in developing and managing these sites. It will help us run these sites more efficiently"*. While discussing with one of the respondents interested in opening an agri-tourist site, mentioned that *"..... I am not aware of any such policy. It is great that you told me. I will explore more about this. Another respondent said, "So far the government has not supported the agro-tourism activities in the state. Due to this, people in the rural area are not aware of this"*

It is evident from the responses that current and potential owners of the agro-tourism sites favor having some policy guidelines for the benefit of the agro-tourism sector. However, due to a lack of awareness, they may not be able to take full advantage of these policies. According to them, it will boost agro-tourism development in the state, but the government should advertise and talk more about these latest policy developments.

4.2.2. Lack of Training and Government Support

Like every service industry, the tourism industry also involves regular interaction with visitors, and it is crucial to provide good service to have satisfied customers. As the tourism sector is a crucial sector contributor to the economy of Rajasthan, the state government has been conducting

¹ <https://tourism.gov.in/sites/default/files/2022-05/National%20Strategy%20and%20Roadmap%20for%20development%20of%20Rural%20Tourism%20in%20India.pdf>

² <https://invest.rajasthan.gov.in/policies/rural-tourism-scheme-2022.pdf>

various training programs to train stakeholders in different skills. These skills include soft skills, training to learn new languages, and other required skills. The agro-tourism sector is different from the current tourism landscape of the state and requires some additional skills to run these sites. More specialized training programs must be needed to train the site owners/managers/employees of these agro-tourism sites to improve service delivery. As one respondent mentioned, *.....we know how to run our regular resort. However, to run an agro—tourism centers need some additional skills as the activities provided are different from the regular tourist attractions. We are training our employees independently, but we lack specific skills. We don't know what more we can add to this site. If the government will help us, we will be able to run this site more efficiently and add more activities to this*". Another respondent said, *.....I want to include medical tourism along with agro-tourism by adding naturopathy, panchakarma, and other related activities along with the agricultural activities in this, but we lack expert professionals who can help in managing this more effectively.*

4.2.3. lack of marketing/Famous for heritage/desert/Cultural tourism

Rajasthan is famous for its forts and deserts. Most tourist destinations in Rajasthan attract customers due to their heritage. The western part of Rajasthan is famous for desert tourism. Tourists come to Rajasthan to see that culture and desert. The concept of agro-tourism could go better with heritage and desert tourism. Therefore, attracting customers to visit agro-tourism sites takes a lot of work. It may be possible in certain places, but a general mindset is that tourist is more interested in forts and deserts. As one of the respondents said, *"Rajasthan means desert. People may be interested in knowing the local culture and food but do not see Rajasthan as an option for agro-tourism. People relate agro-tourism more with eco-tourism, and Rajasthan is not a suitable option."* The government needs to advertise the places where agro-tourism can be developed and promote them so that tourists consider Rajasthan an option for agro-tourism.

4.2.4. Climatic Conditions

Rajasthan is a state which has very different climatic conditions. Water availability is very limited in the major part of the state. The government spends significant money to make water available for the citizens for their day-to-day requirements. In these climatic conditions, especially in the western region, people are not interested in developing agro-tourism sites. They believe that lack of water will waste their investment in the long run. As one resort owner who provides the desert

safari and local cuisines to the visitor said....*I know it has good potential, and I have space to develop a proper agro-tourism site but how will I arrange water ?I buy a large quantity of water from the external supplier to meet my day-to-day requirement. How will I arrange water for the crops and other farm activities?*

The climatic conditions and lack of water resources make it difficult to people to arrange water for crops and mainly dependent on rain for water.

4.2.5. Seasonal Tourism

In Rajasthan, the summer season, is mainly hot. Due to this weather condition, the state attracts the majority of tourist visits during the winter seasons³ People from the tourism industry are not interested in diversifying their business in other directions. As one respondent mentioned, “.....*sir, tourism is here for a minimal time. It is mainly for four months. It is suitable for us to focus on what we are doing.*

Why should I invest my money just to get some additional business in these four-five months?” We don’t have money for our current requirements. Developing an agro-tourism center requires a significant investment. We are not interested in that. The resort owners who are involved in some agro-tourism-related activities are also reluctant to initiate more activities (Dabour, 2003).

4.2.6. Lack of Manpower

Employees play a very critical role in the success of any service organization, which is entirely applicable in the case of agro-tourism. Organizations need people with the skills to run these sites effectively (Afroz and Mahmud, 2017). The skills required include farming, hut formation and maintenance, managing the cattle etc. In order to run a successful agritourism site, employees need to know the site, various activities, and practices, along with the basic skills required to run a resort or hotel⁴.

With the growing interest in white-collar jobs and migration to the urban area, finding people with similar skills has become tough. As the manager of one of the agro-tourism resort mentioned, “....*the agro-tourism has potential in the state, but running these sites is very tough without people*

³ <https://www.tourmyindia.com/states/rajasthan/summer-weather.html>

⁴ https://www.uvm.edu/sites/default/files/Vermont-Agritourism-Collaborative/2019_BestPracticesAgritourism-FINALDRAFT-lores.pdf

with certain skills. In our resorts, we have huts that are painted with cow-dung paste. We are finding it tough people skilled in this job”.

In a similar line, one owner mentioned..... *“to give a village like feeling, we need to design and build huts. We do not have people skilled in this area. It is becoming difficult to locate people to do this job. This skill pass from one generation to another. No one in the young generation is interested to learn these things. They want to go to large cities to earn their livelihood”.*

This clearly shows that running an agro-tourism site requires certain skills that are unavailable among the people. Due to this, farm owners cannot develop effective agro-farm sites.

4.2.7. Lack of Capital

The financial support and infrastructure in the rural part of the country is not developed. Farmers are still dependent on private moneylenders to fulfil their financial requirements. Non-availability of banking institutions or their cumbersome process makes it tough for the farmers to avail of loans from them. Any farmer interested in developing agro-tourism sites must invest specific funds to make them suitable for visitors. They need to invest in certain activities which are separate from regular agricultural process. The lack of capital is creating a barrier for the farmers to think in the direction of developing agro-tourism centers. As one farmer said.....*We don't have money to invest in making new huts, and arrange the necessary amenities. Who will fund us? Why we will take money from a moneylender for this? Government should support us in getting easy loans”.*

In order to develop agro-tourism sites, lack of capital is the main problem, especially for small farmers. They have suitable land which is connected with the other tourism locations, but due to fund limitation, they do not think in this particular direction.

4.2.8. Fear/Risk in the people's mind

One more issue is that people interested in developing agro-tourism sites want government should work as an aggregator to ensure the authenticity of the visitors. They are not interested in taking any risk which may arise without government intervention. They propose that local-level authorities should facilitate connecting potential tourists with these sites. As one of the respondents said, *“People may not be interested in allowing someone to stay in their farm and houses directly. We are not interested in giving the house to stay in without assurance from the government side.”*

When we further asked that the owner may ask for an identity proof as a usual practice. *“The respondents said, farmer is illiterate, how he will manage and if they appoint someone, initially, it may not be profitable. We want to have a mediator like a hotel owner or local tourist authorities. We may collaborate with these hotels to get authentic guests so that we need not be worried about the risk.”*

4.2.9. lack of education

Another issue that emerged as a problem in agri-tourism is the need for more education. Education is essential to do anything in life. With the growth of the market and changing tourism landscape, the people must have education and skills to perform a certain task. This education is not just limited to basic literacy but to be skilled in computers, the internet, soft skills, and others, which makes you ready to deal with the tourist. In the case of agri-tourism, which is primarily focused on increasing the farmer’s income and bringing them into the mainstream of development, these different skills are necessary. Though with the decreasing cost of internet use and the easy availability of affordable smartphones, had provided access to the latest technology to the farmers, there is still a long way to go to develop the required skills among the farmers so that they can run these sites effectively. This is a prominent concern in the case of marginal farmers, who have the required facilities and basic skills to run the agro-tourism sites but don’t how to deal with the customers.*I know how to do farming, how to milk cows, how to do other farm activities we can tell this very effectively, but I don’t know English, and I don’t know how to keep record of who is coming. It is difficult for me.....* While we said that you have smartphones....one respondent said. *“.....Yes, I have it, but I know some basic functions and see news, youtube and others but how it will help me in connect with consumer, I don’t know.*

Therefore, educating people in the required skills is critical to explore the full potential of agro-tourism in the state.

4.2.10. lack of entrepreneurial skills in farmers

Various activities need to be operationalized to run any organization. The owners need to have an understanding of various functions of business like marketing, accounting & finance, operations, human resource management, quality management, etc. Similarly, to run a successful agro-tourism site, the owners must have these skills for proper functioning. It may be possible for the large-scale

agro-tourism site to hire professionals to run these sites, but it is critical for the farmers interested in running these sites on a small scale. These farmers have expertise in farm-related activities but generally do not possess the required entrepreneurial skills as one respondent mentioned “.....*I don't know how to take required approvals. I do not have any idea about computers and accounting. How will I manage ?How will I learn these skills*”? One more respondent said, “*I am a farmer, I can do farming but I don't know how to do business*”. This lack of entrepreneurial skills is creating a setback for the farmers who may be involved in these activities within their existing setup, but due to this gap, they find it challenging to manage.

4.2.11. Presence of an unorganized sector in the Agri-Tourism

The tourism sector is one of the major contributors in the economy of Rajasthan. In the regular tourism avenues, various organized players provide various facilities for visitors. These facilities include a stay in a hotel/resort, tour packages, vehicle arrangements, a guide, and others. Even the state government, under the tourism department, runs various hotels in different locations. The big players involvement makes the tourism sector competitive and enables customers to get the best possible services. With the increasing internet penetration, comparing and selecting the optimized facilities has become possible for visitors.

The situation is different in the case of agri-tourism sector. As discussed earlier, existing agri-tourism sites are very limited in number or mainly running as an allied activity by various resorts/hotels. There still needs to be more focus on running a specific site for agri-tourism. The sector is still not having an involvement of the large players or corporate in agri-tourism. The unorganized sector needs to be able to design and deliver the services as per the requirement of the visitor, which is making tourists reluctant to visit these places. “*Government should encourage the large players to come and invest in the agri-tourism sector. It will help in the growth and help small players learn new things.....*”...One respondent said. “*The majority of agro tourism site owners are the local people and due to their small investment capacity, they are not in the position to capture the full potential....*” Another respondent said.

4.2.12. Impact of Covid-19 on the tourism sector

The recent pandemic has adversely affected the tourism industry around the globe. Rajasthan was also affected badly by the Covid-19 pandemic. The people involved in the tourism industry were

unemployed for a long period of time. Occupancy in the hotels/resort had reduced significantly. The owners of hotels/resorts faced a huge amount of loss. Though, the Industry is recovering now due to increased tourist footfall post-pandemic. The people dependent on the tourism industry are still trying to recover their losses. This is making them reluctant to make any new investment. As one of the resort owners mentioned....*my resort was almost unoccupied for over a year. Significantly less number of people visited here and stayed in our resort. It was difficult for us to manage the staff's salaries and the maintenance cost. Even I had to cut down our manpower. We are still recovering and trying to repay the loan taken from the financial institutions. I can't make any new investment.....Though we make look for investing in this in future.*

Though this problem is short-term and will not remain an issue in future, the continuous growth in the number of tourists may motivate individuals or organizations to invest in this direction.

4.2.13. Lack of industry standards

The agro-tourism sector is an emerging sector in the state. The government has recently launched a policy related to registering and regulating agro-tourism in Rajasthan. There are a very limited number of players those are running full fledge agro-tourism sites. Tourism in Rajasthan is one of the critical sectors, but agro-tourism is in its nascent stage. There is much more to be done for the growth of this sector. Due to all these reasons, industry standards are not available. People need to learn what more they can do as part of agro-tourism. They don't know how to collaborate with the other tourism players to utilize their full potential. They still understand what else tourists may expect as part of these sites. The agro-tourism sector has large potential, and numerous activities can be added effectively to improve the tourist experience. As commented by one of the site owner "*.....Activities at my site are limited to the giving tourist understanding about crops, provide stay in huts, visit to the farms only. I don't know what more can be added*". Developing the industry standard will help standardize the services and the standard operating procedure, which will ultimately help the owners/managers develop a better service blueprint.

4.3 Modelling of Problems of agri-tourism in Rajasthan

In order to apply the Analytical Hierarchy Process technique, we approach 10 experts from both Industry and academia. These experts were asked to complete a pairwise comparison matrix to rank these identified problems from the perspective of Agri-tourism in Rajasthan. A hierarchical

model of problems in agro-tourism in Rajasthan was developed (Figure 4.1). The main objective of ranking these problems was to identify critical problems that require policymakers' attention immediately to develop agro-tourism in Rajasthan. The experts were asked to give priority to the main categories and the subcategories of the problems related to agrotourism. Policymakers with the given resource limitation may initially focus on these problems to nurture agro-tourism activities in Rajasthan. The step-by-step method of the Analytical Hierarchy process is presented as below:

Development of Priority Matrix

In the first step, based on the input received from the experts, a comparison matrix was developed (Table 4.3). This matrix was developed to identify the rankings of the identified problems. Based on the relative importance scale proposed by Saaty (1980a, 1980b), the first pairwise comparison matrix was developed to perform a pairwise comparison of the main categories of the problems.

Table 4.3: Initial Pairwise Comparison Matrix

	PRP	CRLP	ILP	OP
PRP	1.00	3.00	4.00	7.00
CRLP	0.33	1.00	0.50	3.00
ILP	0.25	2.00	1.00	5.00
OP	0.14	0.33	0.20	1.00
	1.73	6.33	5.70	16.00

Development of normalized comparison matrix

The normalized comparison matrix was developed by dividing each entry in the column by the total of respective columns (Table 4.4).

Table4.4: Normalized Pairwise Comparison Matrix

	PRP	CRLP	ILP	OP
PRP	0.57931	0.473684	0.701754	0.4375

CRLP	0.193103	0.157895	0.087719	0.1875
ILP	0.144828	0.315789	0.175439	0.3125
OP	0.082759	0.052632	0.035088	0.0625

Calculation of Priority Weights

The final priority weight was calculated by taking the average the of row total for every main category of the problems of agro-tourism in the Rajasthan.

Table 4.5: Priority Weight

Main Category	Priority Weight
Policy related problems (PRP)	0.548062
Climatic and regional level problem (CRLP)	0.156554
Individual Firm level problems (IFLP)	0.237139
Other Problems (OP)	0.058244

Consistency Check

In order to confirm the weights calculated based on the pair wise comparison matrix, it is essential to do the consistency check in AHP technique. It will give a confirmation that comparison matrix is correct and comparisons are consistent. The AHP methods presents a way to assess the consistency of the pairwise comparisons given by experts (Goyal et. al, 2015). To assess the consistency, Consistency Ratio (CR) needs to be calculated. Any value of CR less than 0.10 confirms the consistency of the pairwise matrix. The CR is calculated by using the following formula:

$$CR = CI/RI$$

The CI is calculated using the formula:

$$CI = (\lambda_{\max} - n) / (n - 1)$$

$$\lambda_{\max} = \text{Max. } \lambda \text{ calculated using pairwise comparison matrix}$$

$$n = \text{Number of criteria/sub-criteria}$$

The value of RI is standard as per the number of factors used for the pairwise comparison matrix as given in Table 4.6

Table4.6: Random number index

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RI	0	0	0.58	0.9	1.12	1.24	1.32	1.41	1.45	1.49	1.51	1.48	1.56	1.57	1.59

(Source: Saaty 1980)

λ will be calculated using the following steps:

1. First multiply the initial pairwise matrix (Table....)with the priority weights (Table...)

$$\begin{bmatrix} 1 & 3 & 4 & 7 \\ 1/3 & 1 & 1/2 & 3 \\ 1/4 & 2 & 1 & 5 \\ 1/7 & 1/3 & 1/5 & 1 \end{bmatrix} \begin{bmatrix} 0.548 \\ 0.156 \\ 0.237 \\ 0.058 \end{bmatrix} = \begin{bmatrix} 2.374 \\ 0.632 \\ 0.978 \\ 0.236 \end{bmatrix}$$

2. Calculate the $\lambda = i^{\text{th}}$ entry of calculated matrix in the last step divided by i^{th} entry in priority weight. λ_{max} will be calculated using the average of the λ_{max} column (Table 4.8)

Table 4.8: Consistency Ratio

Main Categories	λ
Policy related problems (PRP)	4.331611
Climatic and regional level problem (CRLP)	4.040415
Individual Firm level problems (IFLP)	4.126213
Other Problems (OP)	4.05449
Sum	16.55273
λ_{max}	4.1381
CI= 0.0461, RI, 0.9, CR= 0.051179, n=4	

Similarly, the pair wise comparison matrix was developed for the first sub category, policy related problems as bellows:

Table 4.9: Pairwise comparison matrix of for sub category of problem with respect to policy related categories

	PRP1	PRP2	PRP3	Priority Weights
PRP1	1.00	3.00	2.00	0.538961

PRP2	0.33	1.00	0.50	0.163781
PRP3	0.50	2.00	1.00	0.297258
CI=0.004, RI=0.58, CR=0.0079, $\lambda_{\max}=3.009$, n=3				

Table4.10: Pairwise Comparison Matrix for the Climate and regional problems

	CRLP1	CRLP2	CRLP3	Priority Weights
CRLP1	1.00	0.25	0.20	0.096419
CRLP2	4.00	1.00	0.33	0.284228
CRLP3	5.00	3.00	1.00	0.619352
CI=0.0433, RI=0.58, CR=0.074, $\lambda_{\max}=3.087$, n=3				

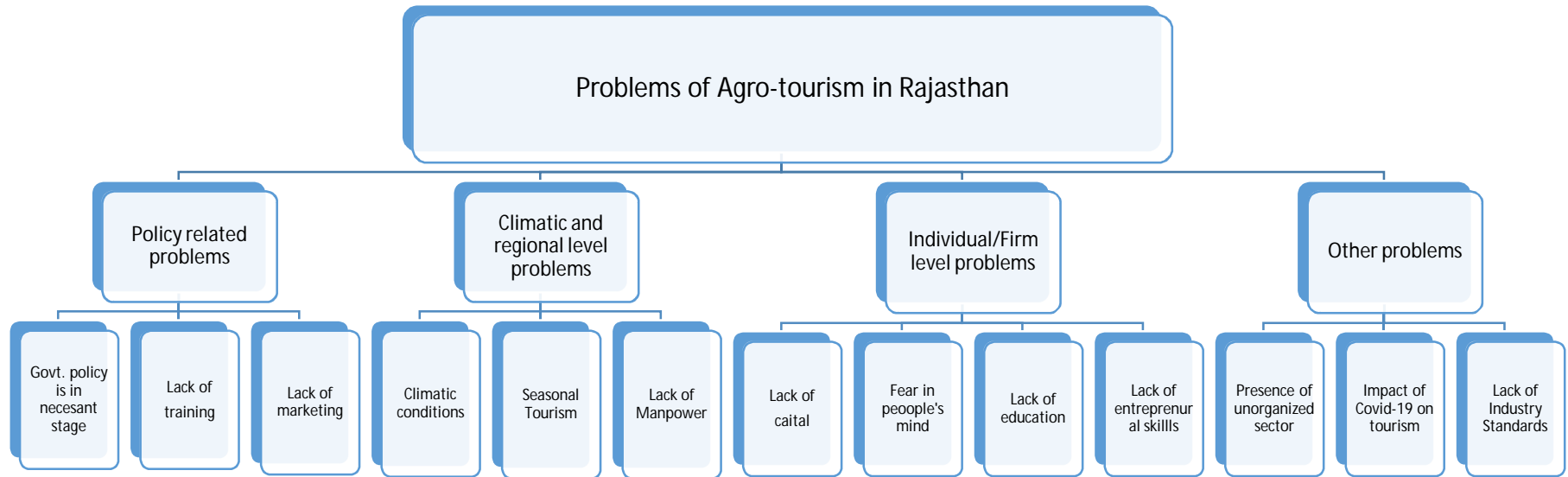


Figure 4.1: Hierarchical Model of Problems of Agro-tourism in Rajasthan

Table4.11: Pair wise comparison for Individual firm level problems

	IFLP1	IFLP2	IFLP3	IFLP4	Priority Weight
IFLP1	1.00	7.00	5.00	3.00	0.583763
IFLP2	0.14	1.00	0.33	0.50	0.075538
IFLP3	0.20	3.00	1.00	0.50	0.142522
IFLP4	0.33	2.00	2.00	1.00	0.198177
CI=0.0397, RI=0.9, CR=0.044, $\lambda_{\max} = 4.119$, n=4					

Table 4.12: Pairwise comparison of other problems

	OP1	OP2	OP3	Priority Weight
OP1	1.00	7.00	0.50	0.346764
OP2	0.14	1.00	0.11	0.057748
OP3	2.00	9.00	1.00	0.595488
CI= 0.0109, RI= 0.58, $\lambda_{\max} = 3.022$, n=3				

Table 4.13: Calculation of Global Weights

Level in Hierarchy	Main Categories	Local Weight	Local Ranking	Global Weight	Global Ranking
Level 2	<i>Pair wise comparison of four main categories of the problems with respect to problems of Agro-tourism in Rajasthan State</i>				
	Policy related problems (PRP)	0.548062	1	0.548062	1
	Climatic and regional level problems (CRLP)	0.156554	3	0.156554	3
	Individual firm level problems (IFLP)	0.237139	2	0.237139	2
	Other Problems (OP)	0.058244	4	0.058244	4
Level 3	<i>With Respect to Policy related problems</i>				
	1. Lack of awareness of government policy or policy is not clear/Policy is in very initial stage. (PRP1)	0.538961	1	0.295384	1
	2. Lack of Training (PRP2)	0.163781	3	0.089762	5
	3. Lack of marketing/Famous for heritage/desert/Cultural tourism (PRP3)	0.297258	2	0.162916	2
	<i>With respect to Climate and regional problems</i>				
	4. Climatic Conditions (CRLP1)	0.096419	3	0.01509478	12
	5. Seasonal Tourism (CRLP2)	0.284228	2	0.04449703	7
	6. Lack of Manpower (CRLP3)	0.619352	1	0.096962033	4
	<i>With respect to individual firm level problems</i>				
	7. Lack of capital (IFLP1)	0.583763	1	0.138432974	3
	8. Fear/Risk in the people's mind (IFLP2)	0.075538	4	0.017913006	11
	9. Lack of education (IFLP3)	0.142522	3	0.033797525	9

