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# An assessment of the extent to which agricultural farms meet the requirements for sustainable agritourism in Zimbabwe

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## ABSTRACT

The purpose of this study was to assess the extent to which agricultural farms meet the requirements for sustainable agritourism in Zimbabwe. This study was motivated by the realisation that despite that the country is agro-based and has great potential to become an agritourism destination, the country is still lagging in agritourism development. The conceptual framework for understanding agritourism and the Triple Bottom Line (TBL) approach was applied. In-depth interviews were conducted with thirty-four (34) farmers who were purposively selected from the Manicaland and Mashonaland provinces of Zimbabwe. Data collection was conducted from October 2020 to June 2021. Thematic content analysis aided by Nvivo 12 software was used to analyse the data. The results revealed that the sampled farms meet at least one of the requirements for sustainable agritourism. However, there is a lack of diversity in both core and peripheral agritourism activities on the farms. The farmers are recommended to increase agritourism activities through sustainable utilization of the existing farm resources. The study provides the relevant stakeholders with information on areas of improvement for agritourism growth in the country and a baseline for future investigations into the prospects of agritourism in Zimbabwe. The main limitation of this study was the use of a framework for understanding agritourism that was developed in a developed world context. Development of a framework for understanding agritourism in a developing world context is recommended for future research.

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## Introduction

Agriculture and tourism are two major industries of most economies contributing enormously towards employment and economic development of nations (Zacal et al., 2019). The synergy between the two industries has resulted in unique agritourism enterprises. Agritourism has been defined as the business of establishing farms as destinations for entertainment, education, recreation, hospitality and on-farm product sales (Chase et al., 2018; Chase, 2020). The concept has been developing throughout the century with rapid growth being witnessed in the 1980s in most European countries, USA and UK (Chase et al., 2018). McGehee (2007) confirmed that agritourism is burgeoning as a form of agricultural diversification in rural societies in the United States. These countries today boast of a vibrant agritourism sector with an estimated total income from agritourism of \$3.7 billion in the U.S. in 2017 (Chase, 2020). Literature shows that agritourism is the growing fastest-growing tourism segment in these regions (Bajgier-Kowalska et al., 2017).

The new tourist now demands pleasure trips combined with activities within agricultural settings. Many tourists desire to escape the noisy and busy city life and prefer to experience the tranquillity, beautiful scenery and authenticity of farm life (Shembekar, 2017). A growing demand to taste traditional cuisine, a tourism concept known as culinary tourism (Chase et al., 2018) has also contributed immensely to agritourism development. This growing consumer demand for local cuisine and leisure trips combined

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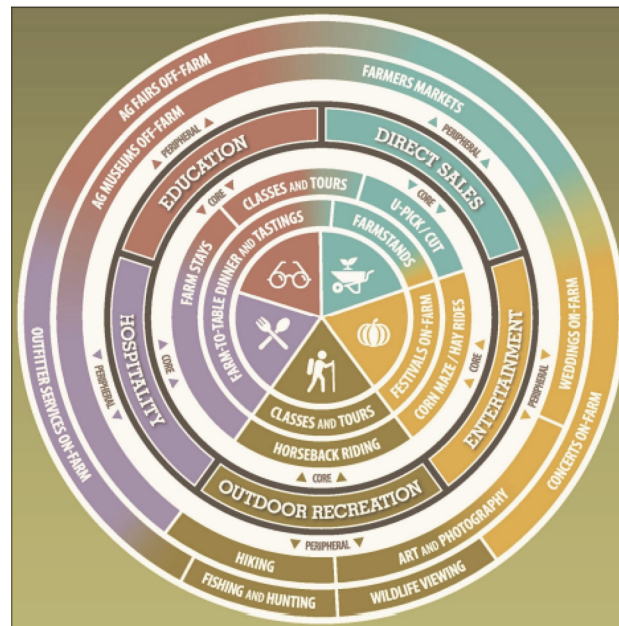
with on-farm experiences makes the nexus between agriculture and tourism through agritourism inevitable. The COVID 19 pandemic has also promoted the growth of agritourism as more people preferred to visit places with few people (Roman & Grudzień, 2021; Wojcieszak-Zbierska et al., 2020). The results Roman and Grudzień (2021)'s research show that all the sampled farm owners obtained a profit on agritourism during the COVID 19 pandemic. Agritourism is thus an indispensable innovative phenomenon for farmers who want to exploit the new demand in the market for exploration and expedition of outdoor recreation in farming environments (Arru et al., 2019).

