



Western Cape
Government

Agriculture

BETTER TOGETHER.

Agritourism to Protect Natural Capital along the Berg River, Western Cape

Resource Economics

www.elsenburg.com

September 2016

Contents

Executive Summary	3
1. Introduction	5
2. Overview of Berg River Catchment	7
3. Agritourism and other niche tourism segments	9
4. Methodology.....	14
5. Challenges and Opportunities for Agritourism along the Berg River	14
6. Conclusion and Recommendations.....	21
References	22

List of Figures

Figure 1: Berg River Pilot Area, Misverstand Dam.....	4
Figure 2: Agritourism Route: Berg Camino	6
Figure 3: Berg River Location.....	7
Figure 4: Berg River Pilot Area: Invasive alien plants near Bridgetown	8
Figure 5: Berg River near Kersefontein	11
Figure 6: Berg River near canoe club and arboretum, Paarl	16

List of Tables

Table 1: Definitions of niche tourism concepts.....	12
Table 2: Berg River Route Agritourism: Preliminary SWOT Analysis	17

List of Acronyms

IAPs	Invasive alien plants
LM	Local Municipality
UNCCD	United Nations Convention to Combat Desertification
WCDOA	Western Cape Department of Agriculture

Executive Summary

The Natural Capital Agenda (2013) serves to address conservation and sustainable protection of biodiversity with sustainable agriculture being a theme aligned to the Agenda. An associated action under this theme is the implementation of a pilot project to facilitate the restoration of a degraded system. The Berg River system is heavily degraded and has been promoted as an environmental priority as it holds national significance as a water source to the greater Cape Town area and its importance to the agricultural sector. The Berg River riparian zone is largely invaded by alien plants which contribute to erosion, impact biodiversity and pose a threat to water supply that is already under immense strain due to the ongoing drought in the Western Cape.

Several plans have been established by various government departments towards restoring the Berg River system. Research on agritourism is in the early stages and there is great scope and need for research attention in this field (Choo, 2012; Rogerson and Rogerson, 2014). This paper considers the existing Green Economy Investment Project to clear invasive alien plants along the Berg River and suggests that agritourism can support unlocking opportunities for sustainable agriculture, economic growth, cultural cohesion and protecting natural capital.

The proposed initiative is to create an enabling environment for the development of an agritourism route along the Berg River that various tourism products and services can link to. Route tourism has been noted as the best hope to sustainability in travel and tourism (ECI Africa, 2006, Lourens 2007) and clustering activities and attractions in less developed areas stimulates local economic development. There are economic benefits to offering experiences and products that effectively lengthen visitor stays in the municipal areas that the Berg River traverses. Market trends reveal that visitors are showing a greater demand for authentic tourism experiences in local communities and a strong preference for outdoor activities, scenic drives and cultural experiences, all which agritourism can service.

Bringing tourism to agricultural land along the Berg River is an opportunity for diversification in the agricultural sector (Rogerson & Rogerson, 2014) and creates incentives for landowners to get further involved with the clearing of invasive alien plants and in turn contributing to the restoration of the Berg River system. The +/- 300km proposed route, which is proposed to be largely anchored as a walking route across agricultural land (i.e. Berg River Camino) begins at the river source in Franschhoek and journeys to Velddrif, where the river meets the sea. Following extensive stakeholder engagement, the pilot route (+/-100 km) was identified between Gouda and Misverstand Dam. Franschhoek is already established as a premier wine destination that attracts numerous international and local visitors to the region throughout the

year and is easily accessible from the Cape Town Metropole. A significant wine destination such as this can be leveraged to complement proposed river activity and conservation. On the West Coast, Velddrif offers a tranquil sea side escape from the city yet is similarly accessible to visitors by major transport routes. The region is known for its humble fishing communities and biodiversity significance, as well as cultural experiences offered by locals. The Berg River can serve to uniquely link these towns and unlock a host of opportunities along the way.

Despite identified challenges, engagement on the ground indicates that there are sufficient strong partners in the private sector to establish each leg of the proposed route, albeit seemingly easier in some areas relative to others. Partnerships are key to gaining critical mass towards meeting the immense challenge of IAP clearing and restoration work. This paper highlights the need to circumvent further land degradation along the Berg River by thinking differently about the challenge of clearing IAPs by linking IAP clearing to agritourism and economic opportunity. Whilst the case for tourism supporting conservation and sustainability is evident in the literature (Viljoen, 2007, Lourens, 2007) it has become evident that protecting natural capital by eradicating IAPs needs to be emphasised to support sustainable agriculture.