10. Lack of entrepreneurial skills in farmers (IFLP4)	0.198177	2	0.046995496	6
<i>With respect to other problems</i>				
11. Presence of unorganized sector in the Agri-Tourism (OP1)	0.346764	2	0.020196922	10
12. Impact of Covid-19 on tourism sector (OP2)	0.057748	3	0.003363475	13
13. Lack of Industry Standard	0.595488	1	0.034683603	8

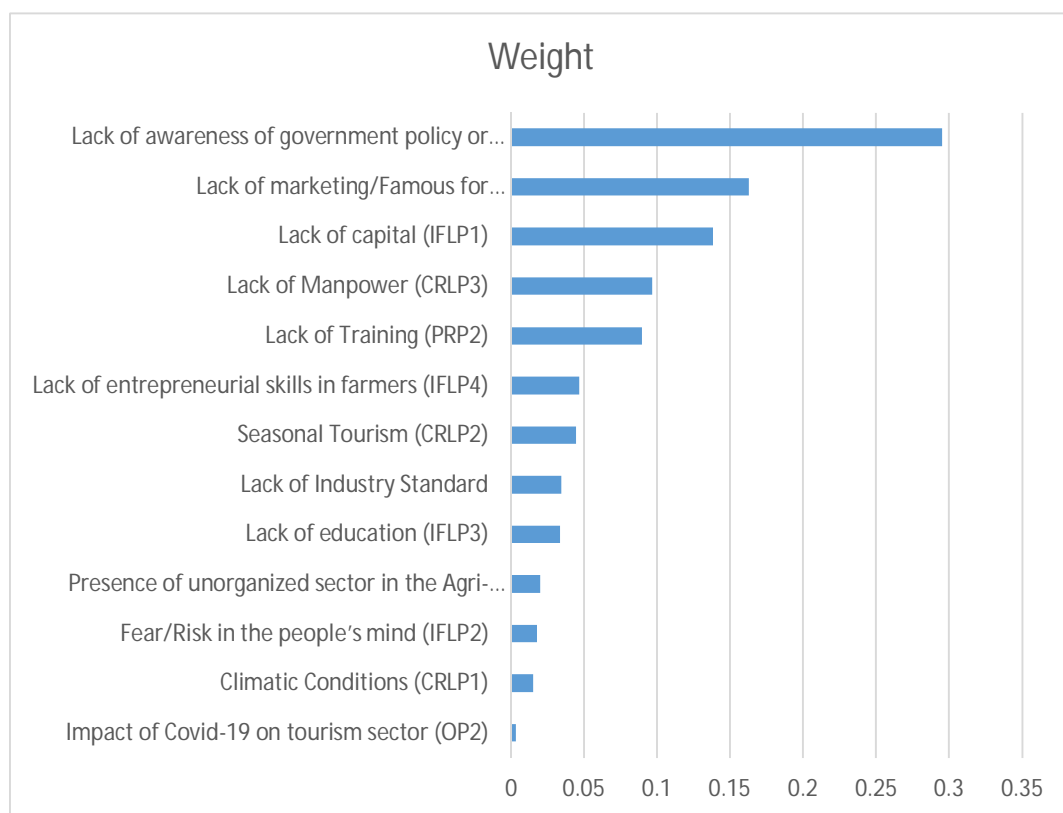


Figure 4.2: Global weights of Problems of Agro-tourism in Rajasthan

4. 4 Results of Modelling of Problems of Agro-tourism in Rajasthan

In this section of analysis, first a hierarchical model was developed based on the problems of agro-tourism in Rajasthan. These problems are identified using the semi-structured interviews conducted with various stakeholders in agri-tourism. These problems were then categorized under four categories. These main categories and sub-categories were discussed with the experts to develop pairwise comparison.. Based on these pairwise comparisons, both local weights(Weights with respect to the category they belongs to), and Global weights (Weights with respect to the main objective of the problem, in this case, problems of agro-tourism in Rajasthan) are calculated. The initial pairwise comparison was conducted among the main category of the problems. The policy related problems have a weightage of 54% and ranked first in the main category, followed by individual firm level problems, climatic and regional problem and other problems with a weightage of 24%, 16% and 6% respectively. This weightage clearly gives an indication that development of effective policy may help fostering the growth of agro-tourism in Rajasthan. Similarly, while global weights for all sub-categories of the problems are calculated, it shows lack of awareness of the policy specifically related to agro-tourism in the state is ranked one in all sub-categories. The lack of capital ranked second in the global weights which further followed by lack of subsidies and lack of marketing for agro-tourism is hindering the growth of agro-tourism in Rajasthan.

4.5 Prospects of agro-tourism in Rajasthan

Agro-tourism has emerged as an important area of tourism across the globe. This emerging area has attracted the attention of both policymakers and the people involved in the tourism sector. The government of Rajasthan has incorporated the policy framework to promote the agro-tourism sector in their latest tourism department policy document. It is quite clear that Rajasthan state has a promising future and scope for the growth of the tourism industry in the state. It has the scope of diversification, increase farmers' income, and better utilization of farmland, especially in the season when farms are not generally used for agriculture. The following section discusses various growth prospects for agro-tourism in Rajasthan.

4.5.1 Diversification of existing tourism activities

As discussed earlier in the review section of the report, the tourism sector plays a critical role in the economy of Rajasthan. Both local and foreign tourists consider the state an attractive tourist destination. The addition of agro-tourism will increase the tourist footfall in the state, or it may extend their stay there. Tourists will consider Rajasthan not just for the forts and desert but also for experiencing the local culture and agro-tourism. While discussing with one of the resort owners, he mentioned that *".....we can attract more customers to enjoy diversified tourism experience. They can come and stay on the farms and enjoy the farm life closely."*

4.5.2 Increase in the farmer's income

Since independence, increasing farmers' income was one of the central and state government policy agendas. Policymakers have implemented various policies to achieve this objective in the last 75 years. Agro-tourism can have emerged as an area that may help policymakers identify and develop a new source of income. There is evidence from different countries, and even from different states in India like Maharashtra, that agro-tourism may help increase farmers' income. Government can motivate, direct and train especially the farmers with small land to develop such facilities to give them an additional source of revenue without a significant investment. This will help them in reducing their dependency on traditional agriculture.

I have land; I have space. The house and If I get an opportunity, I will look for this option. I have my place located in prime location.

4.5.3 Employment opportunities

Tourism is one of the important sectors from the perspective of employment in the state. The diversification of the tourism sector by opening agri-tourism sites will provide more job opportunities for the people dependent on the agriculture sector. Even the small and marginal farmers can get more job opportunities through their involvement in running these sites. The people from the rural part of the state need not migrate to the urban center as the development of agri-tourism will create both direct and indirect job opportunities.

4.5.4 Government support can increase the outreach of agri tourism

The Government of Rajasthan has recently launched a policy to register and regulate agri-tourism in the state. The policy's objective was to help the government effectively assess the potential of agro-tourism in the state. Developing an effective policy framework will also help design and develop more suitable policies related to agri-tourism. The government needs to increase the awareness and coverage of the policy document to provide benefits to more people in rural areas. Government can bring more locations on the tourism map of the state and can attract more tourists. They can also connect the existing tourism activities like heritage/desert tourism with the agri-tourism in the state.

4.5.5 State own land can be cultivated and converted to facilitate agri tourism

Certain state own land that is currently not in use can also be utilized for developing agri-tourism sites in Rajasthan. Department of Tourism may collaborate with other departments, universities, and financial institutions to develop agri-tourism sites, which will help both the collaborators to increase revenue.

Both marginal and established farmers are interested so that they can reduce dependency on agriculture. Some universities in Rajasthan are running degree programs related to the agriculture sector. This may help them in giving their students better field experience.

4.6 S-D logic framework for the agro-tourism

Service-dominant logic has emerged as a critical concept for the service industry. For the successful delivery of any service by the service provider, it is essential to think in a service way. It is important to understand that for the success of the agro-tourism sector, it is critical to develop and deliver the services in such a way to improve customer satisfaction. The study's respondents needed to gain prior knowledge of the S-D logic from a scholarly perspective.

4.6.1 Skills of service provider is critical for successful delivery of agro-tourism services

After assessing the problems and prospects of the agro-tourism interview, questions were shifted to understand the applicability of S-D logic in the agro-tourism concept. The first question about the role of service provider's skill and specific knowledge for better service delivery was confirmed by all respondents. They believe that it is very critical to have satisfied customers, service providers must have the necessary skills in case of agro-tourism. Therefore, it is very

important to have people having expertise in farming activities so that they explain the concept of agriculture and related activities to the customer. This information may be related to the crop type, cattle species, effect of season, etc.

Additionally, the skill of using specific equipment and performing activities like milking the cattle and feeding the cattle are needed in the employees. As one of the respondents said.....*if my employee does not know how to do these activities, how will they explain all processes to the tourist?* Other respondents said, “.....*to gain the visitor's confidence and have satisfied customers, my people must know how to perform all these tasks*”. One respondent said, “.....*to deliver better services, my employee should understand the customer's requirement and deliver the service as per the requirements*”.

4.6.2 Complexity of Agro-tourism services

The concept of agro-tourism involves various activities performed in the farm area directly and indirectly. It may include horse/camel/elephant riding, walking on the farms, staying at farms, camping, field trips, farm tours, workshops, etc. This tourism category involves multiple employees with various skills and education levels. Similarly, investment and training are required to train people in these areas.

4.6.3 Consumption of physical goods

As per the fundamental marketing mix of services, physical evidence is one of the critical dimensions. This is entirely applicable in the case of agro-tourism activities. Tourists may perceive more value while getting some physical evidence along with service experience. In the case of agro-tourism, these physical goods may include farm output, herbs, spices, vegetables, etc. As one of the owners of the agro-tourism farm mentioned, “.....*for our visitors during their stay along with the visit to farm, milking, riding and other activities, we provide them various fresh produce sourced from our farms. Products are organic and produced without using any chemical-based fertilizer. Our customer feels delighted. We even allow them to pluck the vegetables and fruits directly from the farm or trees.*”

Another respondent commented, “.....*it is part of our morning activities to take the customer to the farm and ask them to pluck the fruits and vegetables from our farms. Similarly, we take them to*

the cattle sheds and ask them to milk the cattle. This gives them a better experience along with the stay on farm and camping there”.

4.6.4 Customer focus

Understanding the customer and their requirement is key to the success of any organization. This is more critical in the case of the service industry. Agro-tourism activities are emerging, and therefore, to develop a competitive advantage, the manager/owner must focus on the customer requirement and should work on developing long-term relationships with the customers.

One of the respondents said, *“.....we always try to have a satisfied customer. Sometimes we also talk to the customer to customize the service as per their requirements. We try to maintain a good relationship with the customer, so they revisit us and give positive feedback about our services.”*

Another respondent mentioned, *“customer is most important for us. We do not want dissatisfied customers”.*

“Having a satisfied customer is most important for our success.”

4.6.5 Collaboration with other service providers

Tourist service providers are open to collaborating to give customers a holistic service experience. The owners of the agro-tourism site collaborate with regular tourist service providers and other stakeholders to facilitate the customer in availing of various other services.

“We collaborate with the local guides and cab service providers to provide city tours to our customers”.

One of the respondents in western Rajasthan said, *“We help them book a trip to the desert and other local places so that our customer extends their stay with us and feel satisfied”.*

“We have fewer huts for stay and do not have all services. We connect with the other sites to enable customers to get a better experience”.

“We just provide a few services. For the rest, we have collaboration with similar sites.”

It is quite evident from the responses that the agro-tourism site owners believe in collaborating with other service providers in a similar segment or other segments like heritage site visits/desert trips to enable a customer to have a holistic experience while visiting Rajasthan.

4.6.6 Customer is the one who decides the value in the service.

Customer feedback is very important in tourism industry. Customer must perceive that they are receiving value more than they are spending. It is not the service provider can decide the value of the service.

“Customer feedback is very critical for us.”

Customer must have a good experience so that they feel happy and satisfied”

The value of the service in the tourism industry is very much dependent on the customer’s assessment. This is more critical in case of agro-tourism services. Customer must get authentic local experience, develop understanding of the farm activities and try to get chance to participate in these activities. It will make them happy and satisfied and then they will value the services on higher side. It is all about the experience the customers are having during the visits to these places.

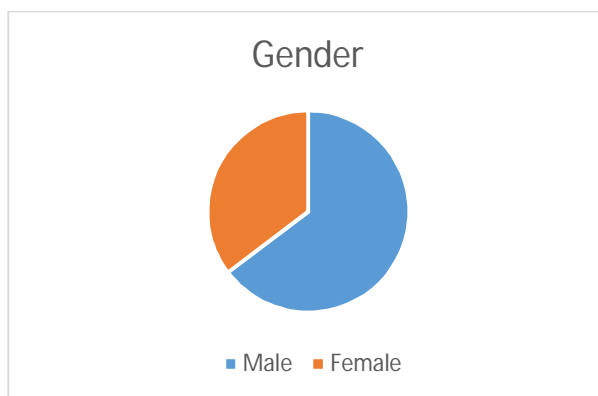
4.7 Results of survey

The following section presents the results of survey conducted with the visitors. There are two sections in the questionnaire. First section discusses about the demographic details of the respondents and second section explains their opinion on the questions.

4.7.1 Demographic Information

1. Gender of respondents

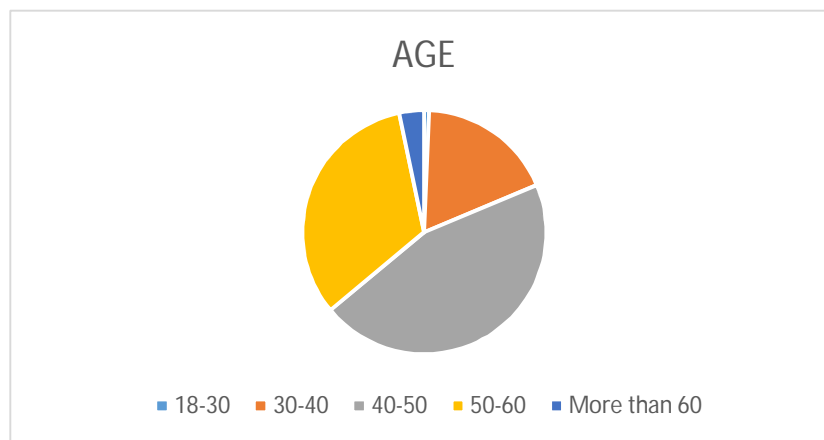
	Male	Female
Gender	97	53
Percentage	65%	35%



From the above data, we can note that the majority of the respondent is male, i.e., around 65%, whereas only 35% are female.

2. Age of Respondents

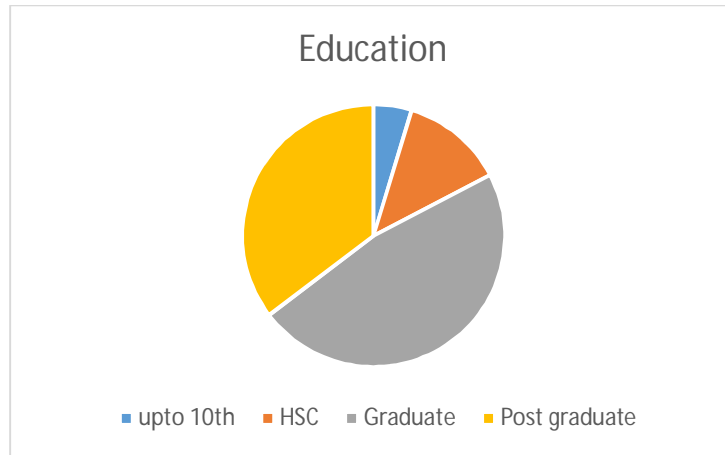
Age	18-30	30-40	40-50	50-60	More than 60
Respondents	1	27	68	49	5
Percentage	1%	18%	45%	33%	3%



From the above data, we can note that the majority of respondent lies in the age bracket of 40 to 60, i.e., around 78 %, whereas only 1% of respondents are from the age group 18-30.

3. Educational qualifications of Respondents

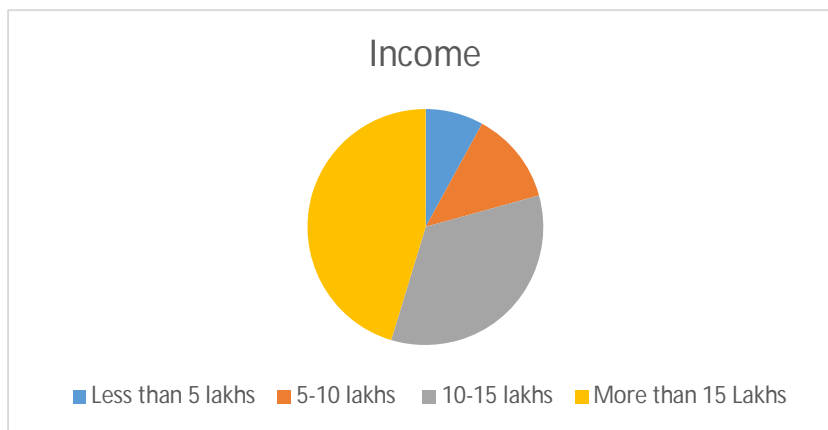
Education	up to 10th	HSC	Graduate	Postgraduate
Respondents	7	19	71	53
Percentage	5%	13%	47%	35%



From the above table and graph, we can note that the majority of the respondent are graduates followed by postgraduates, i.e., around 47% and 35%, respectively, whereas only 5% have educational qualifications up to HSC (10th grade).

4. *Yearly Income of Respondents*

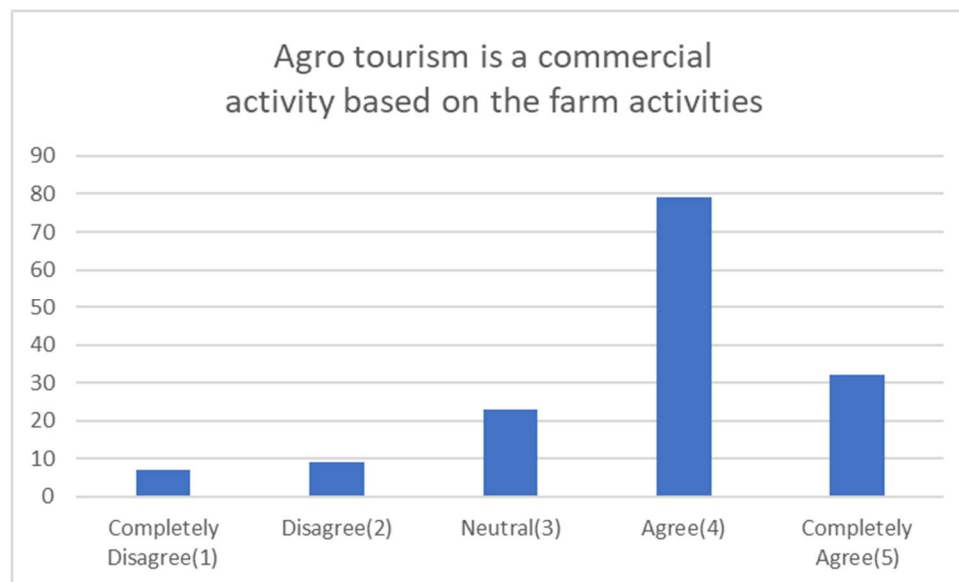
Income	Less than five lakhs	5-10 lakhs	10-15 lakhs	More than 15 Lakhs
Respondents	12	19	51	68
Percentage	8%	13%	34%	45%



From the above table and graph, we can note that the majority of respondent lies in the income group of more than 15 lakhs, whereas only a few, 12(8%), lies in the income group of fewer than five lakhs.

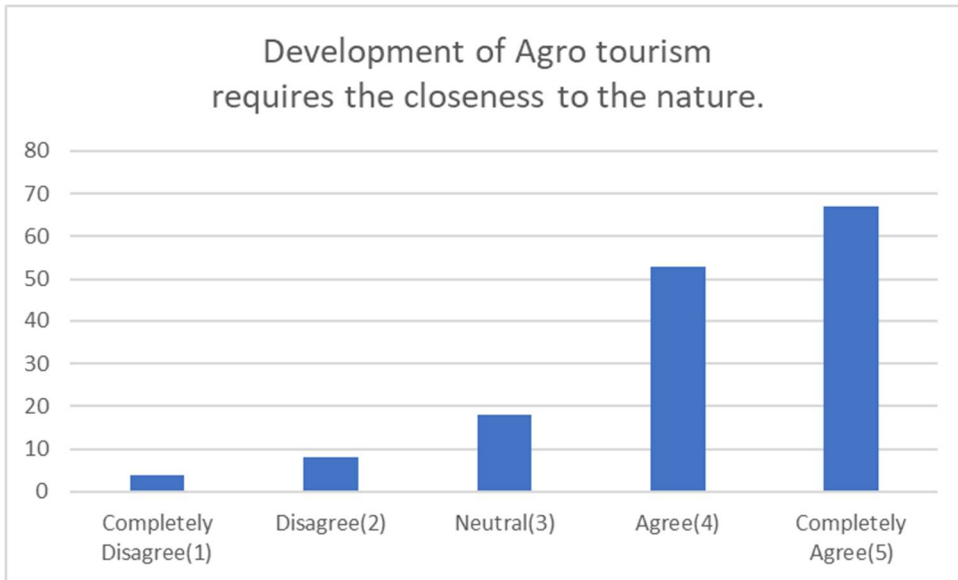
4.7.2 Awareness about Agro tourism

1. Agro-tourism is a commercial activity based on farm activities.



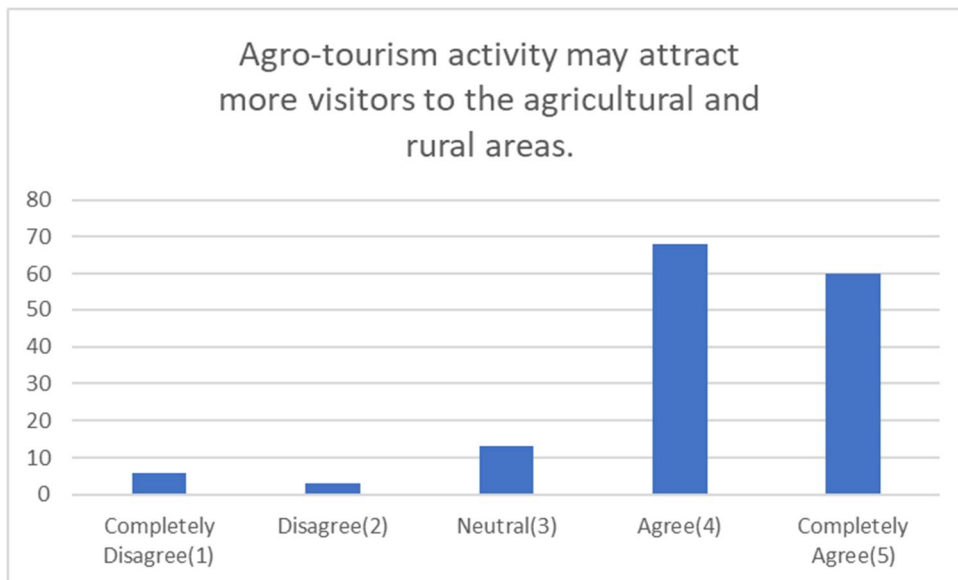
Out of 150 respondents, seven completely disagree, nine disagree, 23 are neutral, 79 agree, and 32 completely agree that Agro tourism is a commercial activity based on farm activities. Hence, 74% of the respondents are aware of agro-tourism as a commercial activity.

