Design of a touristic product to diversify the economic base of the agroecological farm "La María" in Pinar del Río, Cuba

Projeto de um produto turístico para diversificar a base econômica da fazenda agroecológica "La María" em Pinar del Río, Cuba

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ABSTRACT
Agroecological Farm "La María" stands out for its productivity and efficiency. Its economy is based exclusively on agriculture and the production of some fruit derivatives. For several years, the possibility of diversifying the activities in the area has been handled, promoting sustainability and the protection of nature. Considering the importance tourism has acquired for Cuba in recent years, this design proposal for tourist use of the farm is made. The latter has several tourist potentialities and natural and cultural heritage to develop rural tourism. The main steps for the design of a tourist product, evaluation and assessment of tourist resources, a proposal for its practical use and a final product recommendation on the eve of its exploitation were followed. The entire proposal was based on sustainability principles and the preservation of the environment. Due to the growing demand for projects that promote local development in Cuba, this proposal is highly significant. Diversifying tourism products makes it possible to satisfy the increasing expectations of tourists arriving in the country.
Keywords: tourism, development, sustainability.

RESUMO
A Fazenda Agroecológica "La María" se destaca por sua produtividade e eficiência. Sua economia é baseada exclusivamente na agricultura e na produção de alguns derivados de frutas. Há vários anos, a possibilidade de diversificar as atividades na área tem sido tratada, promovendo a sustentabilidade e a proteção da natureza. Considerando a importância que o turismo adquiriu para Cuba nos últimos anos, esta proposta de projeto para o uso turístico da fazenda é feita. Esta última tem várias potencialidades turísticas e patrimônio natural e cultural para desenvolver o turismo rural. Os principais passos para o projeto de um produto turístico, avaliação e avaliação dos recursos turísticos, uma proposta para seu uso prático e uma recomendação de produto final na véspera de sua exploração foram seguidos. Toda a proposta foi baseada nos princípios da sustentabilidade e da preservação do meio ambiente. Devido à crescente demanda por projetos que promovam o desenvolvimento local em Cuba, esta proposta é altamente significativa. A diversificação dos produtos turísticos torna possível satisfazer as crescentes expectativas dos turistas que chegam ao país.

Palavras-chave: turismo, desenvolvimento, sustentabilidade.

1 INTRODUCTION
The activity of tourism today is a changing and diverse phenomenon and one of the main economic activities that bring in capital worldwide. Among the best-known and most visited destinations globally is the Caribbean, which is very popular for the diversity of cultures, the climate, and the famous beaches found on almost all the islands that comprise it (Salinas et al., 2018).

In the Caribbean, the singular beauty of the Cuban archipelago stands out, is known globally, and is currently one of the main tourist destinations in this region. At present, tourism has become one of the main economic activities in Cuba. An example of this was the declaration of the Minister of Tourism in Cuba, Manuel Marrero, at the Seventh Party Congress, where he defined the tourism sector as a strategic point for economic and social development until 2030 (PCC, 2016).

For these reasons, it is essential to diversify the proposals and improve the work in other aspects that affect tourism, such as marketing, original tourism products, creativity, and convenience in services.

Today, Cuba is not merely a sun and beach destination. Other modalities, such as cultural and nature tourism, are popular among visitors. One of the minor developed types of tourism on the island is rural tourism, although there is a
struggle to expand it (Hernández et al., 2020).

This research proposes a design for tourism use in a small territory in Pinar del Río province to diversify tourism products and create new destinations. The proposal to design for tourist use is directed toward the Agroecological Farm “La María” in the El Ocuje community, Crucero Echevarría popular council, in Consolación del Sur municipality. (Figure # 1)

Figure # 1: “La María” Agroecological Farm Location

A farm of just 783,665m² is dedicated to the cultivation of fruit trees and rice for the most part, although they also carry out other activities such as planting vegetables, root vegetables, beans, coffee, and the elaboration of products derived from fruits, in a mini-industry designed by the farm’s workers themselves (IPF, 2014).

Within its territory, it has excellent water potential, which facilitates planting. It maintains a close relationship with the community, developing activities related to the care and protection of the environment. This farm is committed to sustainable development, using natural fertilizers, and encouraging environmental education as its central premise.