Figure 1: Berg River Pilot Area, Misverstand Dam

Photo: Nicole Wagner

1. Introduction

Healthy land is the primary asset that supports livelihoods around the globe – from food to jobs. The United Nations Convention to Combat Desertification (UNCCD) warns that the global economy will lose approximately \$23 trillion through land degradation by 2050. An effort to combat land degradation would cost an estimated \$4,6 trillion. South Africa (SA), signatory to the UNCCD, is faced by environmental issues of drought, land degradation and desertification with alien plant invasion being a significant contributor to degradation and loss of land productivity and water resources. These environmental issues are becoming increasingly concerning and require added attention as they are linked to food security, poverty, climate change, and biodiversity.

Invasive alien plants (IAPs) are invading in the order of 10 million hectares across SA with an approximate water use of 3 300 million m³ per year. The Western Cape Department of Agriculture: LandCare contributes R2 million to the clearing of IAPs and the rehabilitation work that follows. LandCare has created 700 jobs per year and in excess of 25 000 person days of employment but the greatest value to the LandCare project is the value adding to the project by landowners and partners bringing millions to the project and ensuring sustainability. To have meaningful impact in eradicating IAPs, large amounts of financial resources need to be mobilised. The LandCare Programme has explored value-adding end-use options for the IAP biomass to promote the green economy; and continually seeks innovative responses to combating the spread of IAPs. Agritourism was identified a potentially effective link to clearing IAPs and an opportunity to bring about a sustainable, positive change in how the Berg River is managed and appreciated.

The LandCare Programme set out to initiate an enabling environment by connecting stakeholders in the private sector to establish an anchor tourism route (of international significance) to which other projects and routes could link to, to support economic growth and job creation, and protect the natural capital. ECI Africa (2006) argues that route tourism is an effective method of tourism distribution, especially when tourists drive, hike or cycle within a geographical area.

The proposed route¹ (figure 1) aims to bring tourism to agricultural land in the Berg River riparian zone, and so named the *Berg River Camino*². Creating a route of this

¹ In 2017, a survey was circulated to key stakeholders of this Green Economy sub-project and 95% of respondents indicated that the Camino concept is a suitable approach to tourism for the River.

² A Camino route is essentially a long-distance walking route for spiritual introspection but can also be used as a hiking trail for wellness, whether walked or cycled. It offers a broad range of opportunities to communities, small business and individuals created by potentially thousands of walkers/pilgrims passing by, throughout the year.

nature would require landowners/farmers to get further involved with clearing IAPs on their land, in the riparian zone, and connects different cultures across the landscape.



Figure 2: Agritourism Route: Berg Camino

(Cape Camino, 2018)

Despite the challenges identified, engagement on the ground indicates that there are sufficient strong partners in the private sector to establish each leg of the proposed route with the greatest opportunity for piloting implementation identified between Gouda and the Misverstand Dam (refer to figure 1). Such partnerships are key to gaining critical mass towards meeting the immense challenge of IAP clearing and restoration work.

It is worth noting here that both Franschhoek and Velddrif are popular tourist destinations that are easily accessible from the Cape Town Metropole which in turn could lead to relatively short visitor stays. However, the Berg River offers a unique connection to both of these towns, largely across agricultural land and rural landscape, with the opportunity to offer a host of activities and experiences to visitors (not limited to wine tourism) and potentially lengthen visitor stays across the board. Tourism in its various forms (i.e. nature-based, wine-related, agritourism, culture tourism and general hospitality) represents a viable economic sector (Stellenbosch Municipality, 2010).

This paper considers opportunities that route agritourism offers towards sustainability and beyond.

2. Overview of Berg River Catchment

The Berg River Catchment is abundant in opportunity and potential, well endowed with natural beauty and cultural significance. The catchment is situated in the extreme southwest corner of South Africa and falls within the Western Cape province. It derives its name from the largest river within its boundaries, namely the 285km Berg River, spanning three local municipalities (LM): Drakenstein, Swartland and Berg Rivier. These municipalities are at varying levels of development in terms of tourism and within municipalities, economic growth is poorly distributed.