Although agricultural attractions have continued to gain popularity mainly in developed countries, tremendous growth of this concept has started to be witnessed in developing countries and this growth is likely to continue in the future if relevant stakeholders create an enabling environment for its growth (Paresishvili et al., 2017). The growth in popularity of these farm attractions in developing countries has been fuelled by the need to increase the product base of destinations. Most destinations in developing countries have, since time immemorial, relied on nature-based tourism (Woyo & Woyo, 2019). Overreliance on these traditional attractions has led to these being labelled tired products which can no longer motivate tourists to visit the destinations (Chikuta & Makacha, 2016). From an agricultural perspective, the need for a diversification strategy that can sustain the livelihoods of the farming communities has contributed to the growth in agritourism (Bhatta et al., 2019). Many studies have confirmed that agritourism is a sustainable diversification strategy for rural communities (Kumari, 2016; Ammirato et al., 2020).

However, despite the growth in agritourism in some African countries as noted by Eshun and Mensah (2020); Tugade (2020), Rogerson and Rogerson (2014) and van Zyl (2019), agritourism is still in its infancy in Zimbabwe. The unavailability of statistics on the number of agritourism farms and their contribution to the economy in Zimbabwe coupled with scant literature on the concept (Baipai et al., 2022) is evidence that little attention is being put towards its development. Despite the country being agro-based and having great potential to become an agritourism destination, the country is still lagging in agritourism development. Given this, it is important to assess the extent to which the agricultural farms in Zimbabwe meet the requirements for agritourism to evaluate the farms feasibility of offering agritourism activities. Such an assessment is crucial as it enables the identification of areas that are hindering agritourism from fully developing and the provision of recommendations on how these areas can be improved for agritourism to take off sustainably. Therefore, this study identified farm features both natural and man-made and assessed how these are being or can be utilized for agritourism purposes. The results of this study will help and encourage farmers to sustainably utilize the already existing farm features for agritourism to augment their incomes. This work can also be utilized by the government in policy making and can provide a guideline on the funding requirements of farmers. Further, investors can also use the results of this study to assess the amount of investment required for one to venture into agritourism businesses.

## Literature review

The conceptual framework for agritourism activities (Figure 1) by Chase et al. (2018) was used as a guideline on what constitutes agritourism. This framework was developed in a developed world context and may be criticised for the same but it provides an important overview of what constitutes agritourism both from a developed and developing world perspective. This is supported by Bhatta et al. (2019) who acknowledged that the majority of agritourism studies have been conducted in economically strong countries with well-developed agritourism destinations. On the other hand, Van Zyl and Van Der Merwe, (2021) applied these five categories in their study that they conducted in South Africa which is evidence that to some extent the framework applies to the African context. Thus, In their framework, Chase et al. (2018) defined agritourism as the act of visiting a working farm for entertainment, education, recreation, hospitality and purchase of on-farm products. The framework categorised agritourism into five (5) categories that can be core or peripheral. At the core are agritourism activities that take place on a working farm which are deeply connected to agriculture as shown in Figure 1. There seems to be a consensus among researchers (Lamie et al., 2021; Quella et al., 2021; Chase et al., 2021) about the core. However, there is less agreement on the periphery, as some researchers consider these activities to be part of agritourism while others are of a different view. For example,



**Figure 1.** A framework for understanding agritourism.

Source: Chase et al. (2018).

Streifeneder (2016) provided a stricter definition of authentic agritourism which occurs on a working farm where agricultural activities predominates the agritouristic ones. He categorised all the other activities that are not deeply rooted in agriculture that occur on either a working or non-working farm as countryside tourism. On the other hand, Gil Arroyo et al. (2013) suggested an assuaging definition of agritourism that emphasises stakeholders' perspectives with a focus on staged or authentic agricultural activities or processes taking place in working agricultural set-up for either for 'entertainment' or 'education'. For this study agritourism activities can be core or peripheral (Figure 1) as postulated by Chase et al. (2018)

On-farm festivals, such as harvesting festivals and corn maize/hayrides are examples of core activities under the entertainment category (Figure 1). Agricultural farms that grow crops such as maize and corn have an opportunity to create more attractions like crop mazes, crop art and landscaping as they can be designed using coloured planting and can be best viewed from the air or a high structure (Veeck et al., 2016b). Farmers can create petting zoos by having different types of pets such as sheep, goats, rabbits, ducks geese and chickens. These petting zoos are very attractive to children as they enjoy feeding these animals (Mahaliyanaarachchi, 2015).