The territory needs to diversify its economic activities since the popular
council bases its economy mainly on agriculture and livestock (IPF, 2014). It is an opportunity to develop a new activity that increases foreign currency income and improves the inhabitants' quality of life. The improvement of the conditions on the farm for tourism would generate a favorable scenario in the municipality's management plans. Likewise, the formation of the tertiary sector, apart from being another income source, will create new jobs and improve the population's lives.

Designing a tourist product is a process of great importance for tourist activity (UNWTO, 2011). In addition to studying the capacity of a territory to develop tourism, it proposes modalities and activities related to the actual conditions available. It is an exhaustive and meticulous investigation with several steps in which identifications, classifications, and quantitative and qualitative evaluations must be carried out (Ramírez, 2019). Besides, it allows for examining the damage the natural component will suffer if it is decided to carry out tourism in the studied area (Machado & Hernández, 2007). The main objective of a tourism product designer is to develop a product that affects the environment to a lesser extent and create an attractive, exciting product that is as innovative, different, and unique as possible.

2 METHODOLOGY

A portion of Tejeda's (2000) methodology was used in the design of the tourism product. To complete this process, the work is divided into three phases, as shown below.

Fase 1: Diagnostic

Where the following steps are carried out according to Tejeda (2000):

1- Physical-geographical and socio-economical characterization of the area.
2- Inventory of the area's available resources.

Fase 2: Proposal of touristic product design of the agroecological farm "La María."

In this stage, the tourist resources and their characteristics were determined (Tejeda, 2000).

1- Touristic resources determination.
To define the existing touristic resources in the farm, the following indicators are taken into account:
- Conservative value.
- Anthropic modification.
- Current use and possession.
- Use limitations.
- Potential use.

This qualitative estimate, directly made by the designer, allows us to define and recognize the resources that constitute dissuasive or attractive in the area. A dissuasive resource presents some inconvenience caused either by anthropic or natural reasons and does not allow it to be considered attractive, although it does not prevent it from being identified as a touristic resource. In contrast, an attractive resource is one that, given its conditions, state of conservation, and particular characteristics, is capable of attracting a visitor. Finally, the tourist resources are recognized.

2- **Qualitative and quantitative resources assessment:**

The **qualitative assessment**, according to Tejeda (2000), responds to the following:
- Conservation degree.
- Seasonality for use.
- Accessibility.

The **quantitative** depends, according to Tejeda (2000), of:
- Uniqueness.
- Intensity.
- Geodiversity.

The values of these variables are presented by the designer on a scale of 1 to 3, representing the actual conditions of the resources according to their current status. The values of the scale are presented as follows: 1- Low value, 2- Medium value, and 3- High value.

3- **Assessment of the touristic resource’s functional use:**
The following indicators are taken into account:
- Time required.
- Touristic modalities or activities that could be developed in accordance with the resource's characteristics.
- Qualitative assessment of the investment required for developing resources and tourism activities.

**Fase 3: Prognosis of the functional use proposal: environmental impact and risk, frequency of use, and load capacity**

This aspect is essential to protect the sustainability of existing products (Tejeda, 2000; Machado & Ramírez, 2007; Correa, 2017; Ramírez, 2019).

1. **Environmental impact:**

This proposal is submitted to an evaluation process about the environmental impact it would cause. The first step is to identify the possible impacts taking into account all the information received so far on assessing the current state of the resources and the problems that the area presents at the time of carrying out the project (Correa, 2017).

The following aspects will be taken into account:

~ Genesis reinforcement (GR).
~ Rate of incidence (RI).
~ Development tendency (DT).
~ Durability (D).
~ Extension (E).
~ Magnitude (M).
~ Collateral damage (CD).
~ Mitigation (I).

A matrix where the column summations will allow recognizing the impact that each of the actions will cause in the territory is made. With the result of the sum of the impacts, an interval of (0-6) low impact, (7-18) medium impact, and (18-24) high impact is taken into account to evaluate the impact's incidence. Based on this evaluation, a set of measures aimed at mitigating and eliminating the environmental impacts and risks in the territory are defined.

2. **Load capacity:**

Following Ceballos-Lascurain's methodology (cited in Tejeda, 2000). To
calculate this indicator, the aforementioned aspects are taken into account:

- Bearable physical capacity (BPC).
- Actual bearable capacity (ABC).
- Effective Bearable capacity.

3- The final proposal of use's description.

The final product proposal is described (Ramírez, 2014; Correa, 2017), and aspects of tourism development in the "La María" farm are exposed. These aspects are shown below.