Land use within the catchment comprises wheat farming, forestry, fruit and wine farming, urban areas, industry (Department of Water Affairs, 2004) and agri-processing. Major industries in the catchment are agriculturally based and Wineland tourism along with recreation at the Berg River Estuary (and in other parts) are major sources of income. Given that the Berg River is at the heart livelihoods in the catchment, it follows that that the resource should be conserved and improved, and agritourism can be the link towards achieving these goals.



Figure 3: Berg River Location

(Struyf, et al., 2012)

The Berg River Catchment is characterised by intensive agricultural production and processing, and is considered an important supply system for irrigated agriculture as well as for urban users (African Climate & Development Initiative, 2014). The River and its tributaries supports approximately 10% of South Africa's fruit production, therefore the availability and quality of the water in this area is important for fruit production

and consumption, both locally and internationally (Western Cape Government, 2017). More than 4 million people are dependent on the River and its tributaries, with over 22 000 hectares of irrigated crops on 600 farms, the River also contributes to more than R2 billion a year (largely exports) and supports more than 18 000 full time workers with additional part-time employees for seasonal picking (Hortgro Science, 2016).

The Berg River has the potential to offer visitors a range of tourism products based on cultural and natural assets, sporting opportunities and agricultural activities.

Leveraging these endowments of culture and heritage, culinary experiences; adventure-, eco- and agritourism by linking tourism products to the river can contribute to economic growth in the multiple municipalities traversed by the river and is viewed as a way to ensure that the riparian zone is used sustainably.

The river uses include events and races such as the Berg River Dam K1, Franschoek to Paarl Canoe race and the Berg River Marathon that extends from Paarl to Velddrif. In terms of adventure tourism, there are numerous hiking trails, fishing spots, cycling routes, picnic areas and horseback riding facilities in close proximity to the Berg River. Local tourism offices indicate that demand for adventure tourism continues to grow and that it is imperative that all land-use decisions should enhance the integrity of the natural and cultural environment as an important form of capital.



Figure 4: Berg River Pilot Area: Invasive alien plants near Bridgetown

Photo: Nicole Wagner

3. Agritourism and other niche tourism segments

In 1994, the South African government announced its ambitious campaign to make tourism its number one industry in the creation of jobs; realising the importance of tourism as vehicle for poverty alleviation, economic growth and achieving socio-economic equality. Guided by Agenda 21 (UNEP, 2003) legislative and institutional structures saw major changes to serve economic activities with special focus on environmental protection. The environmental management legislation involved both inter-governmental and public-private partnerships in order to promote and maintain the ecosystem services to protect natural assets. South African tourism is largely dependent on the environment but there is a need for greater responsiveness to preserve the natural capital for sustainable tourism that includes agritourism (Muhanna, 2006).

In the literature, it is observed that research in agritourism is still in the early stages of development which presents great opportunity for research (Choo, 2012) however there is still much debate on the definition of agritourism in various contexts. Agritourism is viewed as a complex and differentiated phenomenon that can be seen as an innovative diversification strategy for agriculture (Greyling, 2017), with both economic and non-economic benefits for farmers, communities and visitors (Broccardo, et al., 2017). Synonymously used with the term farm tourism in the literature, agritourism is defined not only as a combination of accommodation and recreation but expanded to include the education or active participation in farm activities on a working farm or agricultural setting (Lobo, 2001). Rogerson and Rogerson (2014) notes that agritourism is sometimes called agrotourism representing an expanding segment of the tourism economy. Agritourism is conventionally considered a subset of rural tourism that includes recreational experiences in a rural setting that is not available in urban areas (Henderson, 2009);(Tifflin, 2005); (Kunasekaran, et al., 2011). Activities that can be linked to agritourism include but is not limited to: accommodation, restaurants, fishing, interaction with farm animals, picking produce, food and wine (Rogerson & Rogerson, 2014). The WCDOA Flyover Project (2017/2018) also includes activities such as breweries, camping, 4x4 routes, wine and cellar tours, ecotourism, ostrich farms, mountain biking, picnics, farm stalls and markets, game farming, hiking and horseriding.