2. Development of Agro tourism requires closeness to nature.



Out of 150 respondents, four completely disagree, eight disagree, 18 are neutral, 53 agree, and 67 completely agree that the Development of Agro tourism requires closeness to nature. Hence, 80% of the respondents are aware of agro-tourism and its relationship with nature.

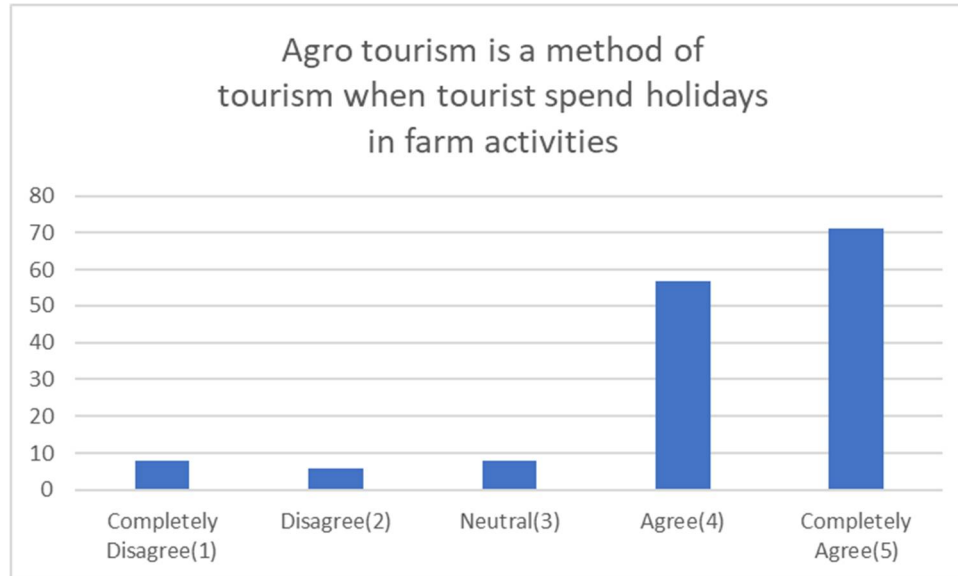
3. Agro-tourism activity may attract more visitors to the agricultural and rural areas.



Out of 150 respondents, six completely disagree, three disagree, 13 are neutral, 68 agree, and 60 completely agree that Agro-tourism activity may attract more visitors to the

agricultural and rural areas. Hence, 85% of the respondents are aware of the e of agro-tourism in the development of rural areas.

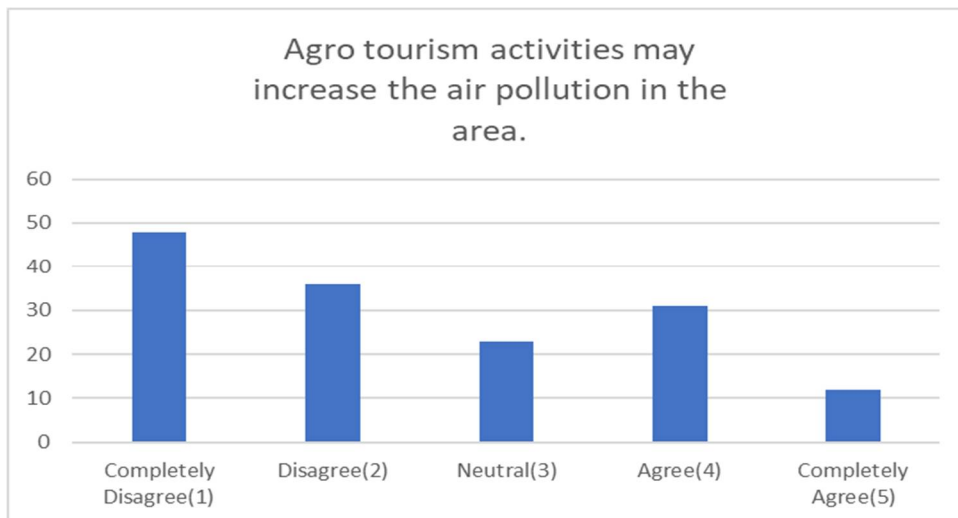
4. Agro-tourism is a method of tourism when tourists spend holidays on-farm activities.



Out of 150 respondents, 8 completely disagree, six disagree, eight are neutral, 57 agree, and 71 completely agree that Agro tourism is a method of tourism when tourists spend holidays in farm activities. Hence, 85% of the respondents have an understanding of agro-tourism.

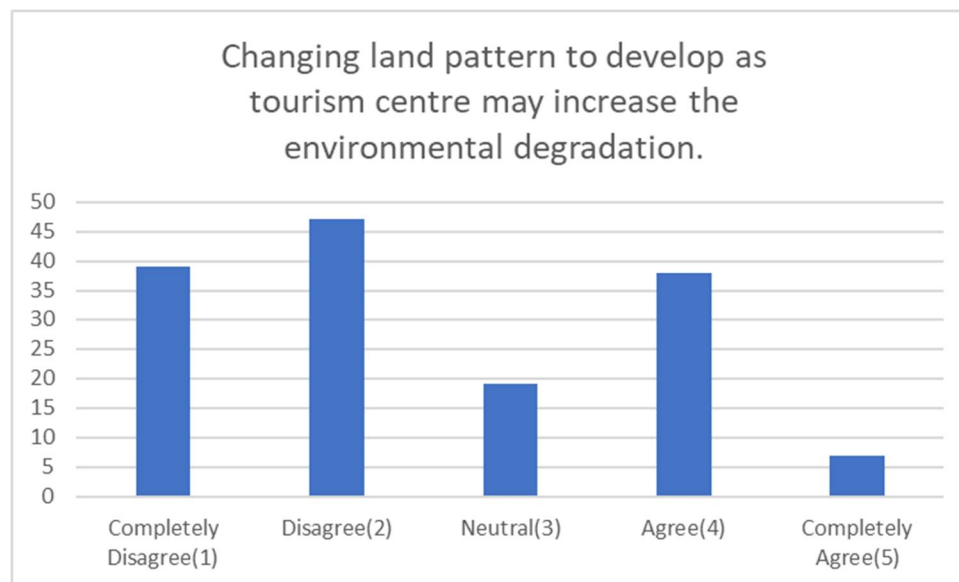
4.7.3 Environmental Problems

5. Agro-tourism activities may increase air pollution in the area.



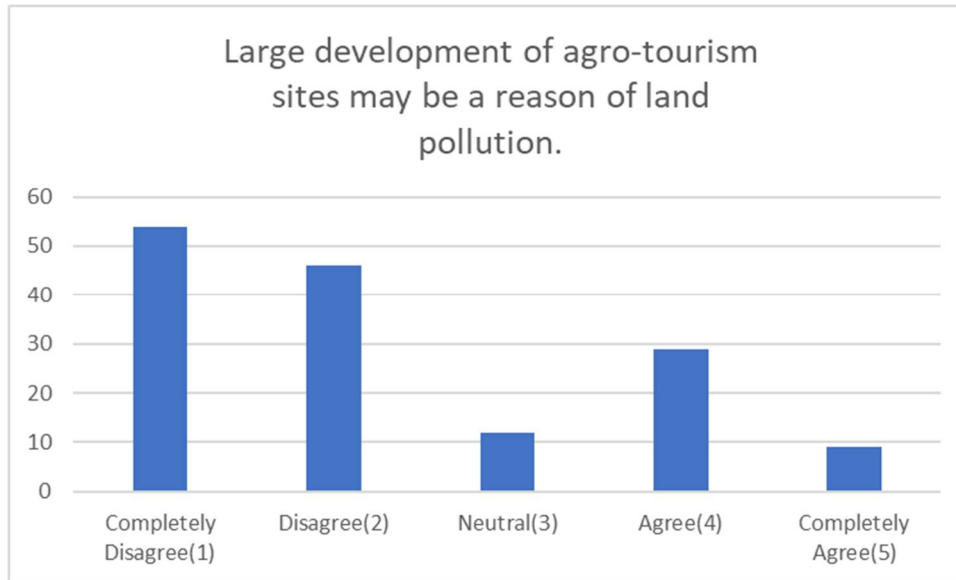
Out of 150 respondents, 48 completely disagree, 36 disagree, 23 are neutral, 31 agree, and 12 completely agree that Agro tourism activities may increase air pollution in the area. Hence, 56% of the respondents disagree with the statement that agro-tourism increases air pollution.

6. Changing land patterns to develop as tourism centers may increase environmental degradation.



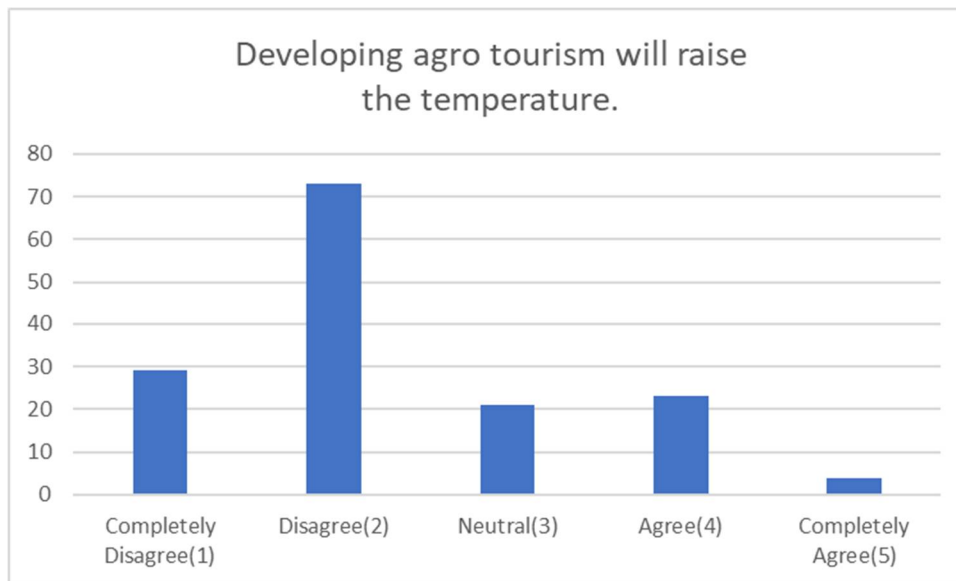
Out of 150 respondents, 39 completely disagree, 47 disagree, 19 are neutral, 38 agree, and 7 completely agree that Changing land patterns to develop as tourism centers may increase environmental degradation. Hence, 57% of the respondents disagree with the statement that agro-tourism increases environmental degradation.

7. The large development of agro-tourism sites may be a reason for land pollution.



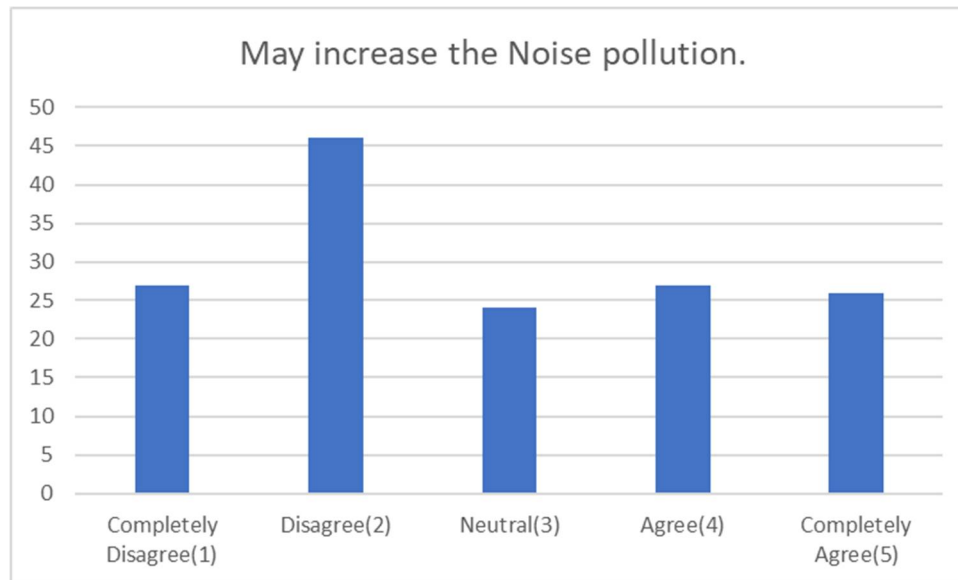
Out of 150 respondents, 54 completely disagree, 46 disagree, 12 are neutral, 29 agree, and nine completely agree the large development of agro-tourism sites may be a reason for land pollution. Hence, 67% of the respondents disagree with the statement that agro-tourism increases land pollution.

8. Developing agro-tourism will raise the temperature.



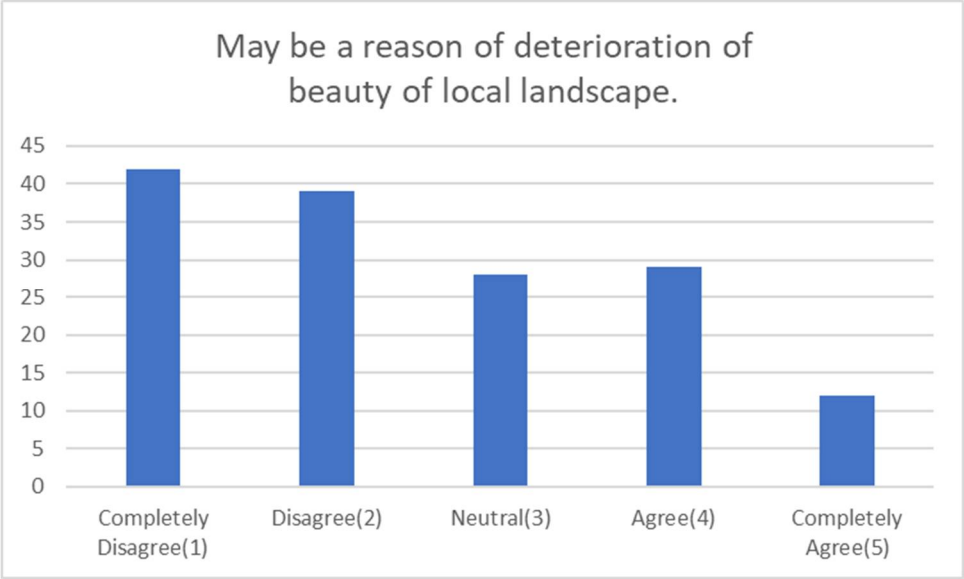
Out of 150 respondents, 29 completely disagree, 73 disagree, 21 are neutral, 23 agree, and 4 completely agree that developing agro-tourism will raise the temperature. Hence, 68% of the respondents disagree with the statement that agro-tourism increases the temperature.

9. It may increase Noise pollution.



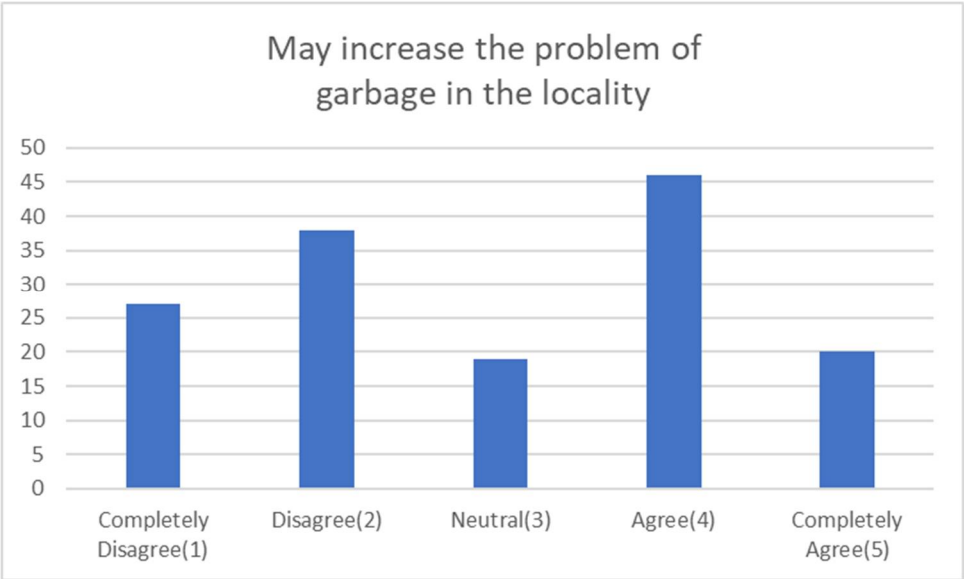
Out of 150 respondents, 27 completely disagree, 46 disagree, 24 are neutral, 27 agree, and 26 completely agree that agro-tourism may increase noise pollution. Hence, 49% of the respondents disagree with the statement that agro-tourism increases noise pollution.

10. It may be a reason for the deterioration of the beauty of the local landscape.



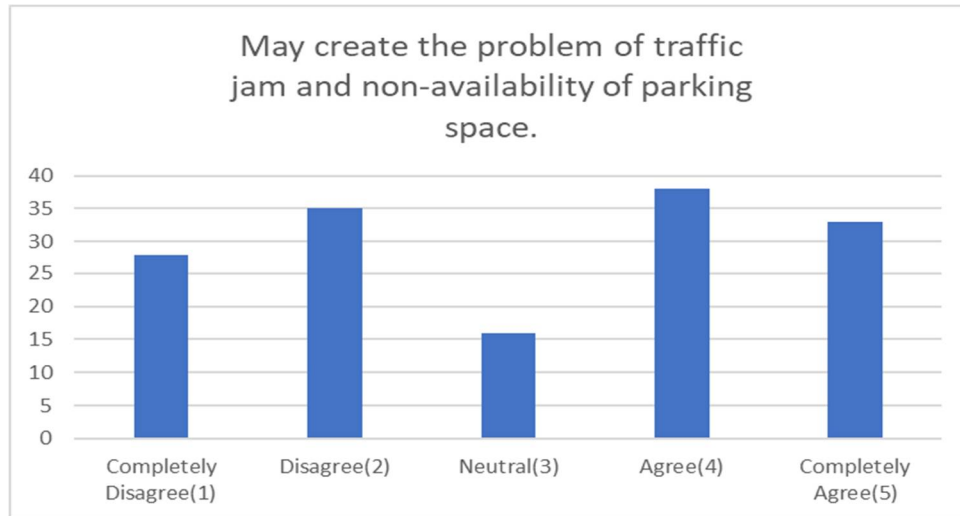
Out of 150 respondents, 42 completely disagree, 39 disagree, 28 are neutral, 29 agree, and 12 completely agree that agro-tourism may be a reason for the deterioration of the beauty of the local landscape. Hence, 54% of the respondents disagree with the statement that agro-tourism results in the deterioration of the beauty of the local landscape.

11. This may increase the problem of garbage in the locality.



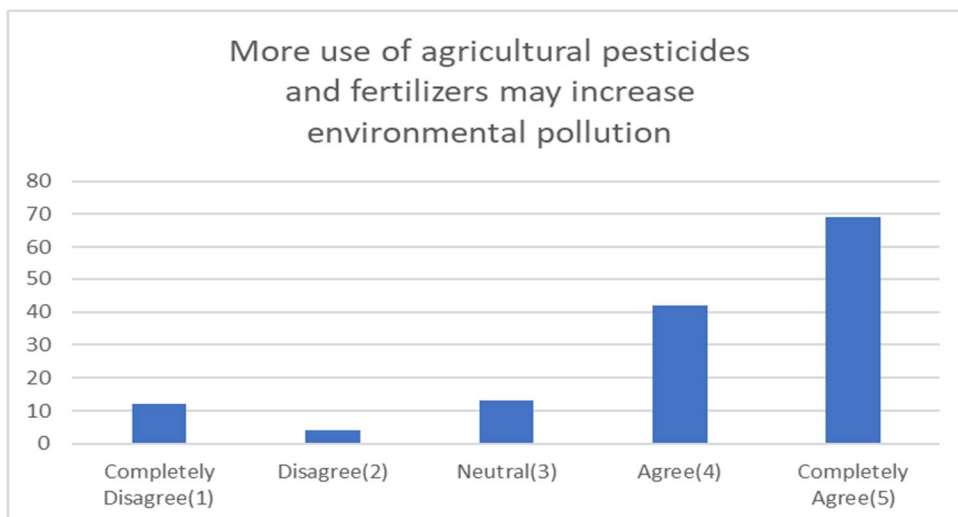
Out of 150 respondents, 27 completely disagree, 38 disagree, 19 are neutral, 46 agree, and 20 completely agree that agro-tourism may increase the problem of garbage in the locality. Hence, 44% of the respondents agree that agro-tourism increases the garbage problem in the city.

12. This may create the problem of traffic jams and the non-availability of parking spaces.



Out of 150 respondents, 28 completely disagree, 35 disagree, 16 are neutral, 38 agree, and 33 completely agree that agro-tourism may create the problem of traffic jams and the non-availability of parking spaces. Hence, 47% of the respondents agree with the statement that agro-tourism increases the problem of traffic jams and non – the availability of parking space.