Chase et al. (2018) identified classes, tours and horse riding as examples of core activities under the outdoor recreation activities category (Figure 1). Khairabadi et al. (2020) affirmed that tourists are more motivated to visit agritourism ventures that offer a wide variety of activities. To the small farmers who cannot compete with large-scale farmers in terms of production, agritourism activities provide a sustainable income opportunity (Lupi et al., 2017). Researchers have identified a wide spectrum of farm-based recreational activities. For example, Khairabadi et al. (2020) identified a variety of agritourism activities in Simin region of Iran such as food services agritourism, sport agritourism, participative agritourism, recreational agritourism, health agritourism, educational agritourism and cultural agritourism. Comen (2017) identified 25 on-farm agritourism activities in Virginia that range from farm tours to cone mazes.

Outdoor recreational activities are activities which are done in the natural environments and include the utilisation of natural landscapes such as mountains, rocks, waterfalls or rivers found in the farm environment (Lupi et al., 2017). Chase et al. (2018) regarded these as peripheral activities because they are not deeply connected to agriculture although they may take place on a working farm. Outdoor adventure activities include mountaineering, rock climbing, biking and hiking, kayaking, ice skating, tramping, photography and bird-watching (MacKay et al., 2019), fishing, hunting, horse riding, feeding farm animals in the petting zoos, and bird watching (Kumari, 2016). Game farms can offer activities such as game

viewing, wildlife photography and hunting. Lamie et al. (2021) acknowledged that there is controversy on whether these activities should be part of agritourism or not.

Educational activities are those which give tourists opportunities to learn the daily operations of the farm either by getting involved in the activities or through demonstrations by the farmer (Petroman et al., 2016). These activities include farm tours or vineyard (Kazmina et al., 2020), learning about local gastronomy through tasting local drink and food (Back et al., 2020; van Zyl, 2019). Tourists can engage in cooking classes which offer them an opportunity to learn how to prepare local meals using ingredients grown on the farm (Chatterjee & Prasad, 2019; Liu et al., 2017). Dias et al. (2019) pointed out that educational activity may also include internships, classes (herb growing) as well as apprenticeships on the farm.

Hospitality activities include overnight farm stays, farm-to-table dining and tastings (Chase et al., 2018; Lago, 2017; Santeramo & Barbieri, 2016). Hospitality activities help to pull tourists to agritourism destinations and they play a big part in influencing visitors' decisions when choosing a destination to visit (Santeramo & Barbieri, 2016). On the other hand MacKay et al. (2019) encouraged the use of farm buildings in providing overnight stays and they referred to this as '*repurposing of farm buildings*' for tourism.

Farmers may have on-farm direct sales where they can sell their farm products directly to tourists. 'U pick your own' enables the tourist to pick up their fruits and vegetables from the field. The farmer gets income by charging entrance fees into the fields (Veeck et al., 2016). Farmers can also put side road farm stalls where they can sell their farm produce (Abdulla, 2013). They can also conduct auctions and sell live wild or farm animals (van Zyl, 2019). Farm-to-table restaurants provide a platform through which farmers can sell food and drink made from farm-grown ingredients (Veeck et al., 2016). Farm stay rentals also contribute substantially to farmers' income (Gunarta & Hanggara, 2018; Bajgier-Kowalska et al., 2017; Stotten et al., 2019). This study aims to assess agricultural farms to establish the extent to which hospitality services available at farms meet the requirements for agritourism development. Although the framework proposes five categories of agritourism activities, Chase (2020), highlighted that successful agritourism farms offer at least one of the categories.

## Sustainability requirement

Agritourism has been regarded as a sustainable diversification strategy by many scholars (Chiodo et al., 2019; Adamov et al., 2020; Ammirato et al., 2020). This makes sustainability an important element in agritourism development for it to provide maximum benefits for the people (Attila & Petres, 2017; Woyo & Woyo, 2019) and make a significant contribution to the economy (Gottschlich et al., 2015). This calls for a shift from agritourism development to sustainable agritourism thus making adherence to sustainability principles a requirement. Sustainability is often defined using the Triple Bottom Line (TBL) concept because it adopts a three-pronged approach as it integrates economic, environmental and social factors (Harrington, 2013). The TBL framework was coined after the realisation that the success of a business must not be based on a measure of profit or loss only but also on the well-being of people and the health of the planet (Elkington, 1994).

The economic aspect of the TBL framework focuses on the impact that the operations of an organization have on the economic system of the country within which it is operating (Elkington, 1994). The social dimension of TBL represents the degree to which an organisation conducts business in a manner that is beneficial and fair to the employees and the community at large (Elkington, 1994). The environmental measure of TBL encourages organisations to engage in practices that lead to conservation of the environmental resources for use by future generations (Elkington, 1994). Sustainable agritourism should therefore promote new models for sustainable food production and the adoption of organic farming. Also, it should provide financial resources for sustaining and preserving biodiversity as well as providing education, skills acquisition and the well-being of the locals (Slaper, 2011).