- Elaboration (Necessary elements for product's exploitation).
- Equipment.
- Seasonality.
- Accessibility.
- Tours.
- Resting zones.
- Auxiliary services.
- Educational activities.
- Protection and management measures.
- Tools and equipment used by tourists.

3 DISCUSSION

3.1 TOURISTIC RESOURCES DETERMINATION

After carrying out the inventory and evaluating the existing resources (Figure # 2) in the agroecological farm "La María", they are defined as attractive or dissuasive, represented in Table 1.

Table 1: Touristic resources determination.

<table>
<thead>
<tr>
<th>Touristic resources</th>
<th>Attractive</th>
<th>Dissuasive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagoon</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Protected-farmed habitat</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Biological Corridor</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Stopover site</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Fruit planting areas</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Reforestation areas</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Cooperative planting areas</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Forest</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Attached classroom</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Camacho's Home</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Fruit Mini-industry</td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

Source: Prepared by the author.
According to the information collected in the table, six attractive and five dissuasive resources exist in the territory. In addition, all are considered tourist resources, so they can all be used in tourism activity.

3.2 QUALITATIVE ASSESSMENT OF TOURISTIC RESOURCES: CONSERVATION DEGREE, SEASONALITY OF USE, AND ACCESSIBILITY.

The qualitative assessment of the farm's tourist resources was carried out to have a clear and precise vision of their conditions, at what time of the year they can be used preferably, and the difficulty they present in accessing. Three factors were considered: the conservation degree, the seasonality for its use, and the
accessibility to the resources.

Table 2: Qualitative assessment of touristic resources.

<table>
<thead>
<tr>
<th>Touristic resources</th>
<th>Conservation degree</th>
<th>Seasonality of use</th>
<th>Accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagoon</td>
<td>Medium</td>
<td>Summer months</td>
<td>Difficult</td>
</tr>
<tr>
<td>Protected-farmed habitat</td>
<td>High</td>
<td>All year long</td>
<td>Easy</td>
</tr>
<tr>
<td>Biological Corridor</td>
<td>High</td>
<td>All year long</td>
<td>Easy</td>
</tr>
<tr>
<td>Stopover site</td>
<td>Medium</td>
<td>All year long</td>
<td>Easy</td>
</tr>
<tr>
<td>Fruit planting areas</td>
<td>Medium</td>
<td>All year long</td>
<td>Medium</td>
</tr>
<tr>
<td>Reforestation areas</td>
<td>High</td>
<td>All year long</td>
<td>Easy</td>
</tr>
<tr>
<td>Cooperative planting areas</td>
<td>Bajo</td>
<td>All year long</td>
<td>Difficult</td>
</tr>
<tr>
<td>Forest</td>
<td>High</td>
<td>All year long</td>
<td>Easy</td>
</tr>
<tr>
<td>Attached classroom</td>
<td>Bajo</td>
<td>September to June</td>
<td>Easy</td>
</tr>
<tr>
<td>Camacho’s Home</td>
<td>Medium</td>
<td>All year long</td>
<td>Easy</td>
</tr>
<tr>
<td>Fruit Mini-industry</td>
<td>Medium</td>
<td>All year long</td>
<td>Easy</td>
</tr>
</tbody>
</table>

Source: Prepared by the author.

3.3 QUANTITATIVE ASSESSMENT OF THE TOURISTIC RESOURCES: UNIQUENESS, INTENSITY, AND GEODIVERSITY

For the qualitative assessment, three aspects were considered, which are evaluated with the three intervals described above.

Table 3: Quantitative assessment of the touristic resources.

<table>
<thead>
<tr>
<th>Touristic resources</th>
<th>Uniqueness</th>
<th>Intensity</th>
<th>Geodiversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagoon</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Protected-farmed habitat</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Biological Corridor</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Stopover site</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Fruit planting areas</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Reforestation areas</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cooperative planting areas</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Forest</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Attached classroom</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Camacho’s Home</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Fruit Mini-industry</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Prepared by the author.

According to the evaluation of the touristic resource, these were defined with an average of 2.27 for uniqueness. It allows us to understand that the resources present a unique high value within the study territory. In addition, 54.5% of them have a high value in this aspect. Regarding intensity, the average value was 2.45. According to the assessment, the resources caused a high attraction on the visitors
due to their conditions. For the geodiversity aspect, an average of 1.9 was found, which defines a reduced number of varieties of components in each resource.