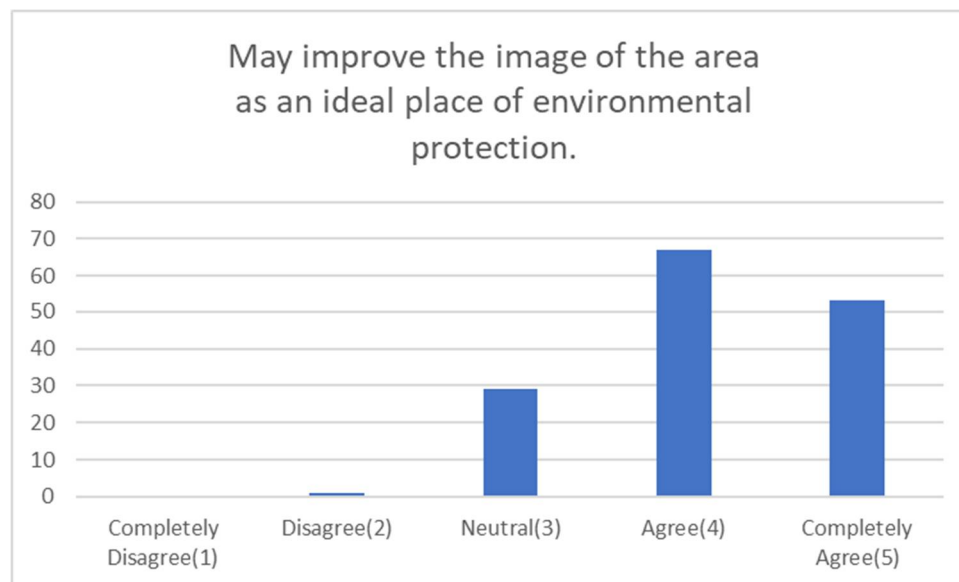
13. More use of agricultural pesticides and fertilizers may increase environmental pollution.



Out of 150 respondents, 12 completely disagree, four disagree, 13 are neutral, 42 agree, and 69 completely agree that more use of agricultural pesticides and fertilizers may increase environmental pollution. Hence, 74% of the respondents agree with the statement that more use of agricultural pesticides and fertilizers increases environmental pollution.

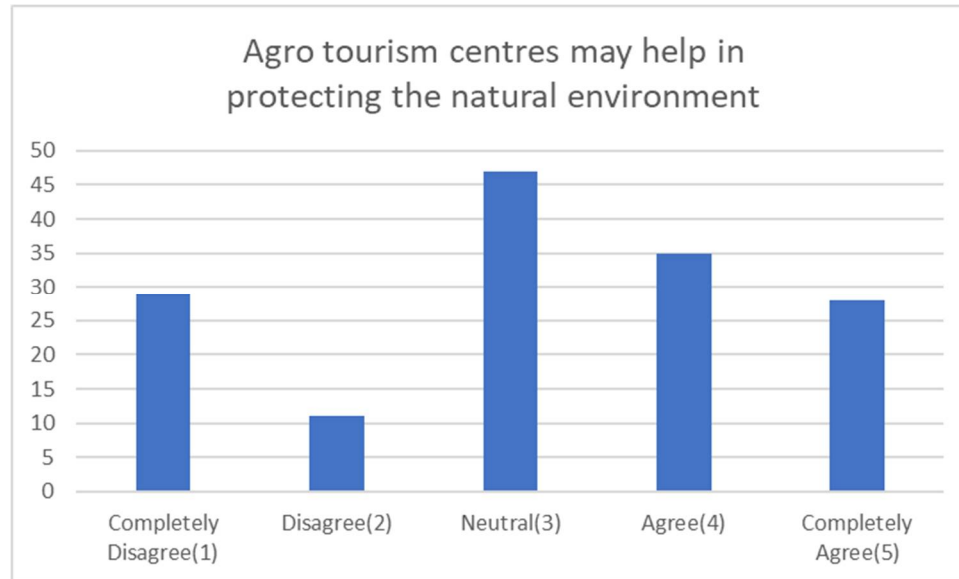
4.7.4 Environmental Prospect

14. This may improve the image of the area as an ideal place for environmental protection.



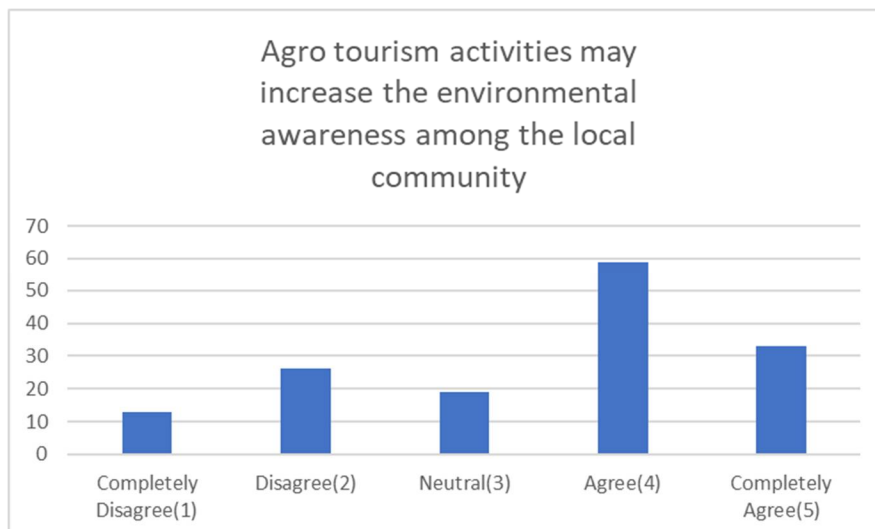
Out of 150 respondents, 0 completely disagree, 1 disagree, 29 are neutral, 67 agree, and 53 completely agree that agro-tourism may improve the image of the area as an ideal place of environmental protection. Hence, 80% of the respondents agree with the statement that agro-tourism improves the image of the area as an ideal place of environmental protection.

15. Agro-tourism centers may help in protecting the natural environment.



Out of 150 respondents, 29 completely disagree, 11 disagree, 47 are neutral, 35 agree, and 28 completely agree that Agro tourism centers may help in protecting the natural environment. Hence, 42% of the respondents agree with the statement that agro-tourism helps in protecting the natural environment of the area.

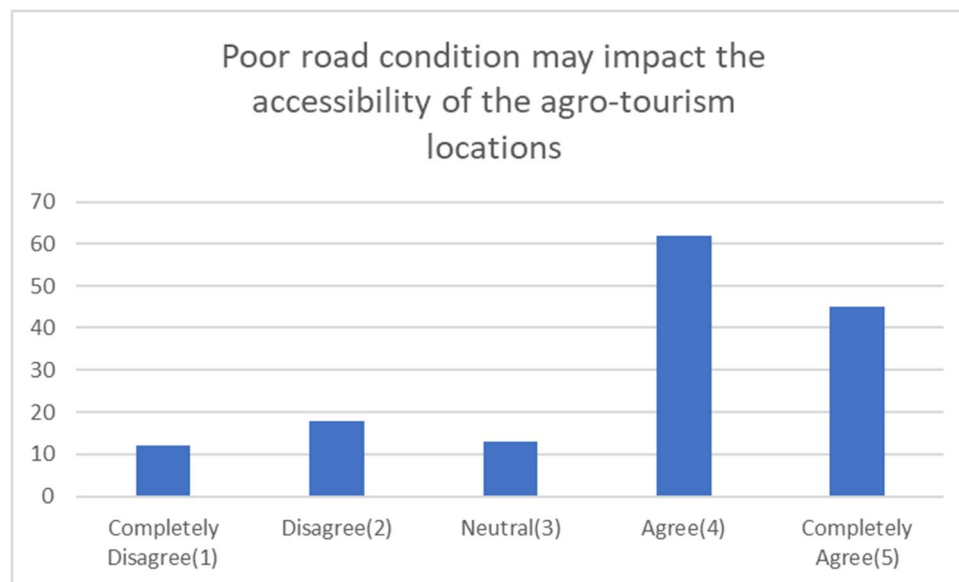
16. Agro-tourism activities may increase environmental awareness among the local community.



Out of 150 respondents, 13 completely disagree, 26 disagree, 19 are neutral, 59 agree, and 33 completely agree that Agro tourism activities may increase environmental awareness among the local community. Hence, 61% of the respondents agree with the statement that agro-tourism increases environmental awareness among the local community.

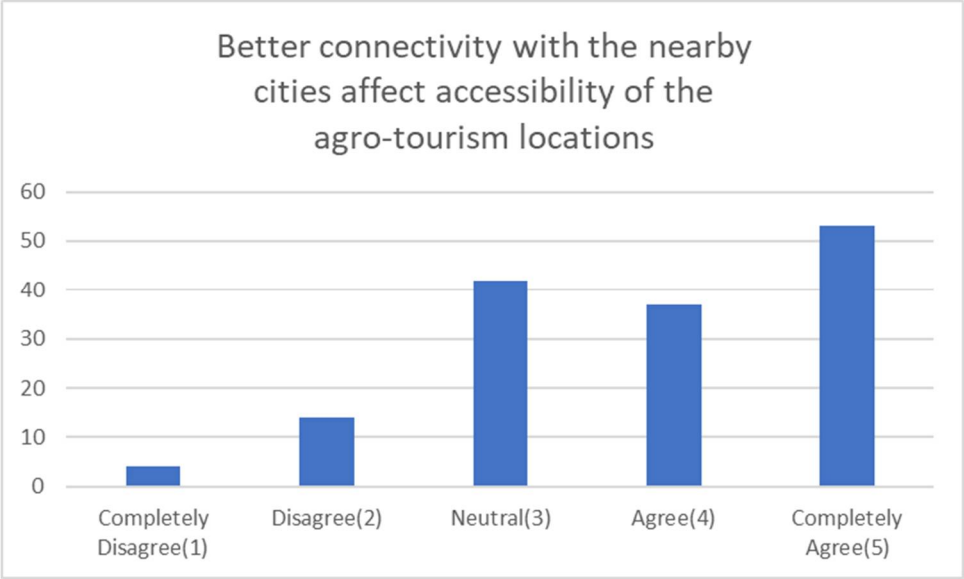
4.7.5 Accessibility

17. Poor road conditions may impact the accessibility of agro-tourism locations.



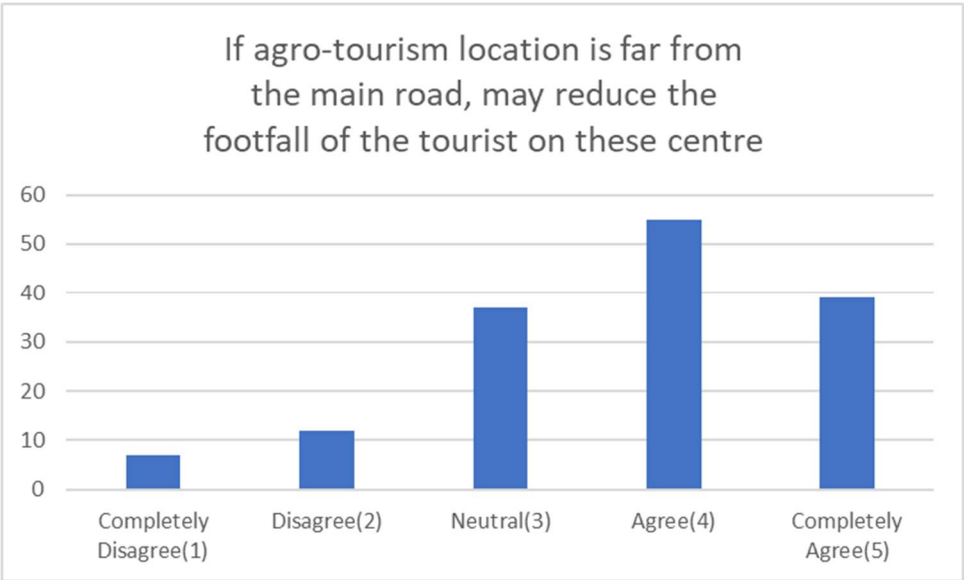
Out of 150 respondents, 12 completely disagree, 18 disagree, 13 are neutral, 62 agree, and 45 completely agree that poor road conditions may impact the accessibility of agro-tourism locations. Hence, 71% of the respondents agree with the statement that agro-tourism was impacted by poor road conditions.

18. Better connectivity with the nearby cities affect the accessibility of the agro-tourism locations.



Out of 150 respondents, 4 completely disagree, 14 disagree, 42 are neutral, 37 agree, and 53 completely agree that better connectivity with the nearby cities affects the accessibility of the agro-tourism locations. Hence, 60% of the respondents agree with the statement that better connectivity with nearby cities affects the accessibility of agro-tourism locations.

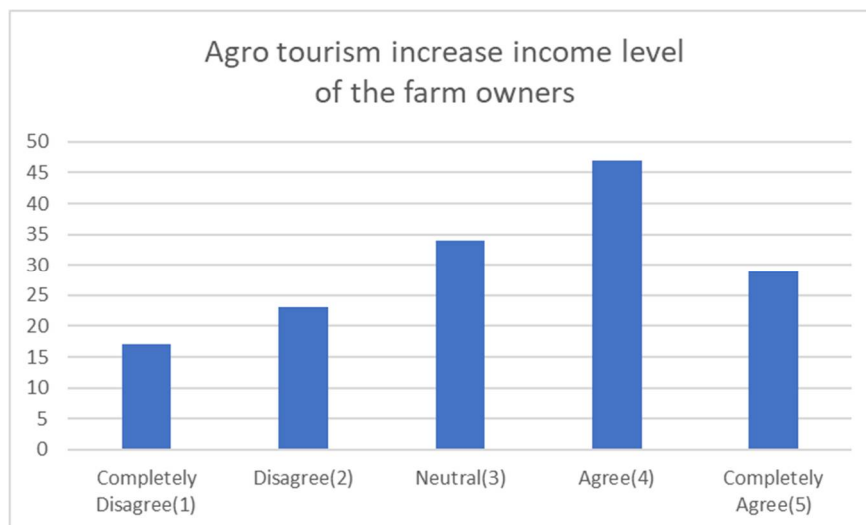
19. If the agro-tourism location is far from the main road, it may reduce the footfall of the tourist in these centers.



Out of 150 respondents, 7 completely disagree, 12 disagree, 37 are neutral, 55 agree, and 39 completely agree; if the agro-tourism location is far from the main road, it may reduce the footfall of the tourist in these center. Hence, 63% of the respondents agree with the statement that if the agro tourism location is far from the main road, it may reduce the footfall of the tourist in these centers.

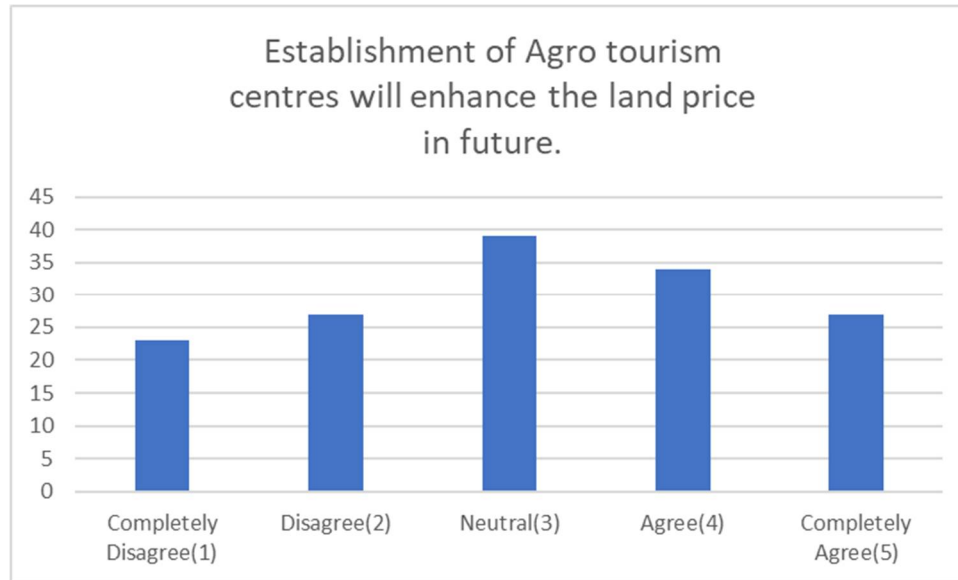
4.7.6 Economic Impact

20. Agro tourism increase the income level of the farm owners.



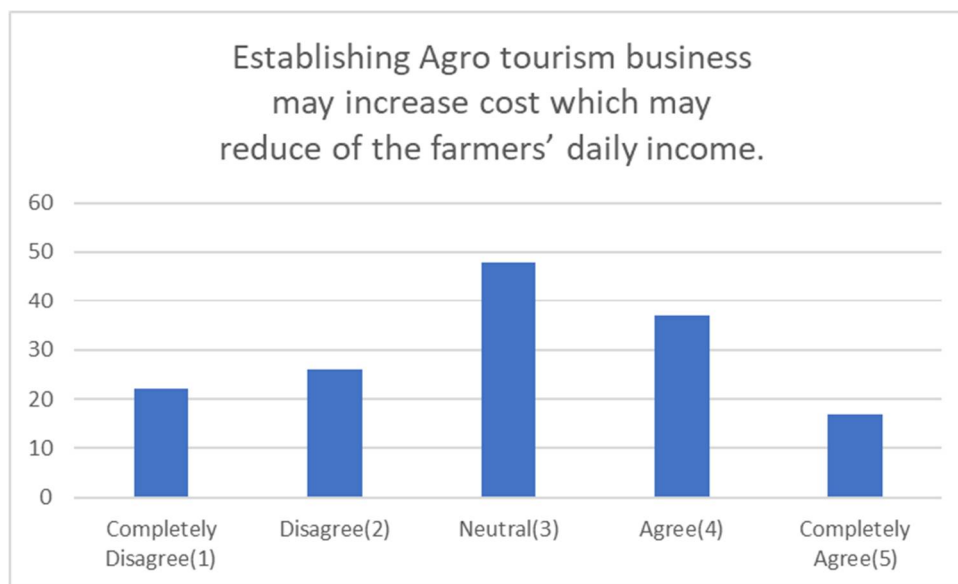
Out of 150 respondents, 17 completely disagree, 23 disagree, 34 are neutral, 47 agree, and 29 completely agree that Agro tourism increases the income level of the farm owners. Hence, 51% of the respondents agree with the statement that agro-tourism increase the income level of farm owners.

21. The establishment of Agro tourism centers will enhance the land price in the future.



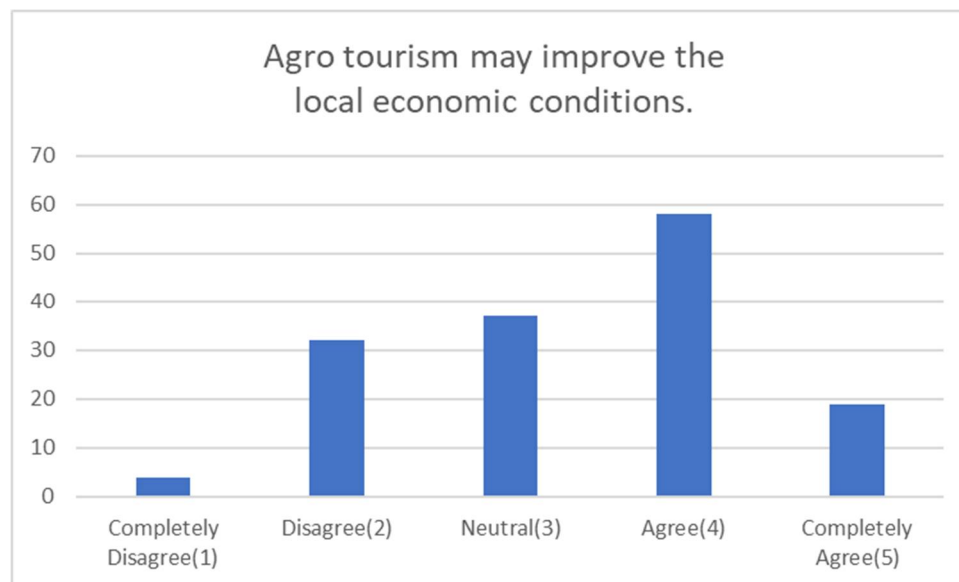
Out of 150 respondents, 23 completely disagree, 27 disagree, 39 are neutral, 34 agree, and 27 completely agree that the Establishment of Agro tourism centers will enhance the land price in the future. Hence, 41% of the respondents agree with the statement that agro-tourism will increase the land prices of the area in the future.

22. Establishing an Agro tourism business may increase costs which may reduce the farmers' daily income.



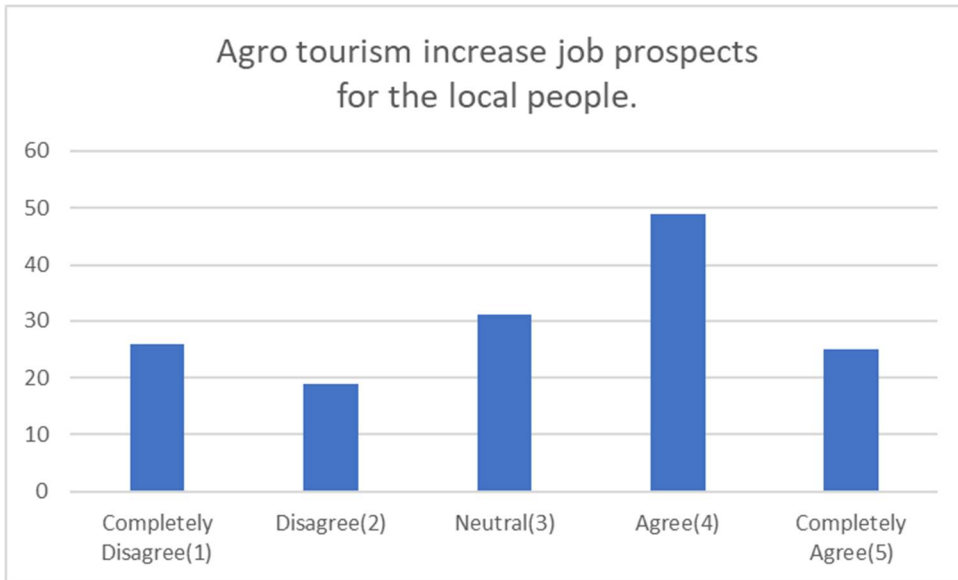
Out of 150 respondents, 22 completely disagree, 26 disagree, 48 are neutral, 37 agree, and 17 completely agree that Establishing an Agro tourism business may increase costs which may reduce the farmers' daily income. Hence, 36% of the respondents agree with the statement that establishing an agro-tourism business may increase costs which may reduce the farmers' daily income.