The researchers adopted this framework in this study and attempted to assess the extent to which the farms in the study areas meet the sustainability measures which are a requirement for sustainable agritourism development. For this research, sustainable agritourism is defined as visiting a working farm for entertainment, education, purchase of on-farm products and involvement in any on-farm activities in a manner that leads to conservation of farm resources, economic growth and equitable social



development for the betterment of local livelihoods. Rauniyar et al. (2020) acknowledged that sustainable development is an under-researched theme in agritourism research and they recommended future research to focus on such. Moreover, most of the studies on agritourism and sustainability have been done in developed regions, leaving the developing countries unexplored despite them being agrarian (Rauniyar et al., 2020; Bhatta & Ohe, 2020; Bhatta et al., 2019). This study, therefore, is important as it attempts to fill this gap.

## Methods

A qualitative research approach was adopted in this study where in-depth interviews with farmers were triangulated with observations done during the farm visits. The aim was to obtain detailed case study information and conduct comprehensive discussions about agritourism development, aligning with the researchers' desire for thorough exploration (Rahi, 2017). The methodological choice of qualitative research facilitated this in-depth exploration and understanding, ensuring a comprehensive examination of participants' perspectives and experiences. Additionally, the integration of qualitative methods, such as in-depth interviews and observations, bolstered the study's scientific rigour. Employing a multiple case study design, 34 participants were purposively selected, allowing researchers to use their judgment in sample selection to ensure relevance (Rahi, 2017; Taherdoost, 2017). The multiple case study design enabled the assessment of agritourism readiness across multiple farms (Gustafsson, 2017; Rashid et al., 2019). Manicaland and Mashonaland West provinces were selected as case studies because they are situated in regions of productive agricultural land, which increases their potential for growth in agritourism. Moreover, the two provinces offer a variety of agricultural activities that can be used to develop a variety of agritourism activities. Farms with potential for agritourism were carefully chosen, and snowball sampling was employed to expand the participant pool with recommendations from relevant authorities such as the Zimbabwe Tourism Authority (ZTA) and AGRITEX (Agricultural, Technical and Extension Services) offices.

The interviews were conducted between October 2020 and June 2021. The demographic characteristics of farmers that were interviewed are shown in Table 1.

The development of interview questions was guided by literature from Chase et al. (2018); Ciolac et al. (2020); Lamie et al. (2021) and Quella et al. (2021). Collected data were analysed using thematic content analysis and NVIVO 12 software. The software aided the researchers in exploring the data through the word frequency query. Through the word frequency query, the researchers were able to establish how many times a word appeared under a particular theme. The word frequency query results are shown in the form of word frequency tables and word clouds. The word frequency tables show the words or concepts that appeared most frequently under each theme (word count) and the weighted percentage of the word, the word clouds display words or concepts in various font sizes with the largest font showing the words that appeared most frequently. In some cases, the researcher conducted a physical count of the features that were available at farms and presented the results in the form of tables expressed as percentages. The sizes of farms that were sampled are shown in Figure 2.

The participants' names were coded to hide their real identity and to ensure confidentiality of results. The following codes were used:

MF-Manicaland Farmer  
 MWF- Mashonaland West Farmer  
 KMA-Key informant Ministry of Agriculture  
 KMT-Key informant Ministry of Tourism  
 TO-Tour Operator

**Table 1.** Demographic characteristics of respondents.

Age (in years)						Gender		Level of education	
35-40	41-45	46-50	51-55	56-60	60-65	Males	females	Secondary	Tertiary
5		7		7	15	22	12	28	6

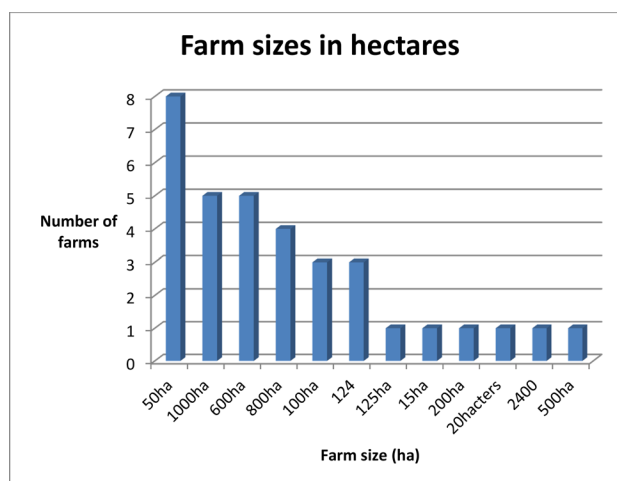


Figure 2. Farm sizes in hectares.