Some of the benefits of agritourism highlighted in the literature include but not limited to:

- Catalyst for rural revitalisation (Das & Rainey, 2010)
- Heritage preservation (LaPan & Barbieria, 2013)
- Alternative farming activity that can contribute to sustainable agricultural sector (Choo, 2012)
- Educational opportunities, community cohesion and economic diversification (Colton & Bizziz, 2005) ; (McGhee, 2004)
- Increased revenue (Barbieri, 2010); (Barbieri, 2013)
- Economic, environmental, socio-cultural benefits which contribute to sustainable development (Choo, 2012) (Sonnino, 2004); (Embarcher, 1994)

Work by Sasu and Epuran (2016) notes that agritourism appeals to the tourist seeking responsible, unique experiences that are deemed ethically correct. In South Africa, there is increasing tourist interest in fair trade and local foods (Rogerson, 2011). Tourists are interested in "different" experiences offered outside of the urban centre and are increasingly showing preference for locally produced food that have been produced in an eco-friendly manner (Greyling, 2017). Such tourists acknowledge responsibility towards protecting the environment. Similarities can be drawn for related niche tourism such as ecotourism, sustainable tourism, adventure tourism, nature tourism and culinary tourism.

Broad definitions of the main, relevant niche tourism concepts are provided in the Table 1. The niche tourism types presented above illustrates the complex and interlinked aspects of tourism that pertains to natural capital and even though there is debate around the definition of agritourism in the literature, the main elements easily link to the other niche tourism sectors. The golden thread of protecting natural resources, creating awareness thereof, and how it relates to the benefit of the environment and society at large is clearly recognised by these tourism types. It is also easily recognised that the Berg Camino initiative speaks to each of these niche tourism types. It follows that bringing agritourism to the Berg River not only has implications for landowners and farmers but sensitizes communities to the cultural and environmental value of their landscape (Broccardo, et al., 2017). The literature shows that agritourism is viewed as a "missing link" that integrates agricultural, cultural and environmental resources (Broccardo et al. 2017; Lupi et al. 2017). At a global scale, nature and agricultural based tourism is of the fastest growing tourism segments reaping economic benefits across the United States, European Union and Australasia. The trend is towards experiencing authentic travel and engaging with locals rather than visiting conventional, mainstream tourist attractions (United Nations, 2006; Sasu and Epuran, 2016). Enjoying traditional meals made using traditional methods, and exploring the landscape is becoming increasingly popular for travellers (Time Magazine, 2005). In the United States, a study by the New York Times found that visitors

are willing to pay more to use companies that strive to protect the environment (United Nations, 2006). Offering on farm activities such as U-Pick activities, learning various traditional farming methods and experiencing farm living and hospitality is also increasing in popularity (Sasu & Epuran, 2016).

There appears to be a lack of local studies that capture the key factors for value creation in agritourism under the dimensions of sustainability: economic (generation of local employment, increased farm revenue); sociocultural (farm succession, attracting youth to rural communities); and environmental (preservation of natural capital, sensitizing visitors to preserve and promote healthy ecosystems e.g. offering ecotourism activities). In particular, there is a great need for greater research on the economic benefits of agritourism (Rogerson & Rogerson, 2014).

Despite the many economic opportunities that agritourism offers small towns and rural areas, Rogerson and Rogerson (2014) argues that agritourism has been overlooked by local economic development debates in South Africa. Greyling (2017) discusses the challenges faced by South African farmers and rural communities, given increasingly difficult business environments they operate in and far-reaching impact of the drought. Tough economic times are motivation to think differently about managing risk and agritourism is an opportunity to do so. The more diverse enterprises are, the more risks are countered.