23. Agro-tourism may improve the local economic conditions.



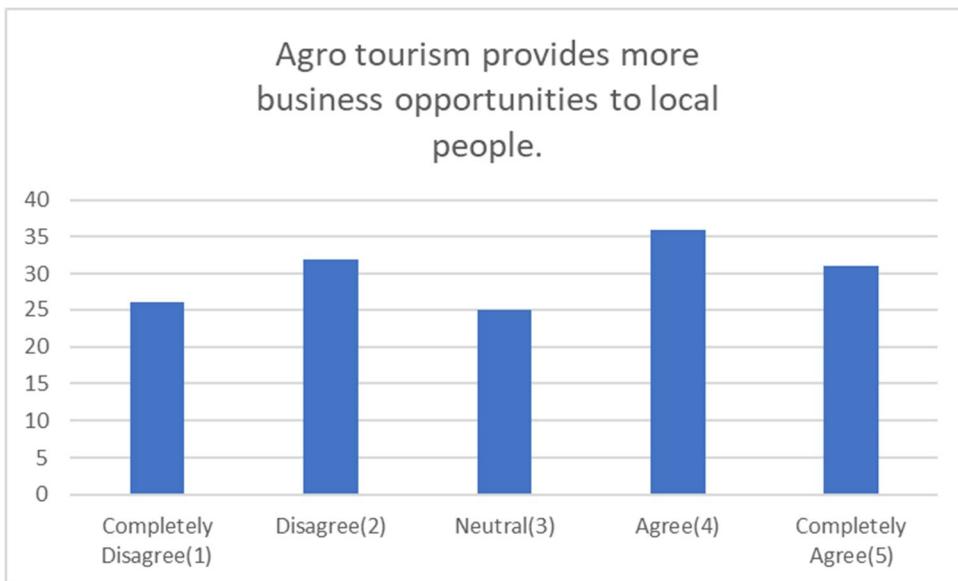
Out of 150 respondents, four completely disagree, 32 disagree, 37 are neutral, 58 agree, and 19 completely agree that Agro tourism may improve the local economic conditions. Hence, 51% of the respondents agree with the statement that agro-tourism improves local economic conditions.

24. Agro-tourism increases job prospects for the local people.



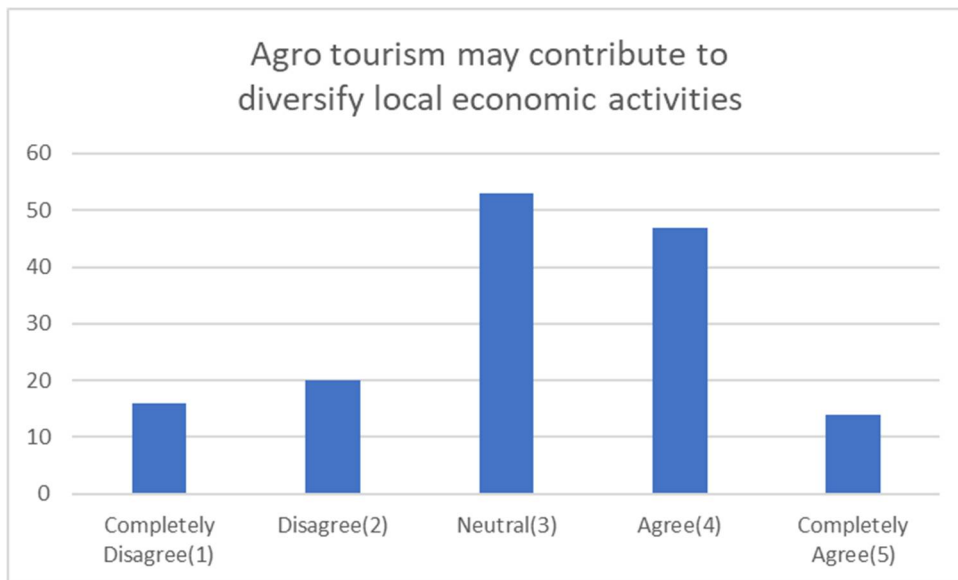
Out of 150 respondents, 26 completely disagree, 19 disagree, 31 are neutral, 49 agree, and 25 completely agree that Agro tourism increases job prospects for the local people. Hence, 49% of the respondents agree with the statement that agro-tourism increases job prospects for the local people.

25. Agro-tourism provides more business opportunities to local people.



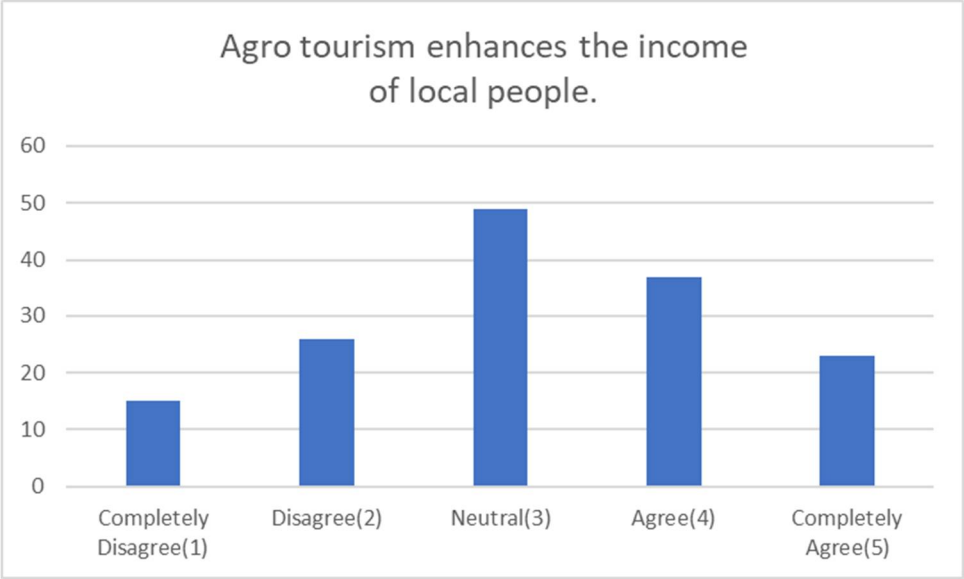
Out of 150 respondents, 26 completely disagree, 32 disagree, 25 are neutral, 36 agree, and 31 completely agree that Agro tourism provides more business opportunities to local people. Hence, 45% of the respondents agree with the statement that agro-tourism increases business opportunities for local people.

26. Agrotourism may contribute to diversifying local economic activities.



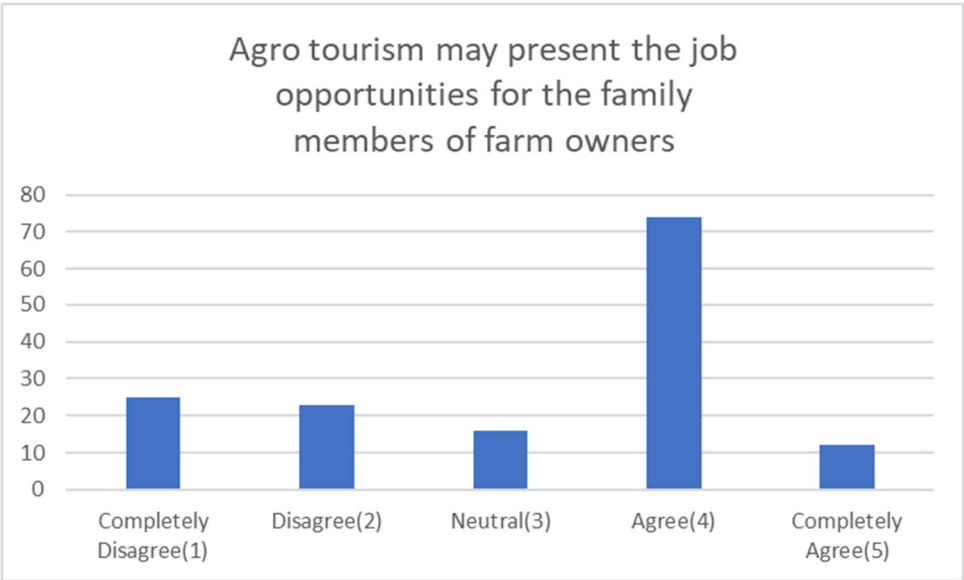
Out of 150 respondents, 16 completely disagree, 20 disagree, 53 are neutral, 47 agree, and 14 completely agree that Agro tourism may contribute to diversifying local economic activities. Hence, 41% of the respondents agree with the statement that agro-tourism contributes to diversifying local economic activities.

27. Agro-tourism enhances the income of local people.



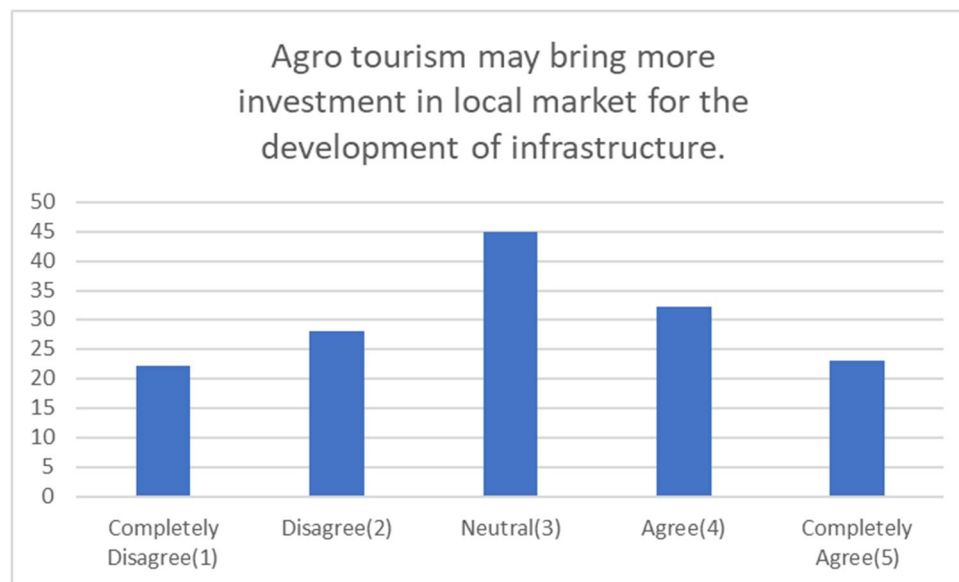
Out of 150 respondents, 15 completely disagree, 26 disagree, 49 are neutral, 37 agree, and 23 completely agree that Agro tourism enhances the income of local people. Hence, 40% of the respondents agree with the statement that agro-tourism increases the income of local people.

28. Agro-tourism may present job opportunities for the family members of farm owners.



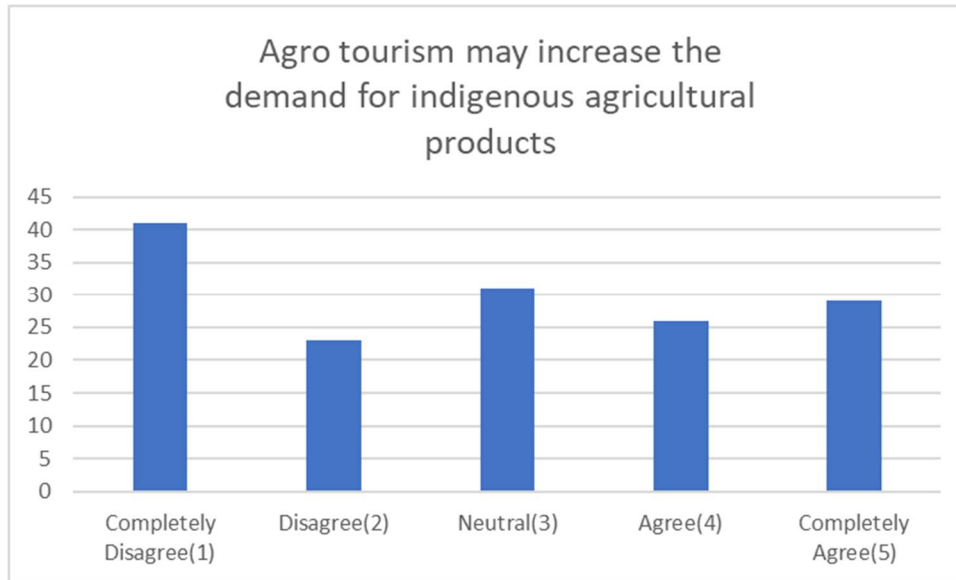
Out of 150 respondents, 25 completely disagree, 23 disagree, 16 are neutral, 74 agree, and 12 completely agree that Agro tourism may present job opportunities for the family members of farm owners. Hence, 57% of the respondents agree with the statement that agro-tourism provides job opportunities for the family members of farm owners.

29. Agro-tourism may bring more investment in the local market for the development of infrastructure.



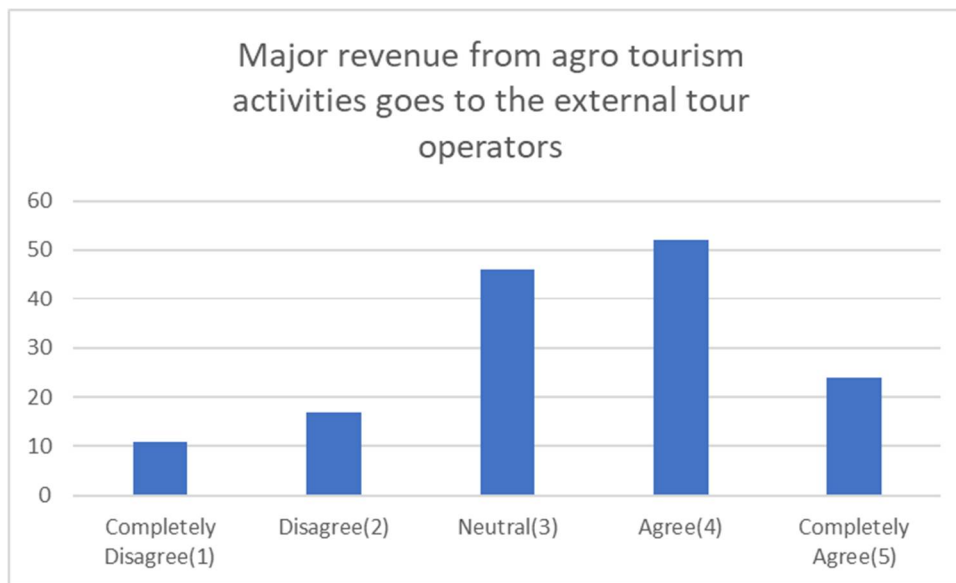
Out of 150 respondents, 22 completely disagree, 28 disagree, 45 are neutral, 32 agree, and 23 completely agree that Agro tourism may bring more investment in the local market for the development of infrastructure. Hence, 37% of the respondents agree with the statement that agro-tourism attracts more investment in the local market for the development of infrastructure.

30. Agro-tourism may increase the demand for indigenous agricultural products.



Out of 150 respondents, 41 completely disagree, 23 disagree, 31 are neutral, 26 agree, and 29 completely agree that Agro tourism may increase the demand for indigenous agricultural products. Hence, 37% of the respondents agree with the statement that agro-tourism increases the demand for indigenous agricultural products.

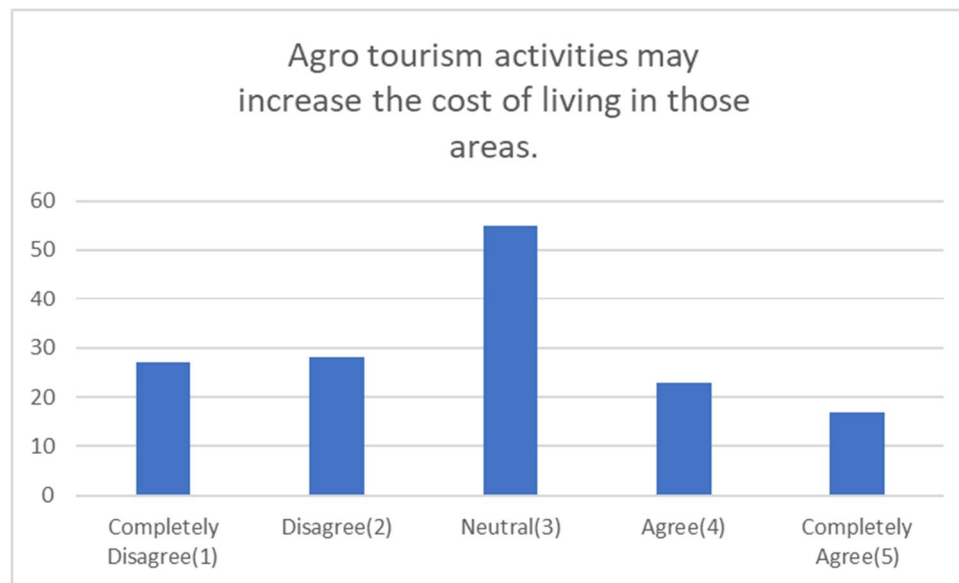
31. Major revenue from agro-tourism activities goes to external tour operators.



Out of 150 respondents, 11 completely disagree, 17 disagree, 46 are neutral, 52 agree, and 24 completely agree that Major revenue from agro-tourism activities goes to external tour operators.

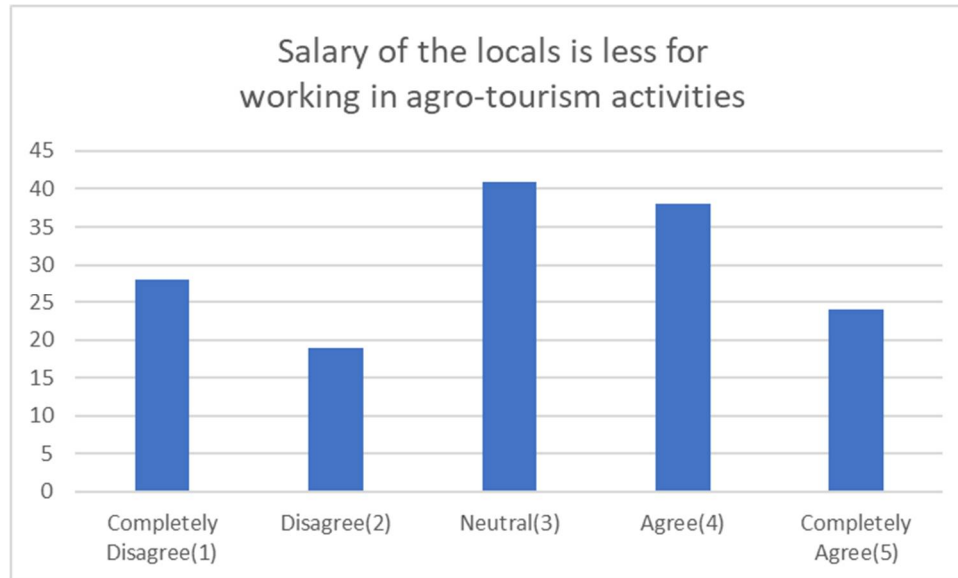
operators. Hence, 51% of the respondents agree with the statement that the major revenue of agro-tourism activities goes to external tour operators.

32. Agro-tourism activities may increase the cost of living in those areas.



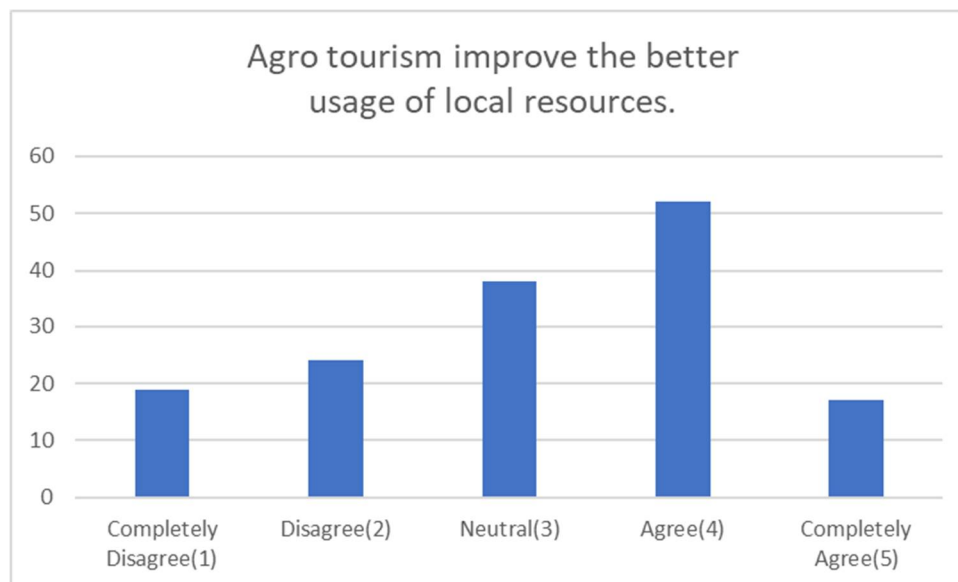
Out of 150 respondents, 27 completely disagree, 28 disagree, 55 are neutral, 23 agree, and 17 completely agree that Agro tourism activities may increase the cost of living in those areas. Hence, 37% of the respondents disagree with the statement that agro-tourism increases the cost of living in those areas.

33. The salary of the locals is less for working in agro-tourism activities.



Out of 150 respondents, 28 completely disagree, 19 disagree, 41 are neutral, 38 agree and 24 completely agree that Salary of the locals is less for working in agro-tourism activities. Hence, 41% of the respondents agree with the statement that agro tourism local workers salary is very low.