3.4 ASSESSMENT OF THE FUNCTIONAL USE OF THE TOURISTIC RESOURCES

It was defined that the right type of tourism to perform in the territory, in accordance with all its resources, is rural tourism. It covers all the activities and components found within the territory. Several modalities will be considered within this type of tourism, such as agrotourism, ecotourism, and adventure tourism (González, 2011). Other activities related to tourism are also incorporated, such as environmental education, baths in the Lagoon, and photographs.

On the other hand, resources are classified according to the time required for them to be exploited and the investment required.

<table>
<thead>
<tr>
<th>Touristic Resources</th>
<th>Modalities of rural tourism and activities</th>
<th>Time required</th>
<th>Investment required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagoon</td>
<td>Baths, nature observation, and canoe rides</td>
<td>Medium-term</td>
<td>Medium</td>
</tr>
<tr>
<td>Protected-farmed habitat</td>
<td>Ecotourism</td>
<td>Short term</td>
<td>Low</td>
</tr>
<tr>
<td>Biological Corridor</td>
<td>Ecotourism</td>
<td>Short term</td>
<td>Medium</td>
</tr>
<tr>
<td>Stopover site</td>
<td>Ecotourism</td>
<td>Medium-term</td>
<td>Medium</td>
</tr>
<tr>
<td>Fruit planting areas</td>
<td>Agrotourism</td>
<td>Short term</td>
<td>Low</td>
</tr>
<tr>
<td>Reforestation areas</td>
<td>Agrotourism</td>
<td>Short term</td>
<td>Low</td>
</tr>
<tr>
<td>Cooperative planting areas</td>
<td>Agrotourism</td>
<td>Short term</td>
<td>Low</td>
</tr>
<tr>
<td>Forest</td>
<td>Ecotourism</td>
<td>Short term</td>
<td>Medium</td>
</tr>
<tr>
<td>Attached classroom</td>
<td>Environmental education</td>
<td>Long term</td>
<td>High</td>
</tr>
<tr>
<td>Camacho’s Home</td>
<td>Agrotourism</td>
<td>Medium-term</td>
<td>Medium</td>
</tr>
<tr>
<td>Fruit Mini-industry</td>
<td>Agrotourism</td>
<td>Medium-term</td>
<td>High</td>
</tr>
</tbody>
</table>

Source: Prepared by the author.

3.5 ENVIRONMENTAL IMPACT

After the fieldwork carried out on the La María farm, the possible impacts that the tourism activity will produce in the territory were identified and listed as follows:

1- Increase in economic costs related to repairing and creating infrastructure for tourism activity on the farm.
2- Increase pedestrian and vehicular flow on the National Central Road that reaches the farm, as well as at the entrance to the farm itself.
3- Increase of water, electricity, and food demands and generation of solid and liquid waste proliferation.
4- Lifestyle changes of the farm's inhabitants and workers and the community.
5- Changes in the general activities carried out on the farm.
6- Pollution and transformation of the lagoon environment.
7- Vegetation logging and pruning to improve accessibility to some resources and outlying areas.
8- Increases in the use of fertilizers for improvements in production.
9- Atmospheric pollution and noise caused by both construction activities and by visitors.
10- Transformation of the rural image of the farm due to the creation of the new infrastructures.
11- Increases in the price of juices and derivatives from the farm's juicer.
12- Loss of traditional values and rural customs of the farm.
13- Forest area Reduction due to the construction of infrastructure for tourism.

Once the territorial impacts that the tourism activity can cause have been specified, their impact on the environment is evaluated, taking into account the following features, Genesis reinforcement (GR), Rate of incidence (RI), Development tendency (DT), Durability (D), Extension (E), Magnitude (M), Collateral damage (CD) and Mitigation (I).
After the impact evaluations and the sum exposed in table 5, it was determined that 76.92% have a medium incidence on the territory. Only 23.07% suppose a high influence, and none will have a low impact on the territory. The impacts with the most significant incidence and, therefore, those of greatest interest to achieving their mitigation are the increase in economic costs related to repairing and creating infrastructure for tourism activity on the farm and the increase of water, electricity, and food demands and generation of solid and liquid waste proliferation.

The analysis and classification of environmental impacts allow the design of a set of measures aimed at mitigating and controlling the increase in damage to the territory caused by the development of tourism activity.