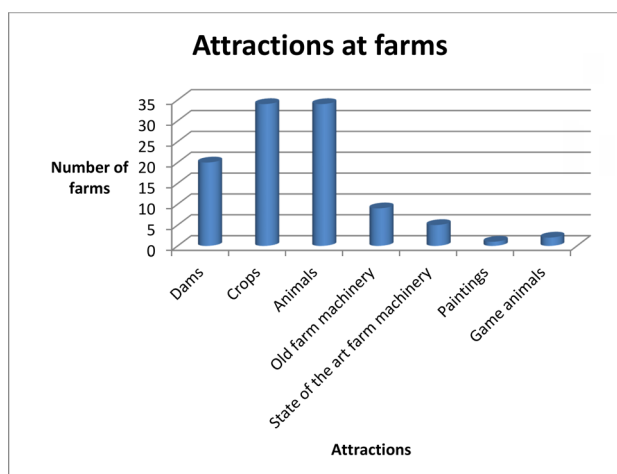


Figure 3. Attractions at farms.

## Findings

### *Agricultural farm-based attractions and activities*

The results (Figure 3) indicate that all the 34 farmers that were interviewed had crops and farm animals (livestock) as the main attractions available at the farm an indication that they were all working farms. The availability of such agricultural attractions offers opportunities for core agritourism activities such as farm tours.

Twenty farmers ( $n=20$ ; 59%) indicated that they have dams at the farm which is a feature that allows the farmers to offer peripheral agritourism water-based activities such as fishing, swimming and boating. Attractions that were available at the farms include beautiful stretches of crops ( $n=34$ ; 100%) such as maize, tobacco, wheat, tea/coffee, tomatoes and farm animals ( $n=34$ ; 100%). Few unique attractions were available at some of the farms that were sampled. These included old farm machinery (9%), state of the art farming equipment (15%), paintings (3%) and game animals (6%). The word cloud below (Figure 2) shows the attractions available at the farms.

The results of the word frequency query under the agritourism activities theme revealed that farm tours were the most frequently mentioned agritourism activities, followed by nature walks, feeding farm animal, learning about agricultural activities at farm and mountain climbing as shown in the word cloud (Figure 4). The word cloud is showing the agritourism activities in various font sizes and colour with the largest font showing the activities that were mentioned most frequently by the farmers.





Only eight ( $n=8$ ; 24%) farms provided overnight farm stays and three ( $n=3$ ; 9%) farms had on-farm restaurants. All the farms ( $n=34$ ; 100%) had outdoor space which could be used to develop peripheral agritourism activities such as camping and picnicking. However, very few of the farms have managed to develop picnic areas ( $n=8$ ; 24%) and campsites ( $n=5$ ; 15%)

The researchers observed that although there were three ( $n=3$ ; 9%) farm restaurants that were identified in the sampled farms, implementation of the farm-to-table concept is evident at MWF1 where the farmer keeps chickens and grows vegetables that are used to prepare meals at the farm restaurant. MF6 do not have a farm restaurant but has a braaiing area where visitors can buy chickens at the farm and braai whilst enjoying the tranquil farm environment.

MWF2 commented, *'I am planning to convert one of my barns into a farm restaurant where I can sell food to farmers who come to sell tobacco to the tobacco auction floor that is located nearby, then I will not have to worry about where to sell my horticulture produce because we will be using the produce to prepare the meals.'*

The researcher noted that the farmers are not aware of how they can utilize non-arable land for outdoor activities or convert it into a recreational park, picnicking area or campsite. Only MWF1, MF4 and MWF10 have managed to utilize the outdoor space for tourism purposes. MWF1 has a caravan and campsite, MF4 has a campsite and MWF10 has a recreational park, children's play centre, braai area and picnicking area.

Only farms that are already offering agritourism (8) had on-farm accommodation. The researcher observed that farmhouses at farms not offering agritourism were either in a dilapidated state or were being used as homesteads by the farmer. When asked if there was accommodation at the farm to cater for visitors who wished to stay at the farm for some days, various responses were given. MF1 explained that: *'guest house is still under construction'*. While MWF1 highlighted that: *'we don't have accommodation yet, but we have plans to build chalets'*. MWF10 indicated that: *'We have school dormitories, but they are only available to visitors during school holidays'* MWF2 explained: *'Not yet but I have plans to put up something. I have plans to modify some of the tobacco bans here into accommodation facilities'*. MF4 indicated that they have self-catering guest houses and campsites.

## Farm direct sales

Items for sale at the farms not yet offering agritourism were limited to horticulture produce ( $n=23$ ) and meat ( $n=11$ ) from farm animals (beef, chicken, goat meat and crocodile meat). In farms with agritourism, the farm direct sales included fish, honey, milk, fruits, crocodile skins and flower nurseries. The word frequency (Table 2) shows the results of the word frequency query that was conducted under the farm direct sales theme.