34. Agro tourism improve the better usage of local resources.

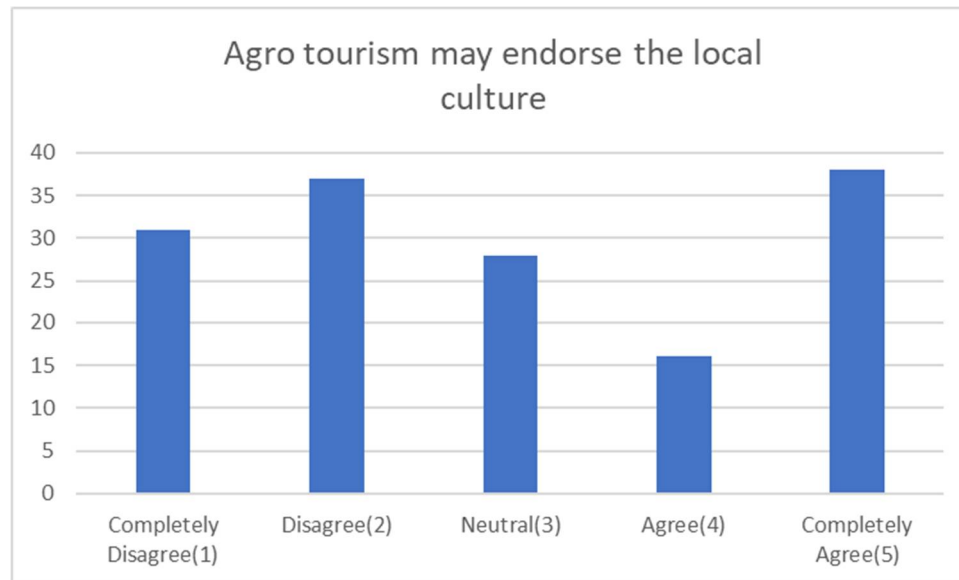


Out of 150 respondents 19 completely disagree, 24 disagree, 38 are neutral, 52 agree and 17 completely agree that Agro tourism improve the better usage of local resources. Hence,

46% of the respondents agree with the statement that agro tourism improves the better usage of local resources.

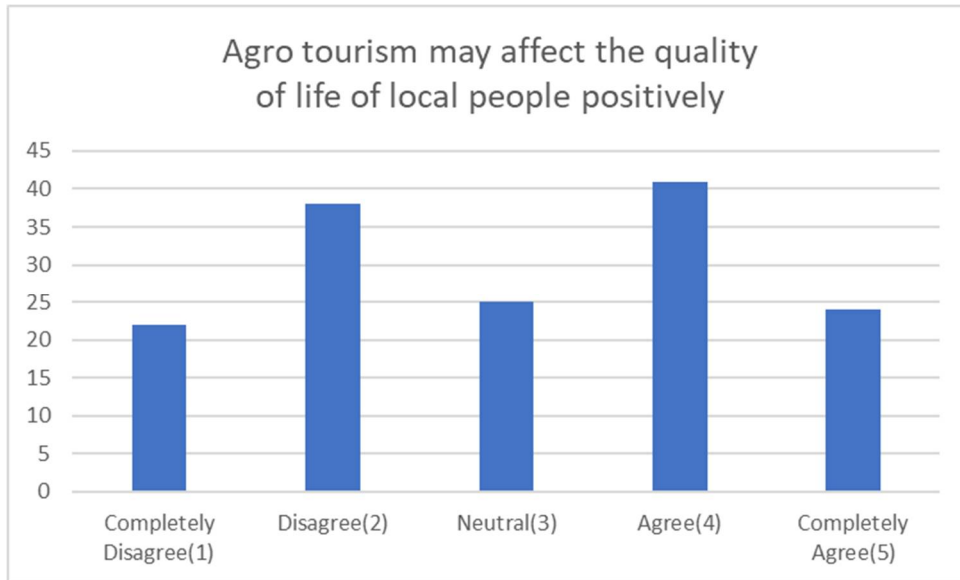
4.7.7 Socio Cultural Impact

35. Agro tourism may endorse the local culture.



Out of 150 respondents 31 completely disagree, 37 disagree, 28 are neutral, 16 agree and 38 completely agree that Agro tourism may endorse the local culture. Hence, 45% of the respondents disagree with the statement that agro tourism endorses the local culture.

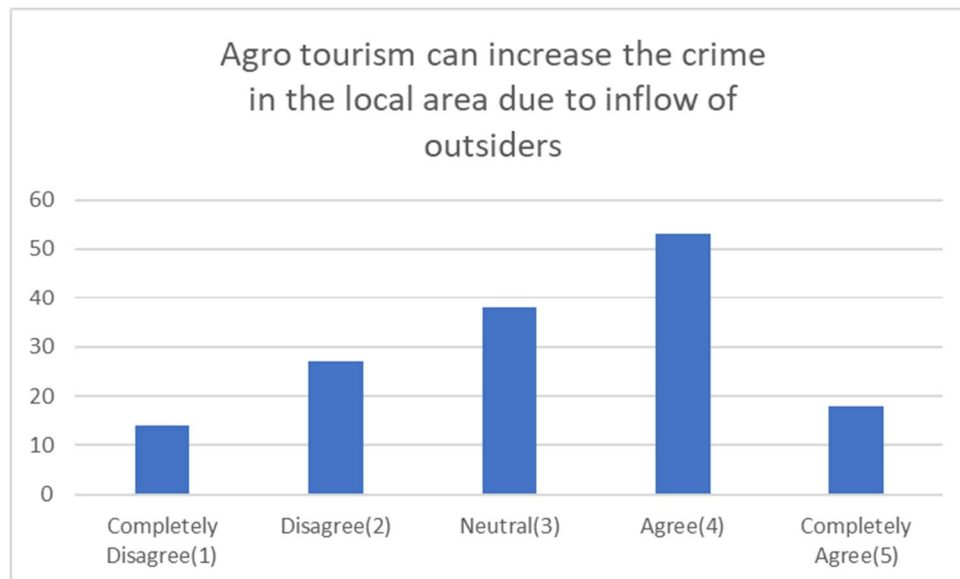
36. Agro tourism may affect the quality of life of local people positively



Out of
150

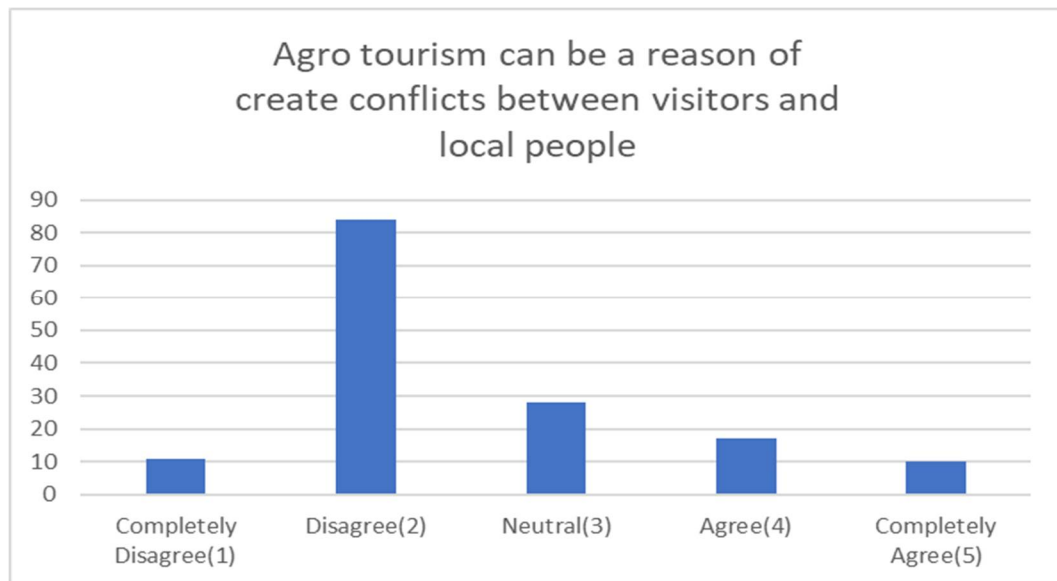
respondents 22 completely disagree, 38 disagree, 25 are neutral, 41 agree and 24 completely agree that Agro tourism may affect the quality of life of local people positively. Hence, 43% of the respondents agree with the statement that agro tourism improves the quality of life of local people.

37. Agro tourism can increase the crime in the local area due to inflow of outsiders



Out of 150 respondents 14 completely disagree, 27 disagree, 38 are neutral, 53 agree and 18 completely agree that Agro tourism can increase the crime in the local area due to inflow of outsiders. Hence, 47% of the respondents agree with the statement that agro tourism increases the crime in the local area due to inflow of outsiders.

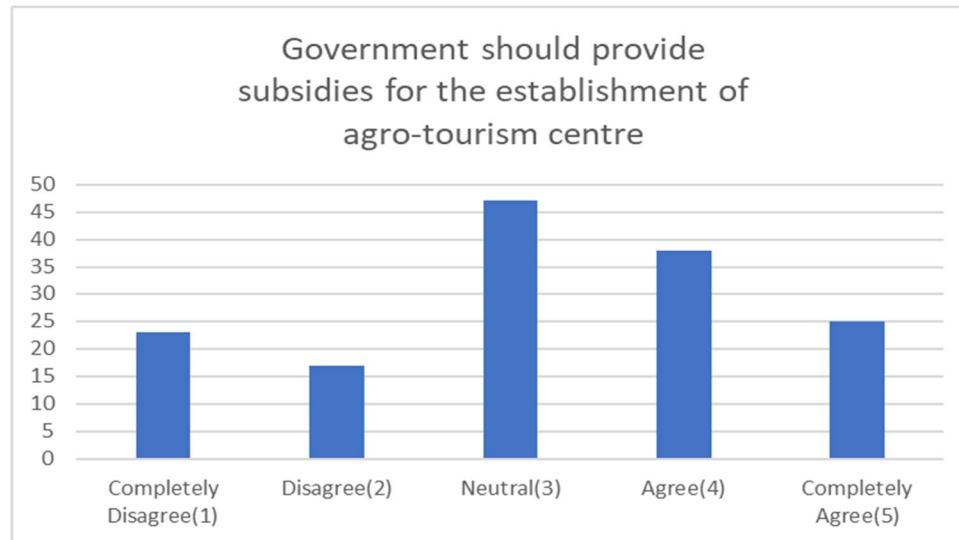
38. Agro tourism can be a reason of create conflicts between visitors and local people.



Out of 150 respondents 11 completely disagree, 84 disagree, 28 are neutral, 17 agree and 10 completely agree that Agro tourism can be a reason of create conflicts between visitors and local people. Hence, 63% of the respondents disagree with the statement that agro tourism creates conflicts between visitors and local people.

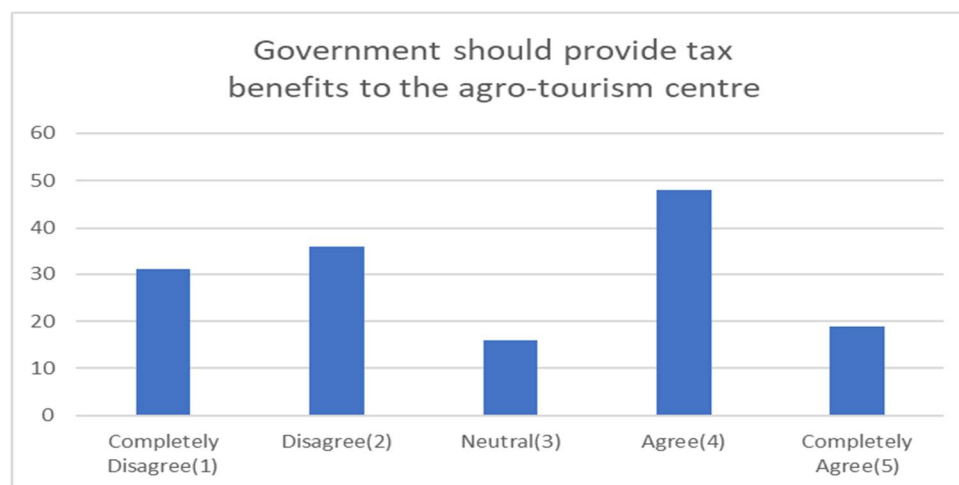
4.7.8 Government Support

39. Government should provide subsidies for the establishment of agro-tourism centre.



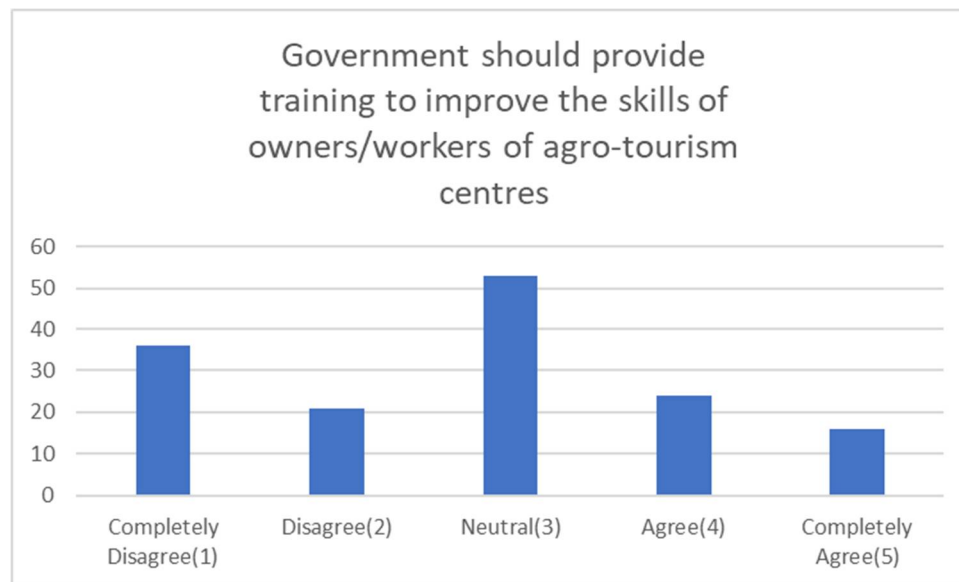
Out of 150 respondents 23 completely disagree, 17 disagree, 47 are neutral, 38 agree and 25 completely agree that Government should provide subsidies for the establishment of agro-tourism centre. Hence, 42% of the respondents agree with the statement that government should provide subsidies for the establishment of agro tourism centre.

40. Government should provide tax benefits to the agro-tourism centre.



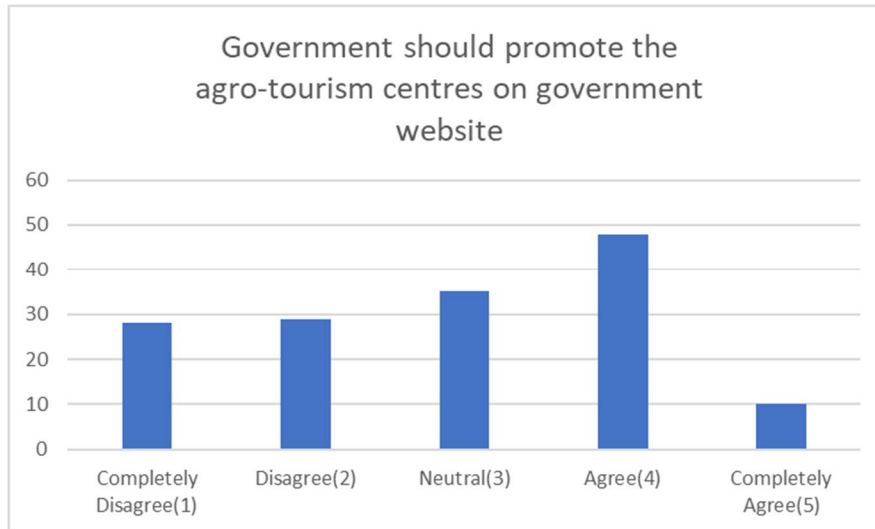
Out of 150 respondents 31 completely disagree, 36 disagree, 16 are neutral, 48 agree and 19 completely agree that Government should provide tax benefits to the agro-tourism center. Hence, 45% of the respondents agree with the statement that government should provide tax benefits to the agro tourism centers.

41. Government should provide training to improve the skills of owners/workers of agro-tourism centers.



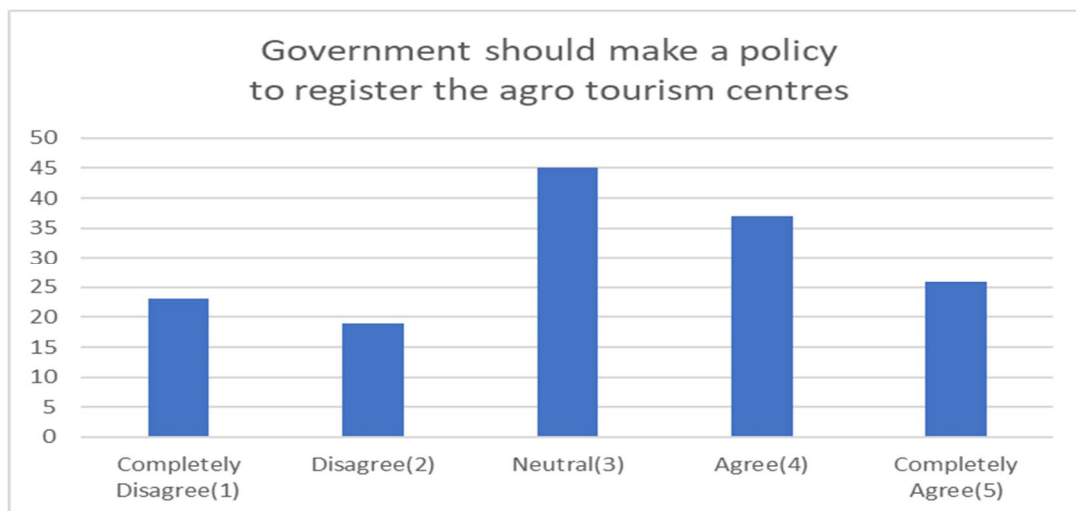
Out of 150 respondents, 36 completely disagree, 21 disagree, 53 are neutral, 24 agree, and 16 completely agree that Government should provide training to improve the skills of owners/workers of agro-tourism centers. Hence, 38% of the respondents disagree with the statement that government training support is required to improve the skills of owners of agro-tourism centers.

42. Government should promote the agro-tourism centers on the government website.



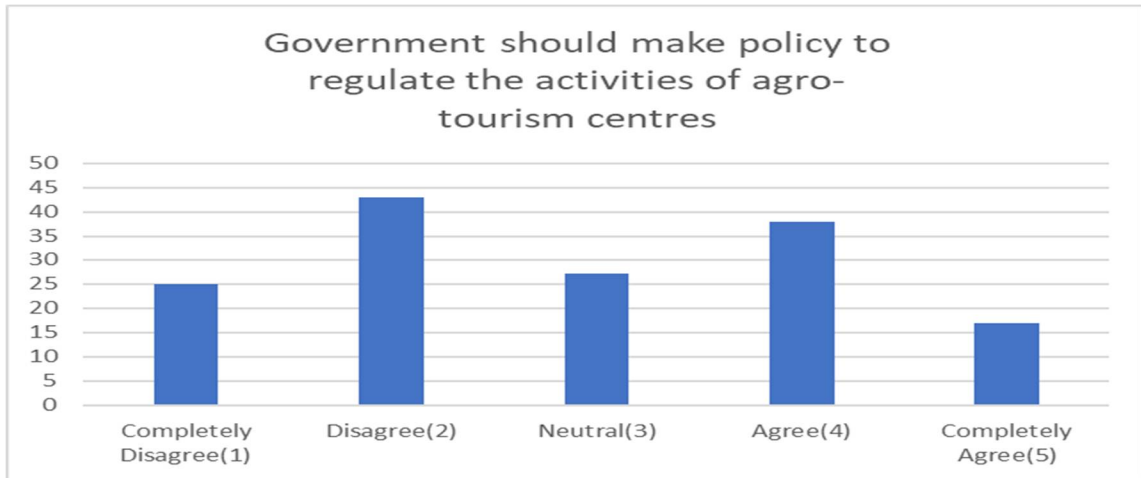
Out of 150 respondents, 28 completely disagree, 29 disagree, 35 are neutral, 48 agree, and 10 completely agree that Government should promote the agro-tourism centers on the government website. Hence, 39% of the respondents agree with the statement that government should promote agro-tourism centers on the government website.

43. Government should make a policy to register the agro-tourism centers.



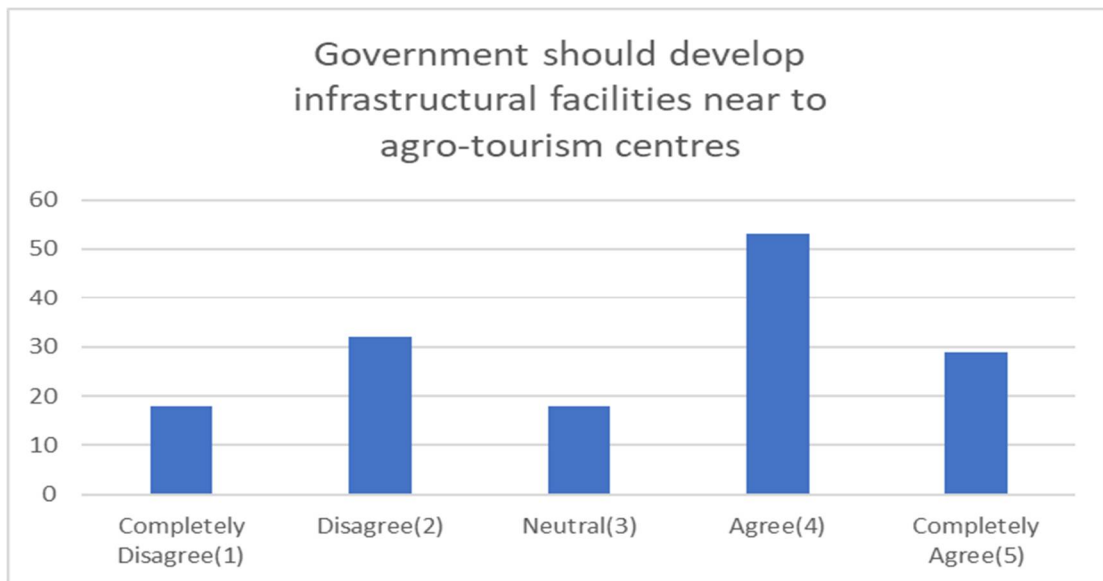
Out of 150 respondents, 23 completely disagree, 19 disagree, 45 are neutral, 37 agree, and 26 completely agree that Government should make a policy to register the agro-tourism centers. Hence, 42% of the respondents agree with the statement that government should make a policy to register agro-tourism centers.