Figure 5: Berg River near Kersefontein

Photo: Nicole Wagner

Table 1: Definitions of niche tourism concepts

	Definition	Types/Categories³ of agritourism activities captured by WCDOA Flyover Project
Agritourism/Agrotourism/Farm Tourism	Agritourism is a combination of accommodation, recreation and educational activities on a farm or agricultural setting. It can be seen as a diversification strategy in agriculture that has both economic and non-economic benefits for farmers (Lobo, 2001); (Rogerson & Rogerson, 2014); (Broccardo, et al., 2017)	Accommodation Birding Breweries Camping Cellar tours
Ecotourism	Ecotourism is a sustainable form of nature tourism that has an education focus to appreciate nature. Ecotourism provides benefits for conservation and community development. Ecotourism minimises negative impacts on the environment, both natural and socio-cultural. It creates jobs and income opportunities for local communities and increases awareness of the importance of protecting natural resources. It is generally organised by small groups and operated by small, locally owned businesses (Swarbrooke, et al., 2003); Ecodirectory, 2007; British Ecotourism market 2001	Conferences Distilleries Ecotourism Fishing 4x4 Farm markets Farm Stalls Game Hiking
Sustainable tourism	Sustainable tourism should make optimal use of environmental resources that constitute a key element in tourism development, offer a meaningful experience to the tourist that raises awareness about sustainability issues and promoting sustainable practices. Following this helps to conserve	Horseriding Mountain Biking Ostrich Picnics

³ The types of agritourism depicted in flyover data cuts across the niche tourism concepts listed here. The types are not captured consistently in the extended list and there is room to expand the list in light of the definitions for niche tourism listed here.

	natural heritage, biodiversity and ecosystems. Socio-economic benefits are fairly distributed and the overall quality of the environment to be maintained. It includes informed stakeholder participation and sustainable practices in business planning and operations (World Tourism Organisation, 2004); (UNEP, 2003)	Restaurants Tastings Weddings Olive and wine cellars Other Wine cellars
Adventure tourism	Adventure tourism requires an element of experience that may encompass risk and/or physical activity , of varying intensity, that includes an experience with nature (Swarbrooke, et al., 2003); (Millington, et al., 2001)	
Nature tourism	Nature tourism is based on nature's attractions and activities held in the surroundings of nature. Activities are aligned to values and principles of sustainable development in terms of respecting and preserving nature. The concept also recognises the importance of environmental and social carrying capacity (Saarinen, 2003)	

4. Methodology

The mixed method approach was adopted: a literature review informed semi-structured interviews that were held with key individuals and institutions. Site visits were beneficial in identifying strong partners in the private sector and made possible through LandCare's established relationships in the agricultural sector. Workshops and information sessions held by LandCare and Cape Camino had extensive stakeholder reach, offering a good understanding of the demand, opportunities and challenges for the proposed work. Cape Camino stakeholder engagement was done via meetings, presentations, emails, online views and vision documents (Cape Camino, 2018).

The work to date was presented to officials and other stakeholders at the national LandCare conference to gain support to continue with this work and to conduct a survey for more informed analysis. The proposed survey is to be administered to a reasonable sample of farmers and land owners in the pilot area, and later extended to riparian landowners along the entire route.

5. Challenges and Opportunities for Agritourism along the Berg River

A cursory overview of the initial results denotes challenges and opportunities arising from the stakeholder engagement and is presented as a preliminary SWOT analysis in Table 2⁴. In 2017, an initial survey was conducted with a sample of relevant government stakeholders and other interested parties that attended a workshop at the conceptualisation of the project. Here the concept of a "Berg Camino" was introduced and supported by stakeholders. Semi-structured interviews, site visits, information sessions and workshops (conducted by LandCare and Cape Camino) followed towards the end of 2017 and into 2018.

⁴ Here agritourism and other niche tourism concepts are referred to synonymously (i.e. ecotourism, nature tourism, sustainable tourism, adventure tourism).

Challenges indicated from survey (2017) responses:

- The need for an action team to do carry out the work
- Collaboration between different regions is required e.g. West Coast and Cape Winelands
- Alien vegetation eradication needs to be considered together with water pollution from land based activities, including illegal agricultural structures, pollution from illegal water abstraction and river bank erosion
- The opportunities that agritourism presents needs to be sold
- Getting people to work together identified as an ongoing challenge
- The Berg River Catchment strategy needs to acknowledge the initiative when its developed.
- The land ownership issue around the river and riparian zones needs to be clarified
- Funding needs to be explored, given that current budget constraints
- Health and pollution aspects should be considered in development of route
- Security
- Need to get community, businesses and municipalities on board at an early stage to get buy-in
- Buy-in from riparian farmers to use private land
- Lack of capacity

Challenges, drivers and demand for agritourism along the Berg River from semi-structured interviews, information sessions and workshops (2017/2018):