During the farm visits, the researcher observed that there was nothing for sale at most of the farms (31), especially food for visitors. Only three ( $n=3$ ; 9%) of the farms had farm restaurants which sold food to visitors.

## Sustainability requirements

When asked how they were ensuring environmental sustainability at their farms all farmers, 100% ( $n=34$ ) mentioned at least one way in which they are conserving the environment with growing and

**Table 2.** Word frequency table for on-farm sales.

Word	Count	Weighted Percentages	Related terms
Horticulture	23	23.42	Crops, tomatoes
Meat	11	12.66	Beef, biltong, pork, poultry, goat, crocodile
Fish	5	6.33	Fish
Honey	4	5.06	Honey
Meals	3	3.80	Meals, tea
Milk	3	3.80	Milk
Fruits	3	3.80	Avocados, bananas, fruits
Crocodile	2	2.53	Crocodile
Seedlings	2	2.53	Seedlings
Casava	1	1.27	Casava

Source: Extracted from NVIVO 12.

conservation of trees being the frequently mentioned practise. MF1 and MWF1 mentioned *'gully reclamation and growing flowers and ornamental trees to improve environmental aesthetic'* while MF10 cited *'avoiding veld fires'*. MF13, MF2, MF3, MWF2 cited *'use of organic manure, recycling of water and use of renewable energy'*. MF1 cited the use of biogas at the farm and the researcher was shown the biogas plant while MF13, MF14 and MWF15 mentioned contour farming. MWF9, MWF6 and MF4 mentioned conservation tillage. MF5 mentioned the use of fire guards to control veld fires.

MF1 however, indicated that when they occupied the farm, there were still game animals available at the farm. She highlighted that she regrets allowing people who would come and go hunting at the farm for a fee as this has resulted in the extinction of the game animals. She also highlighted poaching of these game animals including fish in the dam to have contributed to their extinction. She explained that; *'there used to be big game animals since this was a game farm prior to land reform, but they have all become extinct, only small species like rabbits now remain'*.

The responses given by farmers indicate they are trying to conserve the natural environment although the researcher observed that there was a lot of cutting down of trees, especially in farms that grow tobacco in Mashonaland West. A lot needs to be done in terms of conservation of the environment in the province. Moreover, the researcher also observed that in both provinces, the local community are also cutting down trees in the farms for firewood which they sell along the highway. In Mashonaland West, the researcher observed that veld fires were a common sight. These veld fires destroy the natural environment and make the environment unattractive. At five of the farms (14.7%) there was evidence of cutting down of trees, littered and neglected environs.

The sampled farms were also assessed on the extent to which they contribute to the well-being of the farm community and towards the economy of the country. Three farmers (8.8%) acknowledged that they had employees that are employed to provide hospitality services at the farms. All the farmers ( $n=32$ ; 100%) acknowledged that they were getting extra income from the direct sales of farm produce. The farmers did not have any documentation on how much income they were getting specifically from agritourism activities. Information on how much agritourism was contributing to the national economy could not be obtained from the available literature and ZTA Trends and Statistics Reports.

## Discussion

First, the study revealed that the sampled farms were rich in agricultural attractions such as crops and livestock. The availability of crops and livestock in the farms is evidence of strong and well-developed agriculture which is a prerequisite for the development of agritourism (Kazmina et al., 2020; Streifeneder, 2016). Well-developed agriculture provides opportunities for core agritourism activities such as tours, cone mazes and pick-your-own (Chase et al., 2021). Streifeneder (2016) referred to this as authentic agritourism where agricultural activities predominate the agritourism activities. Sawe et al. (2018) bring in a developing world perspective which is in line with assertions from developed countries that agritourism should present visitors with opportunities for first-hand agriculture experiences.

Second, the results of the study also reveal that the core agritourism activities in the sampled farm are limited to farm tours, nature walks, feeding farm animals, learning about agricultural activities at the farm and while the peripheral ones are limited to mountain climbing. Van Zyl and Van Der Merwe, (2021) also identified nature walks as a popular activity in South Africa. Although some researchers such as Streifeneder (2016) do not consider peripheral activities as part of agritourism, the researchers and other African researchers such as Van Zyl and Van Der Merwe, (2021) agree with Chase et al. (2018) that such activities are relevant as long as they take place in the farm environment. The farms that were sampled with dams in the present study were using the water for irrigation purposes only and yet they could also sustainably utilize the dam water for developing water-based tourism activities (peripheral outdoor recreational activities) such as fishing, canoeing, water sports, water rafting, speed boating, water skiing (Chase et al., 2018; Chase et al., 2021). In the context of sustainability Ciolac et al. (2020) and Kumari, (2016) highlighted that agritourism activity can be a smart chance to sustainability, if it is based on the connection between agriculture activity and touristic ones. This brings out the consensus among agritourism researchers on the nexus between agriculture, tourism, authenticity and sustainability.