44. Government should make policies to regulate the activities of agro-tourism centers.



Out of 150 respondents, 25 completely disagree, 43 disagree, 27 are neutral, 38 agree, and 17 completely agree that Government should make policies to regulate the activities of agro-tourism centers. Hence, 45% of the respondents disagree with the statement that government should make policies to regulate the activities of agro-tourism centers.

45. Government should develop infrastructural facilities near agro-tourism centers.



Out of 150 respondents, 18 completely disagree, 32 disagree, 18 are neutral, 53 agree, and 29 completely agree that Government should develop infrastructural facilities near agro-tourism centers. Hence, 55% of the respondents agree with the statement that government should develop infrastructural facilities near agro-tourism centers.

4.8 Conclusion

This chapter presented the results of the data collected in different phases to achieve the objectives of the study. The data was collected from the multiple stakeholders to understand the holistic situation of agri-tourism in the state. The next chapter will presents a discussion on the results followed by the policy and practitioners recommendations.

Chapter 5: Discussion, Conclusion and Recommendations

5.1 Introduction

This chapter presents the analysis of the results in the context of literature on the problems and prospects of agro-tourism in the Rajasthan. The present study aims to investigate the problems and prospects of the agro-tourism in Rajasthan. Further, this study also aims to understand the agro-tourism practices from the perspective of S-D logic framework. The present chapter explains the outcome of the current study. First, a discussion on the results related to interviews conducted is presented to provide an overview of problems and prospects of agro-tourism in the state. In the next section, a discussion related to the application of S-D logic in the context of agro-tourism is presented. Next to this, a discussion on the problems and prospects of agro-tourism in the Rajasthan from the perspective of visitors is also presented. Finally, a conclusion of the study is presented.

5.2 Problems of agro-tourism in Rajasthan and Recommendations

Rajasthan is the largest state of India in terms of area. The state is known for the tourism not only in the country but also has a prominent name in the world tourism map. Due to its geographical location, Rajasthan has variety of tourist location in different part of the state which attract a significant number of tourist in the state from all over the world. Keeping this concern in mind state government has initiated various schemes to nurture and support tourism activities in the state. These activities primarily include cultural tourism, heritage tourism and desert tourism. This sector contributes significantly in state GDP as well as provides a large amount of employment.

In recent years, agro-tourism has emerged as one of the new branch of tourism. Due to involvement of large population in the agricultural sector, this sector has seen a significant growth in the different part of the country. Maharashtra is one of the pioneer state with respect to agri-tourism in India.

The economy of Rajasthan can also receive substantial benefits by focusing and nurturing agri-tourism in Rajasthan. The main objective of agro-tourism is to increase the income level of farmers by providing them and additional source of income. In the present study while exploring the problems of agro-tourism, based on the data collected through semi structured interview, certain

issues emerged which requires the immediate attention of policymakers and other stakeholders so that potential of agro-tourism can be captured.

As discussed in the previous chapter, in total 13 problems related to agro-tourism are identified. These problems are categorized in 4 categories: *policy related problems, climate and regional problems, individual firm level problems, other problems*. These problems are further ranked using Analytical Hierarchy Process(AHP) techniques. The main reason of using AHP was to assign ranks to these problems to identify the key problems which requires immediate attention of both policy makers and the practitioners of agro-tourism. Due to the limitation of resources, it may be not possible to focus on each problem, it is useful to identify key problems which needs to be taken care immediately. These problems are further discussed in the subsequent sections.

In the main categories of the problems (Table 4.1 and 4.2) of agro-tourism policy related issues has emerged as key problems followed by the individual firm level problems, Climatic and regional problems and other problems. The next section discusses the sub-category of the problems of agro-tourism in the Rajasthan.

Lack of awareness of government policy or policy is not clear ranked one and considered as an important area of the concern. Government of Rajasthan has implemented rural tourism scheme last year to attract more investment in the tourism sector⁵. This study also covers agro-tourism as an important area. During the interview, it emerged as an important area of concern the people are either not having idea about this policy or know very little about it. Awareness about the new initiative is critical for the success of these new initiatives. Awareness is important for the behavioral change of the concerned stakeholder. Government must educate the current and prospective agro-tourism site owners about the benefits of new policy framework.

Lack of marketing/Famous for heritage/desert/Cultural tourism is considered as the second key problem related to agri-tourism. Rajasthan is famous for the heritage/desert/culture tourism across the globe. People comes to see forest, enjoy the cultural diversity and the desert in the Rajasthan. In order to promote agro-tourism as one more avenue of the tourism sector in Rajasthan,

⁵ https://www.business-standard.com/article/economy-policy/rajasthan-govt-implements-new-rural-tourism-scheme-promises-jobs-122120801304_1.html

governments need to promote this concept in aggressive manner. It is important to promote the agri-tourism sites so that people come and stay in these locations. Government should also take initiative to attract investment in the field of tourism. Though in the recent rural tourism policy government has focused on agro-tourism as well but still detailed plan, how to market these sites need to be prepared and implement so that tourist considers Rajasthan also as one of the option while planning to visit agri-tourism centers. A well-defined marketing plan and networking may help in exploring and capitalizing the potential of the state.

Lack of Capital has emerged as a problem which ranked third by the experts in AHP. Design and development of agro-tourism site requires a large investment which is critical for the success of any tourism site. According to Pinky and Kaur (2014), lack of finance is one of the major constraint for the agro-tourism sector. The small farmers may not be in the position to invest a large amount of money and will not be able to take the burden of loan and interest (Rambodagedara and Silva, 2015). These findings of the study were in the line of previous literature conducted in the agro-tourism sector in different context (Parkar, 2015; Krishna et al, 2019; Nimase, 2020). It is imperative for the government to ensure that easy finance and subsidies are available to the people those are interested in running the agro-tourism centers. Government may also help in financing these activities through NGOs, self-help groups etc.

Lack of Manpower is the 4th key issue which needs to be solved to promote agro-tourism in Rajasthan. Like other tourism activities, agro-tourism sector requires people with very specific skills to run these sites effectively. There are certain skills like construction of huts, farming, cropping, pottery required very specialized skills. Due to migration of the people to the urban centers, villages are having dearth of the people skilled in these areas. These skills are generally transfer from one generation to another generation. Lack of interest, lack of job opportunities young generation is not interested to learn these skills. Because of this it is becoming difficult to find people trained in certain skills. Therefore, it is important for the government to run certain schemes to protect these traditional skills those are limited to few individuals or communities. Government needs to provide required financial and non-financial support so that these skills and arts can be protected in future also.

Lack of training is ranked 5th in the list of problems of agro-tourism in Rajasthan. This lack of training in certain ways connected with the previous problem. In addition to this, training is not just required for the workers to do the farming activities, but also to the owners/managers of these agro-tourism sites. They need to be provided on certain aspect of marketing, website management, customer relationship, soft skills etc. This will help them in dealing with their current and potential customers more effectively. They also need to be trained in how to add new activities and improve the visitors experience. This will help them in effectively position their resort/sites and collaborate with other sites.

Lack of Entrepreneurial Skills is another problem emerged during the interviews. People are not interested to take any risk to diversify their business. They lack the basic skills those are critical for the success of any ventures. The farmers with small landholding are not interested to make any new investment to enter into the field of agro-tourism. Though, during the interview they have shown interest but still look for the government support to run these activities.

Another problems, related to agro-tourism in Rajasthan other than discussed above shown a very less weightage as per the ranking. Though, it does not mean that they can be ignored. Policymakers, practitioners must immediately focus on the all problems to develop a conducive and effective eco-system to nurture the agro-tourism in Rajasthan. This will help in increasing the tourist footfall which will be resulted in increase in the income of farmers and other people dependent on tourism sector which will be finally resulted into the growth of the economy of the state.

5.3 Prospects of Agro-tourism in Rajasthan and Recommendation

In the next section we discussed about the prospects of agro-tourism in Rajasthan. Based on the interviews, it was quite evident that there is a large potential for this sector in the state.

First of all, keeping diversity of Rajasthan in mind, this sector can be promoted in all tourism circuits. This sector can be very well coupled with the heritage and desert tourism. Agro-tourism sector can be promoted to give a better experience of the Rajasthani culture. This will help in diversifying the existing tourism setup in the state. As mentioned earlier, currently state is primarily known for the forts and deserts. The growth of agro-tourism will help changing the

perception of the people which will attract more visitors to take variety of tourism experience in Rajasthan.

Second, this sector has a very good potential to increase the income of the farmers. Farmers may utilize their time and asset to earn more profitability. They just need not be dependent on the quality of agricultural output and their price in the market. They can develop more avenues of income generation. It will also increase the employment opportunities to the rural people. The increasing employment opportunities will help in stopping the migration to the urban part of the state or to the other states. Third, the growth of the agro-tourism will help in protecting the interest of the people skilled in certain skills which is necessary for the growth and development of agro-tourism sector. This will provide them the scope of earning and protect these skills. This will help them in passing their knowledge to the future generations.

The another benefit, like the regular tourism activities, government can also venture into the agro-tourism activities. Government can utilize the available unutilized land to develop these centers. Which will generate more source of revenue for the government.

Therefore, it is suggested that government and other relevant stakeholder must focus on the agro-tourism sector which will help all stakeholders while protecting and developing these traditional Rajasthani culture.

5.4 Summary and discussion on the survey results

The following section discuss the discussion and recommendation based on the consumer survey:

The above graphs highlight the histogram presentation of responses received from the respondents on numerous questions related to Agri-tourism being asked of them.

1. Awareness about Agro-tourism

The awareness level of respondents towards Agro-tourism is measured with the help of four questions. Majority of the respondents stated that agritourism is commercial activity which is performed near to nature mostly in rural and remote areas. looking deeper into each questions we found that, more than 70% of respondents view Agro-tourism as a commercial activity based on farm activity, around 80% of respondent agree that

agritourism requires closeness to nature. Respondents (85%) also viewed agritourism as the activity will increase the footfall in agricultural and rural areas.

The above statistics are inline of prior research whereas majority of respondents feel Agri-tourism as commercial activity which will enhance its development (Malkanthi and Routry, 2011).

2. Environmental Problem

The environmental problem towards Agro-tourism is measured with the help of ten questions. The respondents have the mixed view towards the agritourism as the cause of environmental problems.

More than half of the respondents associated agritourism negatively as the cause of air pollution. looking deeper into each questions we found that, more than 50% of respondents view Agro-tourism negatively as a driver of sound pollution, around 68% of disagree with the statement that agro tourism increases the temperature. Respondents (74%) also viewed that more use of agricultural pesticides and fertilizers increases the environmental pollution.

The above statistics are inline of prior research whereas majority of respondents feel Agri-tourism will not harm nature in considerable way and will have majority of positive implications compared to negative ones (Nguyen et al., 2018).

3. Environmental Aspects

The environmental aspects towards Agro-tourism is measured with the help of two questions. Nearly half of the respondents associated agritourism positively as the reason of protecting natural environment. looking deeper into each questions we found that , 42% of respondents agree with the statement that agro tourism helps in protecting the natural environment of the area, around 61% of respondents agree with the statement that agro tourism increases the environmental awareness among the local community. Overall we can say that agritourism will positively contribute towards development of natural environment. The above statistics are different from the earlier research(Neger, 2021).

4. Accessibility

The Accessibility towards Agro-tourism is measured with the help of three questions. More than 71% of the respondents agree with the statement that agro tourism was impacted by poor road conditions. Looking further we found that, 60% of the respondents agree with the statement that better connectivity with the nearby cities affect accessibility of the agro-tourism locations., around 63% of the respondents agree with the statement that agro tourism location is far from the main road, may reduce the footfall of the tourist on these centers. Overall we can say that better accessibility will positively affect the Agro-tourism activity of the region. The above statistics are different from the earlier research (Pinky and Kaur, 2014).

5. Economic

The economic benefits from Agro-tourism is measured with the help of fifteen questions. The respondents have the positive agreement towards the agritourism as the cause of economic progress both at individual as well as the macro level of community. Some of crucial aspects towards which respondents have favourable view is that agritourism activities enhances income level, standard of living, job prospect, business opportunities, infrastructure development, resource utilization and many more. The current findings are inline of earlier research (Nguyen et al., 2018).

6. Socio cultural Impact

The Socio cultural impact towards Agro-tourism is measured with the help of four questions. The respondents have the mixed view towards the socio cultural impact of agritourism.

Around 45% of the respondents disagree with the statement that agro tourism endorses the local culture. Looking deeper into each questions we found that, more than 40% of respondents view agro-tourism improves the quality of life of local people, around 47% of the respondents agree with the statement that agro-tourism increases the crime in the local area due to inflow of outsiders. Whereas 63% of the respondents disagree with the statement that agro tourism creates conflicts between visitors and local people.

The above results are inline of prior research whereas majority of respondents feel Agri-tourism will improve socio cultural aspects of the remote locations (Nguyen et al., 2018).

7. Government support

The government support towards Agro-tourism is measured with the help of seven questions. The respondents agree that government support and policies will improve agritourism activities.

Around 42% of the respondents agree with the statement that government should provide subsidies for the establishment of agro-tourism center. looking deeper into each questions we found that, more than 40% of respondents view that government should provide tax benefits to the agro tourism centres, around 38% of the respondents disagree that government training support is required to improve the skills of owners of agro tourism centers. whereas 45% of the respondents disagree with the statement that government should make policies to regulate the activities of agro tourism centers. The above results are inline of prior research whereas majority of respondents feel government support is needed to facilitate agritourism (FICCI Report, 2016).

5.5 Implementation of S-D logic in agri-tourism sector

Service dominant logic has emerged as an important concept especially in the case of service marketing literature. Firms are looking for the ways to design and develop their product in ‘service way’ not in a ‘product way’. This concept is equally valid in the case of agri-tourism sector. Considering the very basic requirement of consumer involvement in the service delivery, agri-tourism firms must adopt the S-D logic framework in their sites. It is imperative for the success of this category of tourism that agri-tourism sites must develop the ways to improve the customer involvement and engagement right from the start. The owners/managers must plan and develop the activities which may increase the customers’ role in order to increase the customer satisfaction. This will help them in long run in spreading positive word of mouth and increase in the footfall. These satisfied consumers will work as the ambassador and will promote these centers. Agri-tourism centers must ensure the involvement of visitors so that rather than being a passive participant they get involved in process. This will help in increasing perceived value and customer

experience through value co-creation which will result in satisfied customers. This will improve the chances of revisiting by the tourists. They further, may also bring the input of local culture to provide a holistic experience of farm and rural life to the consumers.

Another thing is the complexity of agro-tourism due to large scope and variety of skills requirements as confirmed by the participants also. Therefore, firms must identify the ways by which they can train their manpower in variety of skills by networking and collaborations

5.6 Conclusion

The objective of the present study was to assess the problems and prospects of agro-tourism in the state. This study reviewed thoroughly the state of art literature in the field of agro-tourism which is published from the different perspective and related to different cultural, social and geographical context. Further, the study collected the data from different stakeholders to have a detailed overview of the agri-tourism in the state. Further, the identified problems need to be resolved to capture the full potential of agro-tourism in Rajasthan. Keeping the limitation of resources in mind, it is critical to identify the key issues which requires immediate attention. Keeping this perspective in mind, Analytical Hierarchy process technique was applied to rank these problems from the perspective of the expert. This process helped in identifying the key issues which may be considered on priority by the policymakers and the practitioners. Further, to understand the customer's perspective of agro-tourism and their issue, data was collected using a structured questionnaire. In the last, we presented how S-D logic may help in involving the customers of agro-tourism in effective manner. We also suggest the agro-tourism sites should adopt a collaborative framework with both government and non-government entities to develop and run these sites. Government must also provide them required support and training so that they can diversify the existing tourism framework of the state.

References:

- Addinsall, C., Weiler, B., Scherrer, P. and Glencross, K., 2017. Agroecological tourism: Bridging conservation, food security and tourism goals to enhance smallholders' livelihoods on South Pentecost, Vanuatu. *Journal of Sustainable Tourism*, 25(8), pp.1100-1116.
- Akpınar, N., Talay, İ., Ceylan, C. and Gündüz, S. (2005) Rural women and agrotourism in the context of sustainable rural development: A case study from Turkey. *Environ Dev Sustain* 6, 473–486.
- Ammirato, Salvatore, and Alberto Michele Felicetti. 2014. "The Agritourism as a Means of Sustainable Development for Rural Communities: A Research from the Field." *The International Journal of Interdisciplinary Environmental Studies* 8 (1): 17-29. doi:10.18848/2329-1621/CGP/v08i01/53305
- Annual report of Rajasthan tourism (2017-2018), Available at: <https://www.tourism.rajasthan.gov.in/content/dam/rajasthan-tourism/english/others/tourism-department-annual-progress-report-2017-18.pdf>
- Arroyo, C.G., Barbieri, C. and Rich, S.R., 2013. Defining agritourism: A comparative study of stakeholders' perceptions in Missouri and North Carolina. *Tourism Management*, 37, pp.39-47.
- Asciuto, A., Di Franco, C.P. and Schimmenti, E., 2013. An exploratory study of sustainable rural tourism in Sicily. *International Journal of Business and Globalisation*, 11(2), pp.149-158.
- Arroyo, C. G., Barbieri, C., & Rich, S. R. (2013). Defining agritourism: A comparative study of stakeholders' perceptions in Missouri and North Carolina. *Tourism Management*, 37, 39-47.
- Hashimoto, A. & Telfer, D. J. (2010) Developing sustainable partnerships in rural tourism: the case of Oita, Japan, *Journal of Policy Research in Tourism, Leisure and Events*, 2:2, 165-183,
- Bagi, F., & Reeder, R. (2012). Factors Affecting Farmer Participation in Agritourism. *Agricultural and Resource Economics Review*, 41(2), 189-199. doi:10.1017/S1068280500003348
- Barbieri, C. (2013). Assessing the sustainability of agritourism in the US: A comparison between agritourism and other farm entrepreneurial ventures. *Journal of Sustainable Tourism*, 21(2), 252-270.
- Barbieri, C. and Mshenga, P.M., 2008. The role of the firm and owner characteristics on the performance of agritourism farms. *Sociologia ruralis*, 48(2), pp.166- 183.
- Barbieri, C., Xu, S., Gil-Arroyo, C., & Rich, S. R. (2016). Agritourism, Farm Visit, or . . . ? A Branding Assessment for Recreation on Farms. *Journal of Travel Research*, 55(8),

10941108. <https://doi.org/10.1177/0047287515605930>

Bikaner, Govt. of Rajasthan (2022), <https://bikaner.rajasthan.gov.in/>

Blazquez-Resino, J. J., Molina, A., & Esteban-Talaya, A. (2015). Service-Dominant Logic in tourism: the way to loyalty. *Current issues in Tourism*, 18(8), 706-724.

Brandth, & Haugen. (2011) Farm diversification into tourism – Implications for social identity? *Journal of Rural Studies*, 27(1), 35–44.

Bundi, Govt. of Rajasthan (2022), <https://bundi.rajasthan.gov.in/>

Burrows, R., Fennell, A., Redlin, M. and Verschoor, L., 2007. Agri-cultural tourism: linking the arts and humanities with agricultural direct marketers and specialty producers. *Journal of Extension*, 45(6).

Carla Barbieri (2013) Assessing the sustainability of agritourism in the US: a comparison between agritourism and other farm entrepreneurial ventures, *Journal of Sustainable Tourism*, 21:2, 252-270, DOI: 10.1080/09669582.2012.685174

Carpio, C.E., Wohlgenant, M.K. and Boonsaeng, T., 2008. The demand for agritourism in the United States. *Journal of Agricultural and Resource Economics*, pp.254-269.

Carr, A., Ruhanen, L. and Whitford, M., 2016. Indigenous peoples and tourism: The challenges and opportunities for sustainable tourism. *Journal of Sustainable Tourism*, 24(8-9), pp.1067-1079.

Chatterjee, R & Prasad, G. (2019) Opportunities and Challenges of Rural Tourism in Rajasthan. *International Journal of Research in Economics and Social Sciences*, 7(1), 1–13

Chatzigeorgiou, C., Christou, E., Kassianidis, P. and Sigala, M., 2009. Examining the relationship between emotions, customer satisfaction and future behavioural intentions in agrotourism.

Chemnasiri, N. and Kaewmoung, D., 2008. Farm development to become agro- tourism area by community involvement in Saraburi, Thailand. *Amfiteatru economic*, 10, pp.184-194

Chittorgarh, Govt. of Rajasthan (2022), <https://chittorgarh.rajasthan.gov.in/>

Choo, Hyungsuk & Petrick, J F., (2014). "Social interactions and intentions to revisit for agritourism service encounters," *Tourism Management*, Elsevier, vol. 40(C), pages 372-381.

Choo, H. & Petrick JF (2013) Resource Exchanges for Agritourism Service Encounters, *Journal of Hospitality Marketing & Management*, 22:7, 770-780, DOI: 10.1080/19368623.2013.723996

Choudhary. S & Yadav. S. (2018) Role of Tourism in Economic Development of Rajasthan , *International Journal of Research*, Volume : 7, Issue – 8, Page, 543-550

- Christou, P., Lashley, C. and Saveriades, A., 2009. The world of agritourists: A psychological perspective. *tourismos*, 4(4), pp.241-257.
- Das, B. R., & Rainey, D. V. (2010). Agritourism in the Arkansas delta byways: Assessing the economic impacts. *International Journal of Tourism Research*, 12(3), 265-280.
- Doh et.al, (2017) Antecedents and consequences of managerial behavior in agritourism, *Tourism Manag.*, 61 (2017), pp. 511-522
- Drishti ias (2022), Rajasthan Rural Tourism Promotion Scheme, Available at: <https://www.drishtiias.com/state-pcs-current-affairs/rajasthan-rural-tourism-promotion-scheme>
- Evgrafova, L. V., Ismailova, A. Z., & Kalinichev, V. L. (2020). Agrotourism as a factor of sustainable rural development. In *IOP conference series: earth and environmental science* (Vol. 421, No. 2, p. 022058). IOP Publishing.
- Ezung, T. Z. (2011). Rural Tourism in Nagaland, India: Exploring the Potential. *International Journal of Rural Management*, 7(1–2), 133–147. <https://doi.org/10.1177/0973005212459833>
- Fernández-Hernández, C., León, C. J., Araña, J. E., & Díaz-Pérez, F. (2016). Market segmentation, activities and environmental behaviour in rural tourism. *Tourism Economics*, 22(5), 1033–1054. <https://doi.org/10.5367/te.2015.0476>
- FitzPatrick, M., Davey, J., Muller, L., & Davey, H. (2013). Value-creating assets in tourism management: Applying marketing's service-dominant logic in the hotel industry. *Tourism Management*, 36, 86-98.
- Giaccio, V., Giannelli, A., & Mastronardi, L. (2018). Explaining determinants of agri-tourism income: Evidence from Italy. *Tourism Review*.
- Govt. of Rajasthan (2022), <https://rajasthan.gov.in/>
- Hayslip, T.B., Gallarza, M.G. and Andreu, L., 2013. Service-dominant logic and value in tourism management: a qualitative study within Spanish hotels managers. *Journal of Business Theory and Practice*, 1(2), pp.303-328.
- Henderson, J.C., 2009. Agro-tourism in unlikely destinations: A study of Singapore. *Managing Leisure*, 14(4), pp.258-268.
- <http://www.agro-tourism.in/blog-post/what-is-agri-tourism-all-about/>
- <https://media.unwto.org/press-release/2017-08-15/tourism-growth-not-enemy-it-s-how-we-manage-it-counts>
- Hayrol, A., Azimi, H., Yassin, S.M., Bahaman, A.S., D'Silva, J.L., Neda, T. and Mahazan, M.,

2015. The coastal community perception on the socio-economic impacts of agro-tourism activities in coastal villages in Malaysia. *Asia Pacific journal of tourism research*, 20(3), pp.295-313.