- **Product Development:** Stakeholders offered support for developing products to link to an agri-tourism route. Existing service providers (e.g. accommodation, food) are market ready and excited to be part of a Camino route. Financial resources required for new products and for clearing land.
- **Ownership, Partnership and Communication:** Farmers and other interested parties are aware of the value-added opportunities of agri-tourism development as well as potential challenges. Stakeholders were generally keen to be involved in an internationally successful concept and are ready to take ownership of their own thriving. Individuals started creating their own momentum by personally designed routes and packages (Cape Camino, 2018). Tourism was identified as a positive contributor to education and social issues.
- **Government Support:** Government support and political will is lacking.
- **Privacy, Safety and Security:** There is a lot of concern from landowners regarding the movement of public across private land. There is also concern for the safety of users of such a route (trained guides are crucial to the experience).

- Environmental: There are concerns about disturbance to natural beauty met by support for environmental education opportunities. The link to protecting natural capital by eradicating IAPs needs to be emphasised.
- Resources: Communities and farmers are interested in financial opportunities to support livelihoods.

However, farmers lack resources and time for training staff and other expenses to diversify farming operations. Camino routes are supported by micro business therefore each landowner and their agricultural team can make a contribution – none too big or too small. Investment is needed for infrastructure.



Figure 6: Berg River near canoe club and arboretum, Paarl

Photo: Nicole Wagner

Table 2: Berg River Route Agritourism: Preliminary SWOT Analysis

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Easily accessible from Cape Metropole	Short visitor stays	Offer product/service to lengthen visitor stays; benefits of routes	Established tourism offerings e.g. wine and food
Diversified farm operations	<p>Lack of capacity and resources</p> <p>The link between clearing IAPs and protecting natural capital not widely understood.</p> <p>Need to emphasise and create awareness</p>	<p>Create awareness</p> <p>Agricultural land footprint maintained</p> <p>NGOs available to assist with capacity building and advise on best practices</p>	Increased traffic risks environmental protection
Existing products/services to link to, and interconnectedness of niche tourism offerings	Farmers lacking resources	<p>Agritourism initiatives need not be extravagant – start small</p> <p>Leverage niche tourism related to protecting environment/promoting sustainability</p> <p>Expanded on farm employment</p>	Drought conditions in the Western Cape

		NGOs available to assist with capacity building and advise on best practices	
Berg Camino can be marketed through the established Cape Camino and will be internationally recognised under the "Camino" name. Benefits of route tourism	Government support and political will	Improved product awareness Garner support via Green Agenda Start small with the big picture in mind – pockets of agritourism and SMME initiatives. Funding opportunities for SMMEs & women in particular	Discontinuation of government creating enabling environment for Camino route
Berg River creates a natural link/route for agritourism	Requires action team to drive initiative	Draw on experience from Cape Camino & Cape Biosphere Consider examples of route tourism e.g. west coast way	Agriculture in South Africa becoming increasingly risky – political challenges, cost-price squeeze, marketing challenges
Interest of communities to get involved and support their livelihood by establishing micro businesses	Funding to establish pilot required	Additional farm revenue, improved cash flow Alternative on farm accommodation and homestays that offer authentic, unique experiences to visitors. Local heritage support Unlock funding for SMMEs Local Economy stabilisation	

		Revitalising rural communities	
Beautiful natural landscape, unique sense of place, landscape for many outdoor activities and scenic drives, biodiversity	Natural capital not fully utilised	Unlock Berg River as an agritourism route. Proposed route unique to South Africa but can draw on international success of Camino de Santiago and other Camino routes	The proposed route traverses many land uses and landowners, security and safety of landowners
Farmers and other interested parties are aware of the value-added opportunities of agri-tourism development. Stakeholders keen to get involved		New niche markets NGOs available to support training and marketing Partnerships	Lack of marketing and management resources
Stakeholders keen to get involved – individuals are already starting to create their own routes and packages	Need to bring it closer to the river to impact IAPs	Diversified local business base and improved business sustainability Incentive for landowners to clear IAPs and buy in to restoring the Berg River system	
Tourists are looking for “different” experiences. Camino travellers are responsible tourists that understand and can		Environmental awareness and protection, educational opportunities.	