To this end, the following group of measures is proposed:

1- Follow the environmental laws and regulations and the basic principles of Cuban environmental policy in force in the Cuban Constitution.

2- Create a monetary fund dedicated to the activities, facilities, and transformations for the development of the tourist activity on the farm.

3- Create a monetary fund to mitigate and eliminate environmental problems and possible negative impacts of tourism activity.

4- Avoid the use of non-natural fertilizers in crops.

5- Avoid unnecessary logging in the forest.

6- Repopulate areas with plants and trees.

7- Respect aesthetics and preserve the rural environment when building facilities for tourism activities.

Table 5: Environmental impact matrix.

<table>
<thead>
<tr>
<th>Impacts</th>
<th>GR</th>
<th>RI</th>
<th>DT</th>
<th>D</th>
<th>E</th>
<th>M</th>
<th>CD</th>
<th>I</th>
<th>Total</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>23</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>17</td>
<td>Medium</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<td>22</td>
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</tr>
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<td>15</td>
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</tr>
<tr>
<td>5</td>
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<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>13</td>
<td>Medium</td>
</tr>
<tr>
<td>6</td>
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<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>17</td>
<td>Medium</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>16</td>
<td>Medium</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
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<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>17</td>
<td>Medium</td>
</tr>
<tr>
<td>9</td>
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<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>19</td>
<td>Medium</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>16</td>
<td>Medium</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>13</td>
<td>Medium</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>13</td>
<td>Medium</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>17</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Source: Prepared by the author.
8- Repair existing facilities with a particular interest in the attached classroom.
9- Improve hygiene and sanitation in the fruit mini-industry area.
10- Develop a solid and liquid waste collection system without affecting the farm environment, especially the Lagoon.
11- Promote caring for the traditions and agricultural activities on the farm.
12- Protection of natural resources from erosion, pollution, damage, excessive exploitation, and increase of visitors.
13- Organize access and parking areas to avoid aesthetic changes and problems that affect public transportation, agricultural activities or generate conflict with the community residents.
14- Design a program for the community based on environmental awareness and the importance of protecting natural resources.
15- Educate workers and neighbors of the farm about issues related to tourism activities.
16- Protect rural space and natural resources in order not to transform or change them due to tourism.
17- Control the use of water, electricity, food, and waste, encouraging the community and the visitors to be aware of these and the environment in general.

3.6 LOAD CAPACITY

Due to the adverse effect tourism activity can cause on a territory, the load capacity of the spaces is calculated. It establishes control for the number of visitors that can go to a given site without causing damage to the environment. For these reasons, the load capacity indicator is vital for a territory that intends to develop touristic activities (Ayala & Hernández, 2021).

The following data is required for this analysis:
- One person occupies a space of approximately 1m².
- The distance between the groups of tourists must be equal to or greater than 50m since they can cross but not coincide in the same place.
- The minimum area for public use available in the resources whose interior
- The visit duration average to the farm will be 4 hours. Despite the fact that it is a small territory, it has several touristic resources of notable interest.

From these premises, the following results are obtained:

The bearable physical capacity (BPC) is 30 visitors since the minimum area of use is 10m², and each person needs 1m², so three daily groups of 10 people are proposed.

The actual bearable capacity (ABC) is 26 visitors per day. For this calculation, the corrective factor was taken into account: the days that the resource won't be available, corresponding to Sundays, and the daily hour range.

As a final proposal, the bearable effective capacity corresponds to 24 tourists a day, divided into three groups of eight people, with a four-hour visit for each group. The time range for each group was defined for the entire territory and not for each resource. The farm's resources don't need the same time of use. For example, the Lagoon, a place for bathing, canoeing, and taking photos, will need more time than other resources.

4 FINAL PROPOSAL OF THE TOURISTIC PRODUCT

It is proposed that the type of rural tourism be developed in the territory since the farm presents the ideal conditions to recreate modalities and activities corresponding to this type of tourism.

4.1 PROPOSAL DESCRIPTION

An authentic product is proposed with activities related to sustainable development, based on environmental education and knowledge, where the interaction between the visitor and the workers of the farm is stimulated with the retribution of experiences and customs through agricultural and recreational activities, always having as a first guideline the care and protection of natural resources. The modalities of rural tourism considered successful for developing on the farm are ecotourism, agrotourism, environmental education, and nature observation.