Hoarau, H., 2014. Service Dominant Logic for Innovation in Nature Based Tourism. 25–27 June 2014, *Le Meridien Hotel ISSN 169412225 Edited by Robin Nunkoo, Boopen Seetanah & Raja*, p.543.

Iakovidou, O., 1997. Agro-tourism in Greece: the case of women agro-tourism co-operatives of Ambelakia. *Medit*, 8(1), pp.44-47.

Jaipur, Govt. of Rajasthan (2022), <https://jaipur.rajasthan.gov.in/>

Jaisalmer, Govt. of Rajasthan (2022), <https://jaisalmer.rajasthan.gov.in/>

Jęczmyk, A., Uglis, J., Graja-Zwolińska, S., Maćkowiak, M., Spychała, A., & Sikora, J. (2015). Research Note: Economic Benefits of Agritourism Development in Poland — An Empirical Study. *Tourism Economics*, 21(5), 1120–1126.

Jodhpur, Govt. of Rajasthan (2022), <https://jodhpur.rajasthan.gov.in/>

John W. Colton PhD & Glyn Bissix (2005) Developing Agritourism in Nova Scotia: Issues and Challenges, *Journal of Sustainable Agriculture*, 27:1, 91-112,

Joshi, S., Sharma, M., & Singh, R. K. (2020). Performance Evaluation of Agro-tourism Clusters using AHP–TOPSIS. *Journal of Operations and Strategic Planning*, 3(1), 7–30.

Kapoor, B. and Sing P. (2017), Opportunities and Challenges of Rural Tourism in Rajasthan, *International Journal of Research in Economics and Social Sciences*, Volume 7, Issue 1, PP 1-13

Karabati, S., Dogan, E., Pinar, M. and Celik, L.M., 2009. Socio-economic effects of agri-tourism on local communities in Turkey: The case of Aglasun. *International Journal of Hospitality & Tourism Administration*, 10(2), pp.129-142.

Khangarot, G, and Sahu, P. (2019) "Agro-Tourism: A dimension of sustainable tourism development in Rajasthan. "The Journal of Indian Management & Strategy 24.4: 21-26

Kizos, T. and Iosifides, T., 2007. The contradictions of agrotourism development in Greece: evidence from three case studies. *South European Society & Politics*, 12(1), pp.59-77.

Kline, C., Cardenas, D., Leung, Y.F. and Sanders, S., 2007. Sustainable farm tourism: Understanding and managing environmental impacts of visitor activities. *Journal of Extension*, 45(2), pp.1-4.

- Krishna, D.K., Kumbhare, N.V., Sharma, J.P., Rao, D.U.M. and Bhowmik, A., 2019. Challenges and strategies for promotion of agritourism: A multi-dimensional study. *Indian Journal of Extension Education*, 55(3), pp.10-13.
- Kubickova, M., & Campbell, J. M. (2020). The role of government in agro-tourism development: a top-down bottom-up approach. *Current Issues in Tourism*, 23(5), 587-604.
- Kumar, M. R. & D. K. (2016). "Agri-Tourism as an Alternative Source of Earning Income for Farmers in the State of Maharashtra." *Udgam Vigyati- The Origin of Knowledge*, 3, 1–11.
- Kumbhar, V., 2009. Agro-tourism: A cash crop for farmers in Maharashtra (India).
- Kunasekaran, P., Ramachandran, S., Yacob, M.R. and Shuib, A., 2011. Development of farmers' perception scale on agro tourism in Cameron Highlands, Malaysia. *World Applied Sciences Journal*, 12(10-18).
- LaPan, C., & Barbieri, C. (2014). The role of agritourism in heritage preservation. *Current Issues in Tourism*, 17(8), 666-673.
- Li Yang (2012) Impacts and Challenges in Agritourism Development in Yunnan, China, *Tourism Planning & Development*, 9:4, 369-381,
- Liang, A. R. (2017), Considering the role of agritourism co-creation from a service-dominant logic perspective, *Tourism Management*, 61 (2017), pp. 354-367
- Liang, K. and Dunn, P., 2016. Understanding barriers for and information seeking strategies by agritourism entrepreneurs in New England. *Journal of Business & Entrepreneurship*, 27(2), p.7.
- Little, M. E., & Blau, E. (2020). Social adaptation and climate mitigation through agrotourism: a case study of tourism in Mastatal, Costa Rica. *Journal of Ecotourism*, 19(2), 97-112.
- López, E. P., Javier, F., & García, C. (2006). Agro tourism, sustainable tourism and ultraperipheral areas: The Case of Canary Islands. *Revista de Turismo y Patrimonio Cultural*, 4(1), 85–97.
- Loureiro, M.L. and Jervell, A.M., 2005. Farmers' participation decisions regarding agro-tourism activities in Norway. *Tourism economics*, 11(3), pp.453-469.
- Lupi, C., Giaccio, V., Mastronardi, L., Giannelli, A. and Scardera, A., 2017. Exploring the features of agritourism and its contribution to rural development in Italy. *Land use policy*, 64, pp.383-390.
- Malkanthi, S.H.P., & Routry, J.K. (2011). Potential for agritourism development: evedance from srilanka. *The Journal of Agricultural sciences*, 6(1), 45–58.
- Makian, S., & Hanifezadeh, F. (2021). Current challenges facing ecotourism development in Iran. *Journal of Tourismology*, 7(1), 123–140.<https://doi.org/10.26650/jot.2021.7.1.0007>

- Marques, H., 2006. Searching for complementarities between agriculture and tourism—the demarcated wine-producing regions of northern Portugal. *Tourism economics*, 12(1), pp.147-155.
- McGehee, N. G., & Kim, K. (2004). Motivation for agri-tourism entrepreneurship. *Journal of travel research*, 43(2), 161-170.
- McGehee, N.G., 2007. An agritourism systems model: A Weberian perspective. *Journal of Sustainable tourism*, 15(2), pp.111-124.
- Mihalic, T. (2014). Sustainable-responsible tourism discourse towards ‘responsustable’ tourism. *Journal of Cleaner Production*, 1–10. <https://doi.org/10.1016/j.jclepro.2014.12.062>
- Neger, C. (2021). Ecotourism in crisis: An analysis of the main obstacles for the sector’s economic sustainability. *Journal of Ecotourism*, 21(4), 311–333. <https://doi.org/10.1080/14724049.2021.1942019>
- Nguyen, N.T.H., Suwanno, S., Thongma, W. and Visuthismajarn, P., 2018. The attitudes of residents towards agro-tourism impacts and its effects on participation in agro-tourism development: the case study of Vietnam. *African Journal of Hospitality, Tourism and Leisure*, 7(4), pp.1-18.
- Nimase, A.G., 2020. Development of Agro-Tourism in Rural Maharashtra: Challenges and Disturbances. *Aayushi International Interdisciplinary Research Journal*, pp.1-6.
- Nowers, R., de Villiers, E. and Myburgh, A., 2002. Agricultural theme routes as a diversification strategy: The Western Cape wine routes casestudy. *Agrekon*, 41(2), pp.195-209.
- Ohlan, R. (2017). Tourism and economic growth in India The relationship between tourism, financial development and economic growth in India. *Future Business Journal*, 3(1), 9–22.
- Palace on Wheels (2022), <https://thepalaceonwheels.com/>
- Palace on Wheels, RTDC (2022), <https://rtdc.tourism.rajasthan.gov.in/palaceonwheels>
- Parkar, P., 2015. Developing agritourism in Ratnagiri District of Konkan (Maharashtra): issues and challenges. *Online International Interdisciplinary Research Journal*, 5(2), pp.145-152.
- Paul, T., & Patil, A. (2022). Sustainable Agro Tourism: A Case Study of “Farm of Happiness”. *International Journal of Risk and Contingency Management (IJRCM)*, 11(1), 1-11.
- Phelan, C. and Sharpley, R., 2011. Exploring agritourism entrepreneurship in the UK. *Tourism Planning & Development*, 8(2), pp.121-136.

Phillip, S., Hunter, C. and Blackstock, K., 2010. A typology for defining agritourism. *Tourism management*, 31(6), pp.754-758.

Pinky, S. and Kaur, R., 2014. Prospects and problems of agri-tourism in Punjab state. *International Journal of Advanced Research*, 2(9), pp.66-73.

Prayukvong, W., Huttasin, N. and Foster, M.J. (2015), "Buddhist economics meets agritourism on the Thai farm", *International Journal of Culture, Tourism and Hospitality Research*, Vol. 9 No. 2, pp. 183-199. <https://doi.org/10.1108/IJCTHR-08-2014-0065>

Pujiasmanto, B., Aliyah, I., & Miladan, N. (2021). Development of organic agro tourism for optimizing agricultural resources in Ngawi, East Java, Indonesia. In *IOP Conference Series: Earth and Environmental Science* (Vol. 637, No. 1, p. 012061). IOP Publishing.

Pulinkalayil, P. (2016). Rajasthan to promote agri-tourism in big way. *The Times of India*.

Pushkar, Govt. of Rajasthan (2022), <https://www.tourism.rajasthan.gov.in/pushkar.html>

Rajras (2022), Agritourism in Rajasthan, <https://www.rajras.in/rajasthan/tourism/agri/>

Rambodagedara, R.M.M.H.K., Silva, D.A.C. and Perera, S., 2015. *Agro-tourism development in farming community: Opportunities and challenges*. Hector Kobbekaduwa Agrarian Research and Training Institute.

Ranthambore National Park, Govt. of Rajasthan (2022), <https://www.ranthamborenationalpark.info/>

Reddy, R.& Rao, A. (2017). Tourism and economic growth in India The relationship between tourism, financial development and economic growth in India. *Future Business Journal*, 3(1), 9–22.

RTDC (2022), <https://rtdc.tourism.rajasthan.gov.in/Client/HotelDetails.aspx?HotelID=MountAbuShikhar>

RTDC, Govt. of Rajasthan (2022), <https://rtdc.tourism.rajasthan.gov.in/>

Samjetsabam, P., & Ravinder K. (2014). Prospects and Problems of Agri-Tourism in Punjab State. *International Journal of Advanced Research*, 2(9), 66–73.

Saaty, T.L. (1980), *The Analytic Hierarchy Process*, McGraw-Hill, New York, NY.

Saaty, T.L. (1994), "How to Make a Decision: The Analytic Hierarchy Process", *Interfaces*, Vol. 24 No. 6, pp. 19-43.

Saaty, T.L. (1996), *Multi-criteria Decision Making: The Analytic Hierarchy Process*, University of Pittsburgh Press, Pittsburgh.

- Saaty, T.L. (2000a), *Fundamentals of Decision Making and Priority Theory*, 2nd ed., RWS Publications, Pittsburgh, PA.
- Schilling, B.J., Attavanich, W. and Jin, Y., 2014. Does agritourism enhance farm profitability?. *Journal of Agricultural and Resource Economics*, pp.69-87.
- Shah, G. (2022). The Allied Farming-Agro tourism is the tool of revenue generation for rural economic and social development analyzed with the help of a case study in the region of Maharashtra. *Sustainability, Agri, Food and Environmental Research*, 11(1).
- Sharma, M. (2018) "Tourism in Rajasthan: Problems and Prospects", Innovation the research concept, Vol 3(2), pages 217-221.
- Sharma, A.& Arora, S (2015). the Impact of Events on Rajasthan Tourism with Reference to Different Fair & Festivals. *International Journal of Economics, Commerce, and Research (IJECR)*, 5(4), 9–22. Retrieved from <http://www.tjprc.org/view-archives.php>
- Shen, F. and Cottrell, S.P., 2008. A sustainable tourism framework for monitoring residents' satisfaction with agritourism in Chongdugou Village, China. *International Journal of Tourism Policy*, 1(4), pp.368-375.
- Shen, F., Cottrell, S.P., Hughey, K.F. and Morrison, K., 2009. Agritourism sustainability in rural mountain areas of China: A community perspective. *International Journal of Business and Globalisation*, 3(2), pp.123-145.
- Shinde, R. (2021). Agrotourism: Avenue for Rural Areas with Special Reference To Pune Region. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(12), 3558-3565.
- Strategic government advisory & YES bank ltd. (2016). Agritourism advantage Rajasthan Report. 1–48
- Srikatanyoo, N., & Campiranon, K. (2010). Agritourist needs and motivations: The Chiang Mai case. *Journal of Travel & Tourism Marketing*, 27(2), 166-178.
- Srivastava, S., 2016. Agritourism as a strategy for the development of rural areas case study of Dungrajya Village, Southeast Rajasthan, India. *Journal of Medical and Dental Science Research*, 3(6), pp.35-39.
- Suwanna, A., Pisitsenakul, S., & Passadee, L. (2019). Participatory Research in Preparing Sustainable Tourism Strategy Plan in Head Watershed of Chiang Mai, Thailand (pp. 0–16).
- Swaimadhapur, Govt. of Rajasthan (2022), <https://sawaimadhapur.rajasthan.gov.in/>
- Tew, Christine & Barbieri, Carla, 2012. "[The perceived benefits of agritourism: The provider's](#)

[perspective](#)," [Tourism Management](#), Elsevier, vol. 33(1), pages 215-224.

Tourism Policy of Rajasthan (2020), Available at:

<https://www.tourism.rajasthan.gov.in/content/dam/rajasthan-tourism/english/homepage/topslider/Rajasthan%20Tourism%20Policy%202020.pdf>

Udaipur, Govt. of Rajasthan (2022), <https://udaipur.rajasthan.gov.in/>

Upadhye, N., & Shingare, D. (2021). Best Practices implemented by Agro tourism Farms in the Era of pandemic to retain the customers.

Van Trung, H., & Tharu, D. (2021). Exploitation and Preservation Agricultural Way of Life for Agro-Tourism Development, A Case Study at Tra Que Village, Quang Nam Province, Vietnam.

Vargo, S.L. & Lusch, R.F. (2008) "Service-dominant logic: continuing the evolution" *Journal of the Academy of Marketing Science* Vol.36, pp.1-10.

Veeck, G., Che, D., & Veeck, A. (2006). America's changing farmscape: A study of agricultural tourism in Michigan. *The professional geographer*, 58(3), 235-248.

Weaver, D. B., & Fennell, D. A. (1997). The vacation farm sector in Saskatchewan: A profile of operations. *Tourism Management*, 18(6), 357-365.

Wojciechowska, J., 2007. Types of Polish Agrotourism Farm and Owner Profiles. *Tourism/Turyzm*, 17(1), pp.159-171.

Yadav, M. (2017), Rajasthan Tourism: Problems and Government Policies, *International Journal of Advanced Research and Development*, Volume 2, Issue 3, Page No. 68-72

Yang, Z., Cai, J. and Sliuzas, R., 2010. Agro-tourism enterprises as a form of multi-functional urban agriculture for peri-urban development in China. *Habitat International*, 34(4), pp.374-385.

Appendix

Questionnaire-1

Dear Sir/Madam,

The purpose of study is multi-fold. First this study focuses on identifying the problems and prospects of agro-tourism in the state of Rajasthan. Second objective to develop a S-D logic framework in the context of agro-tourism sector.

The outcome of this study will explore the various problems and challenges being faced by the agro-tourism site owners in Rajasthan states. The identification of these problems will provide an input for developing an effective policy framework for the state. Further, the identification of future prospects in the field of agro-tourism will also help in effective diversification of tourism activities in the state, which is one of the objective of latest tourism policy 2021 of Rajasthan.

Further, the developing the S-D logic framework from the agro-tourism perspective will help the owners/managers of these sites to improve the value of their service offering to their customer/visitors.

Data collected during this interview will be kept confidential and only the overall data with the coded name will be used in the research report and publications.

Thanks & Regards

Questions

Q. 1 What is your view about your agro-tourism site and your journey so far?

Q. 2 What is your opinion about the importance of agro-tourism in economy, environment and sustainable development, education, local employment?

Q. 3 What do you understand by the role of agro-tourism in the overall tourism sector in case of Rajasthan?

Q. 4 What do you think is the major problems, you faced or facing in developing the agro-tourism sites in the state or in your region?

Q. 5 In your opinion, what are the main reasons of these problems?

Q. 6 In your opinion, what could be the possible solution of these problems?

- Q. 7 In your opinion, what are the growth prospects of agro-tourism in Rajasthan?
- Q. 8 If given the chance, what new things you would like to add in your current site?
- Q. 9 What kind of support you seek from the government authorities for developing agro-tourism sites?
- Q. 10 What kind of support you seek from the local administrative authorities for developing agro-tourism sites?
- Q. 11 What do you think about the role of service provider's skills and specific knowledge in providing the good services while interacting with tourists?
- Q. 12 Do you think the services of agro-tourism are complex due to involvement of different people, large investment, and variety of activities?
- Q. 13 Consumption of physical goods provide value to the visitor as it is also adding value to them.
- Q. 14 The practical knowledge of various activities in agro-tourism differentiate them from other organizations.
- Q. 15 Service in agro-tourism is now becoming more important
- Q. 16 Consumer receive more value if they are involved in service generation and delivery.
- Q. 17 Agro-tourism activities should be focused on customer and to develop a better relationship with them.
- Q. 18 All agro-tourism sites if they are different from each other should collaborate to generate more value.
- Q. 19 Customer is the one who decides the value in the service.

Questionnaire-2

Section A- Demographic Information (Please Tick the correct Answer)

Gender	Male		Female	
Age (In Years)	18-30		30-40	
	40-50		50-60	
	More than 60			
Education	Up to 10 th		12 th	
	Graduate		Post Graduate	
Income (Yearly)	Less than 5 lakhs		5 Lakhs-10 Lakhs	
	10-15 Lakhs		More than 15 Lakhs	

Section B

Please provide your response on the scale of 1-5. 1 stands for “Completely Disagree” and 5 stands for “Completely Agree”

S. No.	Statement	Completely Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Completely Agree (5)
	Awareness about agro-tourism					

1	Agro tourism is a commercial activity based on the farm activities					
2	Development of Agro tourism requires the closeness to the nature.					
3	Agro-tourism activity may attract more visitors to the agricultural and rural areas.					
4	Agro tourism is a method of tourism when tourist spend holidays in farm activities					
Environment Problems						
5	Agro tourism activities may increase the air pollution in the area.					
6	Changing land pattern to develop as tourism center may increase the environmental degradation.					
7	Large development of agro-tourism sites may be a reason of land pollution.					
8	Developing agro tourism will raise the temperature.					
9	May increase the Noise pollution.					
10	May be a reason of deterioration of beauty of local landscape.					
11	May increase the problem of garbage in the locality					
12	May create the problem of traffic jam and non-availability of parking space.					
13	More use of agricultural pesticides and fertilizers may increase environmental pollution					
Environmental Prospect						

14	May improve the image of the area as an ideal place of environmental protection.					
15	Agro tourism centers may help in protecting the natural environment					
16	Agro tourism activities may increase the environmental awareness among the local community					
	Accessibility					
17	Poor road condition may impact the accessibility of the agro-tourism locations					
18	Better connectivity with the nearby cities affect accessibility of the agro-tourism locations					
19	If agro-tourism location is far from the main road, may reduce the footfall of the tourist on these center					
	Economic					
20	Agro tourism increase income level of the farm owners					
21	Establishment of Agro tourism centers will enhance the land price in future.					
22	Establishing Agro tourism business may increase cost which may reduce of the farmers' daily income.					
23	Agro tourism may improve the local economic conditions.					
24	Agro tourism increase job prospects for the local people.					
25	Agro tourism provides more business opportunities to local people.					

26	Agro tourism may contribute to diversify local economic activities					
27	Agro tourism enhances the income of local people.					
28	Agro tourism may present the job opportunities for the family members of farm owners					
29	Agro tourism may bring more investment in local market for the development of infrastructure.					
30	Agro tourism may increase the demand for indigenous agricultural products					
31	Major revenue from agro tourism activities goes to the external tour operators					
32	Agro tourism activities may increase the cost of living in those areas.					
33	Salary of the locals is less for working in agro-tourism activities					
34	Agro tourism improve the better usage of local resources.					
	Socio Cultural Impact					
35	Agro tourism may endorse the local culture					
36	Agro tourism may affect the quality of life of local people positively					
37	Agro tourism can increase the crime in the local area due to inflow of outsiders					
38	Agro tourism can be a reason of create conflicts between visitors and local people					

	Government Support					
39	Government should provide subsidies for the establishment of agro-tourism center					
40	Government should provide tax benefits to the agro-tourism center					
41	Government should provide training to improve the skills of owners/workers of agro-tourism centers					
42	Government should promote the agro-tourism centers on government website					
43	Government should make a policy to register the agro tourism centers					
44	Government should make policy to regulate the activities of agro-tourism centers					
45	Government should develop infrastructural facilities near to agro-tourism centers					

Publication from present work

Goyal, P., Chadha, S. and Singh, S.R., 2023. Agro-tourism: A Literature Review. Handbook of Evidence Based Management Practices in Business, p.376.