appreciate the need to protect the environment			
Stakeholders offered support for developing products to link to an agri-tourism route. Existing service providers (e.g. accommodation, food) are market ready and excited to be part of a Camino route. Financial resources required for new products and for clearing land.		Mobilise funding to clear IAPs	
Farmers' ability to adapt to change (socio-economic and environmental climate)		Diversify risk	Drought
Farmers own their offering and can choose their scale of operation and/or to offer seasonal product so as to focus on primary farm functions	Farmers lacking resources	NGOs available to support training and marketing Draw on experience from Cape Camino & Cape Biosphere	

6. Conclusion and Recommendations

Agritourism is a new and growing industry and since agritourism studies are still in the early stages of development there is great scope for research and theoretical advances. The links to the environment between niche tourism such as nature tourism, sustainable tourism, adventure tourism and ecotourism supports are evident and supports the notion that agritourism is an opportunity to protect the natural capital along the Berg River in the Western Cape and beyond.

Underutilised resources along the Berg River offer potential to develop the agritourism sector further, strengthening the economy, generating jobs and creating a more sustainable living environment for residents in the associated municipalities. The success of an agritourism route along the Berg River requires a healthy functioning river ecosystem and clearing of invasive alien plants; thus promoting the restoration of the system.

For agritourism operators, route agritourism such as a Berg Camino is seen as an attractive option to diversify farming activities, improve profitability and create opportunities for communities to support livelihoods. However, it is imperative that security and privacy are issues are addressed and partnerships in the public and private sectors be fostered to support success of this initiative. For policy makers, the potential value of this work could demonstrate that diversification strategies could improve non-farm income to maintain an agricultural footprint and support food security.

It is recommended that further work be done on route agritourism to promote and protect environmental resources, to further support a Berg Camino. A survey is recommended to demonstrate the economic impact of agritourism; and to contribute to a better understanding and to further analyse of the potential for developing the route, the critical success factors, costing and funding. Agritourism has been overlooked in local economic development debates and greater attention should be given to the economic benefits of agritourism (routes). There is also opportunity to further develop work done as part of the WCDOA Flyover Project.

Agritourism and related niche tourism referred to in this work can sensitize farmers, visitors and communities preserve nature and create awareness of the benefits of clearing alien vegetation for sustainable agriculture and protection of natural capital.

References

- African Climate & Development Initiative, 2014. *The Food-Energy-Water-Land-Biodiversity*. [Online] Available at: http://www.fewlnexus.uct.ac.za/sites/default/files/image_tool/images/91/Berg%20River%20FEWLB%20Nexus%20Framework%20%26%20Description%20Final%20Draft.pdf [Accessed July 2017].
- Barbieri, C., 2010. An Importance-performance analysis of the motivations behind agritourism and other farm enterprise developments in Canada. *Journal of Rural and Community Developments*, Volume 5, pp. 1-20.
- Barbieri, C., 2013. Assessing the sustainability of agritourism in the US: A comparison between agritourism and other farm entrepreneurial ventures. *Sustainable Tourism*, 21(2), pp. 252-270.
- Broccardo, L., Culasso, F. & Truant, E., 2017. Unlocking Value Creation Using Agritourism Business Model. *Sustainability*, Volume 9.
- Cape Camino, 2018. *Berg River Camimo Evaluation Report*, s.l.: s.n.
- Cape Camino, 2018. *Pers. Comm.* [Interview] (15 June 2018).
- Choo, H., 2012. Agritourism: Development and Research. *Journal of Tourism Research & Hospitality*, 1(2).
- Colton, J. & Bizziz, G., 2005. Developing Agritourism in Nova Scotia: Issues and Challenges. *Journal of Sustainable Agriculture*, 27(1), pp. 91-112.
- Das, B. & Rainey, D., 2010. Agritourism in Arkansas Delta Byways: Assessing the economic impacts. *International Journal of Tourism Research*, 12(3), pp. 265-280.
- Department of Water Affairs, 2004. *State of the Rivers*. [Online] Available at: https://www.dwa.gov.za/iwqs/rhp/state_of_rivers/berg04/berg2.pdf
- ECI Africa, 2006 Community Based tourism, unpublished draft report for FRIDGE Johannesburg
- Embarcher, H., 1994. Marketing for Agritourism in Australia: Strategy and realisation in a highly developed tourist destination. *Journal of Sustainable Tourism*, 2(1-2), pp. 61-76.
- Greyling, M., 2017. *Grain SA: Think out of the box, think agritourism*. [Online] Available at: <https://www.grainsa.co.za/think-out-of-the-box,-think-agritourism> [Accessed August 2016].