Third, the responses that were given by the participants and the observations by the researchers confirm that the hospitality category is not well provided for in the sampled farms. Chase et al. (2018) are of a similar view that farmers may provide on-farm experiences such as farm stays, farm-to-table dinners and food tastings as part of their agritourism offer. Bajgier-Kowalska et al. (2017) encouraged farmers to offer overnight stays especially those in proximity to major cities and towns so that they take advantage by providing affordable farm stays to tourists. Such farmers can also provide weekend stays to urban dwellers who might want to escape the noisy and busy life associated with towns and spend the weekend in the farm environment. Stotten et al. (2019) encouraged farmers to offer overnight farm stays as it 'strengthens farm operations through offering a direct market for farm produce. Ciolac et al. (2019) also pointed out the potential of hospitality service in farms to contribute to sustainability through maintaining the originality and diversity of the local people. This was not evident in the sampled farms as the level of civilization and comfort of the facilities had been raised thereby diluting their originality.

Agritourism activities under the hospitality category (farm stays and farm-to-table dinners) as noted by Chase et al. (2021) are a valuable asset for agritourism because they prolong the tourists' length of stay at a farm and create a positive memorable experience in the minds of visitors (Danaher et al., 2016). Sawe et al. (2018) in his conceptual model which was developed from the perspectives of the Nandi County in Kenya included accommodation as a push factor that can lead to agritourism growth. The concept of farm stays is regarded as critical for agritourism growth in the literature although researchers in developing countries prefer to use the term 'accommodation', for example, Sawe et al. (2018); van Zyl (2019); Eshun and Mensah (2020) and Bhatta et al. (2019). Farm to table dining provides a direct market for farm produce by using the farm produce to prepare farm-to-table meals for tourists (Liu et al., 2017). The researchers observed that all the farms had plenty of outdoor space which is either not suitable for agriculture because of the terrain or because it is simply not being utilized for agricultural activities. Chatterjee and Prasad (2019), also encourages farmers to utilize some of their space by growing fruit trees which will attract birds and provide opportunities for pick-your-own activities (Chase et al., 2018; Chase et al., 2021). These additional recreational facilities provide the visitors opportunities to spend time with family and to enjoy the peacefulness and tranquillity of farm environments (Back et al., 2020). Ammirato et al. (2020) and (Ciolac et al., 2019) emphasised the importance of setting up any agritourism activities in a manner that lead to sustainable development for the farms and the rural areas.

Fourth, the research revealed that farm direct sales were limited to horticulture produce and meat from farm animals (Table 2). In addition to farm produce, farmers can sell meals prepared and preserved using their local food production methods and Chase et al. (2018) referred to this as farm-to-table dining. Chatterjee and Prasad (2019) expressed that the farm produce that tourists buy should not just be a memento for the farm visit but should be the farmer's key to obtaining additional income. In most developing countries generation of income from the direct sale of farm produce is a motivating factor for venturing into agritourism as highlighted by van Zyl (2019); Van Zyl and Van Der Merwe, (2021); Eshun & Mensah, 2020). In this regard Kim et al. (2019) views agritourism as a marketing channel thus agritourism providers should work on exposing agri-products to agritourists in a more meaningful manner during their farm stays.

Fifth, research results showed that the few farms offering agritourism mentioned the use of biogas, and the growing of flowers and ornamental trees to improve environmental aesthetics as some of the sustainable practises they have adopted. This is in line with Elkington (1994)'s view that tourism development should balance maximization of revenue and conservation of the environment. Moreover, Ciolac et al. (2019) and Bunghez (2016) also put forward that agritourism promotes the conservation of nature. Ciolac et al. (2019) emphasised that agritourism activity is a 'smart chance' to sustainability. Tribot et al. (2018) confirmed that there is a relationship between the aesthetic value of landscapes and the conservation of biodiversity. They concluded that the relationship between these two concepts is at the forefront of biodiversity conservation. Studies conducted in Africa confirm the importance of agritourism in curbing the effects of climate change (Sawe et al., 2018) and its contribution to the well-being of the environment (Eshun & Mensah, 2020). Dagar et al. (2021) brings in a different perspective of traditional agriculture which may result in the conservation of farm biodiversity but was not mentioned by the sampled farmers.