For this sustainable experience, the farm has the following attributes:

1- Wide range of vegetation and green areas conserved.
2- Development of agricultural activities of great interest, generating curiosity and attraction, especially to visitors from the city.

3- Great kindness and hospitality of the inhabitants and workers of the farm.

4- Strong peasant and Cuban customs in the territory.

5- Beautiful views of landscapes with flowering vegetation and a peculiar lagoon surrounded by climbing bushes and vines.

6- An attached classroom exists for meetings with locals and university students and other events related to ecology and environmental sciences.

7- The farm contributes to the conservation and promotion of the natural and architectural heritage of the territory.

8- Good accessibility to the farm through the National Central Road.

A group of activities is proposed to be developed in the territory for better enjoyment and resource use.

1- Tour with guides through all the touristic resources on the farm.

2- Visit the Camacho’s house, where visitors will interact with the customs and traditions of peasant work.

3- Tasting a welcome cocktail made in the farm's mini-fruit industry.

4- Visit the forest, and develop activities such as participation in reforestation, planting a tree, and nature photography.

5- Lectures about environmental protection, environmental problems, agricultural activities, and other important themes, in the attached classroom, with the participation of the University of Pinar del Río's students and professors.

6- Tours and fruit picking in the fruit farming areas.

7- Tours and participation in agricultural activities in the cooperative planting areas.

8- Swimming and canoe rides in the farm's Lagoon.

9- Outdoor and recreational activities in the vicinity of the Lagoon.

10- Tasting typical peasant dishes, juices, preserves, and sweets made on the farm.

11- Visitors will participate in the daily activities of the peasants, harvesting rice, fruits, and vegetables.
12- Purchase of handicrafts made by the inhabitants of the farm and its neighbors.
13- Horseback riding through the farm territory.
14- Visit the mini-industry in operation to observe the production processes.

4.2 ELABORATION

To complete the tourist product in “La María” farm, a group of elements must be elaborated, repaired, or created, for a better experience and enjoyment of the resources and the territory itself.

These elements are:
1- Repair and renovation of the farm entrance.
   -Repair the fence that surrounds the farm.
   -Entrance gate repair and painting.
   -Repair and painting of the initial sign with the name and data of the farm.
   -Creation of a map showing tourist resources and tour trails.
   -Repopulation of the natural fence segment in the farm fence.
   -Cleaning of the road and the farm entrance.
2- Repair of road networks.
   -Repair of the National Central Road, farm's North limit.
   -Eliminate as far as possible the architectural barriers in the farm.
   -Creation of an outdoor parking lot without affecting the resources or the community's public transportation system.
   -Cleaning and repair of the roads that connect the farm tourist resources.
   -Create some signals that indicate the presence of a touristic destination in the community.
3- Restoration of buildings that have a low and medium conservation level.
   -Painting and restoration of Camacho's house.
   -Beautification of the facade and the entrance with ornamental plants.
   -Restoration of the attached classroom.
   -Deep cleaning of mini-industry and juice creation implements.
   -Cleaning the drain that carries the waste from the mini-industry to the
treatment plant.
- Cleaning of the juices and other fruit derivatives storage area.

4- Creation of new infrastructures for the development of touristic activities.
- Construction of five cabins with a five people capacity each to implement the overnight stay on the farm.
- Construction of a small restaurant or canteen to serve typical food that comes mainly from the agricultural and productive activities of the farm.
- Creation of a Ranchón, with tables and chairs for food tasting, with a rustic and typical infrastructure, using materials such as wood and coverage from palm trees.
- Construction of sidewalks and small theme parks, all with rustic and typical infrastructures, which do not change or transform the rural aesthetics of the farm.
- Creation of natural umbrellas by tree cover in the vicinity of the Lagoon.
- Construction of bathrooms and seats, all rustic and typical, in the vicinity of the Lagoon.
- Construction of a map or model for the stopping site.
- Construction of a five meters high viewpoint to observe the farm’s natural resources and the surroundings at the stopping site.
- Creation of an information point for visitors in the attached classroom.

5- Natural resources conservation and preparation for tourism activity use.
- Lagoon cleaning and preparation for aquatic activities.
- Creation of quarries with small plants such as medicinal and ornamental, easy to manage, and simple planting.
- Forest species reforestation and diversification.
- Protected-farmed habitat delimitation and fencing, as well as its maintenance.
- Environmental training of workers and neighbors, as well as implementing some measures to encourage environmental protection.
- Creation of posters about environmental caring.
- Training of workers on environmental awareness and regulations for
environmental protection.