Henderson, J., 2009. Agro-tourism in Unlikely Destinations: A Study of Singapore. *Managng Leaisure*, 14(4), pp. 258-268.

Hortgro Science, 2016. *A River Runs Through It*. [Online] Available at: <http://www.hortgro-science.co.za/wp-content/uploads/2016/04/a-river-runs-through.pdf> [Accessed 2017].

Kunasekaran, P., Ramcharandran, M., Yacob, M. & Shuib, A., 2011. Development of Farmers' Perception Scale Agro tourism in Cameron Highlands, Malaysia. *World Applied Sciences Journal*, Volume 12, pp. 10-18.

LaPan, C. & Barbieria, C., 2013. The role of agritourism in heritage preservation. *Current Issues in Tourism*.

Lobo, R., 2001. *Helpful agricultural tourism (agritourism) definitions*. [Online] Available at: www.afc.ucdavis.edu/agritourism/definition.html

Lourens, M. 2007 Route Tourism - a roadmap towards successful destinations and local economic development, *Development Southern Africa*, 24, in press

McGhee, N., 2004. Motivation for Agritourism Entrepreneurship. *Journal of Travel Reseach*, 5(4), pp. 308-321.

Millington, K., Locke, T. & Locke, A., 2001. Occasional studies: adventrue travel. *Travel and Tourism Analyst*, Volume 4, pp. 65-97.

Muhanna, E., 2006. Sustainable Tourism Development and Environmental Management for Developing Countries. *Problems and Perspectives in Management*, 4(2).

Rogerson, C., 2011. Tourism - agriculture linkages in rural South Africa: evidence from the accommodation sector. *Sustainable TOurism*, 20(3), pp. 477-495.

Rogerson, C. & Rogerson, J., 2014. Agritourism and local economic development in South Africa. *Bulletin of Geography Socio-economic Series*, pp. 93-106.

Saarinen, J., 2003. The regional econimics of tourism in Northern Finland: the socio-economic implications of recent tourism development and future possibilities for regional development. *Scandanavian Journal of Hospitality and Tourism*, Volume 3, pp. 91-113.

Sasu, K. & Epuran, G., 2016. An Overview of the new trends in rural tourism. *Economic Sciences*, 9(2), pp. 119-126.

Sonnino, R., 2004. For a piece of bread? Interpreting Sustainable Development through Agritourism in Southern Tuscany. *Sociologia Ruralis*, 44(3), pp. 285-300.

Stellenbosch Municipality, 2010. *Stellenbosch Municipality Spatial Development Framework*, s.l.: s.n.

Struyf, E. et al., 2012. *Nitrogen, phosphorus and silicon in riparian ecosystems along the Berg River (South Africa): The effect of increasing human land use*, s.l.: s.n.

Swarbrooke, J., Beard, C., Leckie, S. & Pomfret, G., 2003. *Adventure Tourism: The new frontier*, s.l.: s.n.

Tifflin, W., 2005. *Agritourism in Kwa-Zulu Natal, Durban*, s.l.: s.n.

Time Magazine, 2005. October.

UNEP, 2003. *Tourism and Local Agenda 21: The role of local authorities in Sustainable Tourism*, s.l.: UNEP.

United Nations, 2006. *Sustainable Development: Agritourism - Revitalizing agriculture and Rural Development*. [Online] Available at: https://sustainabledevelopment.un.org/content/documents/harvey_12may_sids.pdf

Viljoen, F., 2007 Sustainability indicators for monitoring tourism route development in Africa

Western Cape Government, 2017. *The Economic Value of the Berg River*. [Online] Available at: <https://www.westerncape.gov.za/eadp/central-environmental-and-water-information-portal/berg-river-implementation-programme/the-economic-value-of-the-berg-river> [Accessed 2017].

World Tourism Organisation, 2004. *Sustainable Development of Tourism. Concepts and Definitions*. [Online] Available at: http://www.world-tourism.org/frmeset/frame_sustaibale.html [Accessed September 2018].