Ammirato et al. (2020); Crook (2020) and Sawe et al. (2018) highlighted that agritourism is a sustainable development strategy for both farmers and other rural communities as it provides them not only alternative income to sustain their livelihoods but also facilitates environmental sustainability. According to Togaymurodov et al. (2023) agritourism is regarded as one of the main instruments of forming new economic, social and cultural opportunities for the farming communities. This is evident that the literature from developed and developing agritourism destinations is in agreement that agritourism is a sustainable diversification strategy (Dias et al., 2019). The researcher also observed that agritourism has motivated farmers to conserve farm buildings by converting them into guest houses. MacKay et al. (2019) highlighted that those farmers in countries where government support is limited can repurpose farm buildings into accommodation facilities and get income to support their activities. Montefrio and Sin (2019), however, emphasised the need to critically evaluate the sustainability claims of agritourism rather than taking it at face value. This assertion of employment creation is in line with United Nations Sustainable Development Goals (Ammirato et al., 2020; Dagar et al., 2022; Rehman et al., 2021) and it promotes agritourism as a sustainable diversification strategy. On the other hand Alvarado et al. (2021) noted that over-reliance on natural resources may lead to the degradation of the environment if policy makers fail to assess the potential of nature to heal or regenerate the resources.

## Conclusions and recommendations

The study concluded that each of the sampled farms meet at least one of the requirements for sustainable agritourism with all of them being working farms which is a requirement for core or authentic agritourism activities. However, there is a lack of diversity in both core and peripheral agritourism activities on the farms. The farmers are recommended to increase agritourism activities through sustainable utilization of the existing farm resources. The agritourism activities in most farms were limited to farm tours, nature walks and feeding farm animals. The hospitality category was not well provided for in the sampled farms with very few farms offering overnight farm stays and farm-to-table dining. Farm-direct sales were limited to the selling of crops and meat from farm animals. Sustainability practices were not very evident in farms not yet offering agritourism. There was evidence of veld fires, cutting down of trees, littering and pollution. No statistics were obtained on the economic contribution of agritourism in Zimbabwe Tourism Authority (ZTA) tourism trends and statistics reports. Further, the farmers did not have any documentation of the income they were getting specifically from agritourism activities. The farmers are therefore recommended to increase agritourism activities at their farms by utilizing already existing resources. The dilapidating farmhouses could be renovated and used for overnight farm stays. The dams could be used to develop peripheral agritourism activities such as boating and fishing and mountain resources can be used to develop adventure tourism activities. The farmers are also recommended to utilize local gastronomy, local dances, and arts and crafts to develop cultural and heritage attractions. Outdoor space is not suitable for agriculture because the terrain may be used to develop campsites, recreational parks, and picnic areas. The development of agritourism activities could lead to employment creation which may benefit the local communities.

This study contributed to the broader field of agritourism in Zimbabwe and other less-developed agritourism destinations. Of note is that the study provides the relevant stakeholders with first-hand information on features available in farms that could be utilized for agritourism growth. Areas that need improvement were also highlighted in the study because these are potential barriers that may prevent the sector from burgeoning. Studies on agritourism in Zimbabwe and most developing countries loudly confirm the availability of the potential for agritourism development but no full attention has been given to assessing the extent to which these destinations meet the requirements for agritourism despite them being agrarian. The results of this study address this gap by providing an overview of the state of agricultural farms in Zimbabwe which may also be similar to most developing countries.

The results also bring out a new controversial perspective that being agrarian does not automatically translate to a booming agritourism sector but there is a need to couple agriculture with the requirements that enable agritourism development. The results on physical features available at farms that could be exploited for agritourism in a way give confidence to prospective investors who may wish to invest in the sector. Agritourism and sustainable development have remained unexplored in current

agritourism research. This study has contributed enormously to the literature on agritourism and sustainability. The study has also provided evidence that agritourism does not spontaneously result in environmental sustainability but requires relevant stakeholders to offer awareness programmes on sustainable use of farm resources to farmers willing to venture into the agritourism business. Most importantly this study guides and provides a baseline for future investigations into the prospects of agritourism development in Zimbabwe.

The main limitation of this study was the small sample size which was limited to 34 farms only thus making generalisation of results challenging. A larger sample size is recommended for future research. Moreover, the assessment was mainly based on the supply side, that is, the physical characteristics of the farms and the perception of farmers. Thus, an assessment that focuses on the demand side, that is, the perceptions and preferences of agritourists is recommended for future research. Further, the study was guided by the framework for understanding agritourism by Chase et al. (2018) which is biased towards developed agritourism destinations and may be costly and difficult to implement in developing countries. The researchers recommend future research to focus on the development of a framework that defines agritourism from a developing world perspective.

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## Disclosure statement

No potential conflict of interest was reported by the author(s).

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