4.3 EQUIPMENT

The equipment is needed to properly perform touristic activities, facilitating communication, transfers, and tourist comfort. A series of implements will be required, such as:

1- Communication instruments, such as amplifiers and poster signs with names of the different resources.
2- Whistles.
3- Signal flags.
4- Garbage bins throughout the farm.
5- First aid kit.
6- First aid equipment.

4.4 SEASONALITY

The touristic product "Agroecological Farm La María" will be available all year. Some resources, such as the Lagoon, "are suggested" not to be used in the winter months.

4.5 ACCESSIBILITY

The farm is located at kilometer 112 of the National Central Road, 15 minutes from the municipal city of Consolación del Sur. Accessiblility is favorable by road. There are no problems with the entrance by bus or car to the farm.

4.6 TOURS

The tours inside the farm will be made along the path from the entrance to the cooperative's planting areas.

4.7 RESTING ZONES

The proposed resting areas are the Camacho's House, the "Ranchón" that must be built, the rustic theme park in the forest, the protected-farmed habitat, and the Lagoon.
4.8 AUXILIARY SERVICES

According to the activities and the modalities that will be developed, the following services will be needed:

1- Touristic guides specialized in rural tourism modality, fluent in demanded languages.
2- Transportation from Pinar del Río and Consolación del Sur cities to the farm.
3- Maps, thematic guides, and cartels that promote the touristic product.
4- Health and safety services such as medical assistance and a lifeguard for the Lagoon.

4.9 EDUCATIONAL ACTIVITY

The educational activity in the territory will be fundamentally directed to preserve natural and rural values, peasant customs, agricultural activities, and natural resources sustainability. The awareness of tourism activities development without causing damage to the environment is essential to maintain the farm's agroecological concept. The farm's workers and neighbors must be educated in tourist arrival assimilation and accepting other cultures and customs without losing the territorial idiosyncrasy.

4.10 PROTECTION AND MANAGEMENT MEASURES

For the protection and management of the tourist activity on the farm, it will be necessary to comply with the following measures:

1- Promote direct communication by walkie-talkies between the guides and the organization group of the tourist activity on the farm.
2- Create a security group to ensure existing regulation compliance.
3- Correct signalization of the perimeter fence and the farm's paths.
4- Create pamphlets with regulations and prohibitions for tourist activity, which will be delivered to tourists when they enter the farm.

4.11 TOOLS AND EQUIPMENT USED BY TOURISTS

Some implements will be needed to develop rural tourism activities on the farm to facilitate the tourist's comfort. The use of adequate and comfortable
clothing that allows agricultural activities, swimwear, and some devices such as umbrellas, glasses, and binoculars would be needed for tourists’ convenience. Due to the challenging physical activities on the tours, some visitors will also need water bottles and personal-specific medications.

Figure 3: Use Final Proposal.

Land Use Proposal for "La María" Agroecological Farm

Legend
- Information Center
- Resting Zone
- Touristic Route
- Touristic Resources

Others
- "Crucero Hechoharia"
  Popular Council
- "La María" Farm
- National Central Road
- Walking Trays
- Rivers and Streams

Coordinate System: WGS-84
Author: Juan P. Cabrera Diaz
Year: 2019

Source: Prepared by the author.
5 CONCLUSIONS

The touristic use proposal of the Agroecological Farm "La María" allows a new opportunity to diversify economic activities with sustainable development principles.

The tourist modalities and activities that could be carried out on the farm were established, and the impacts that this could cause were evaluated. 76.92% of them will exert a medium incidence on the territory, and only 23.07% suppose a high influence. The impacts with the highest incidence are the increase in economic costs related to creating and repairing infrastructure for developing tourism activity on the farm and the increase in water, electricity, and food demand, in addition to solid and liquid waste generation.

The final load capacity corresponds to 24 tourists a day divided into three groups of eight people, with a visit of four hours for each group. This figure allows the tourist activity to be carried out without causing damage to the environment, allowing the sustainability of the analyzed resource.

The final proposal defines the practice of rural tourism for the farm with dissimilar modalities and activities, such as agrotourism and ecotourism. It is necessary to create infrastructure and acquire some devices to implement the proposal. These must be taken into account for their subsequent exploitation.
REFERENCES


