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ORIGINAL ARTICLE

Construction of green hostels based on biologically renewable construction materials and natural economic media network

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Abstract – With growing demand for sustainable tourism, ecotourism is a fast-growing branch of the tourism industry, where the design and management of destinations must take into consideration the quality, originality, ecological compatibility, aesthetical properties, educational value, and the evaluation of the carrying capacity of destinations. In this study, we propose a new type of artificial tourist attractions within educative ecotourism, the green hostels constructed entirely of natural materials in harmony with the environment. The here presented model may be adapted to any type of natural environments. Our model of green hostels is based on biologically renewable construction materials and natural economic media network, may constitute a new tourist product in ecotourism. Apart from the presentation of the concept, the study sought answers to the following specific issues: (1) Identify the target group of the planned tourist offer and its needs and estimate the potential number of direct recipients of the project and (2) Demand analysis, based on needs research in terms of developing the tourist offer in a given area, based on which it is possible to indicate the demand for a specific type of tourist product.

Keywords – ecotourism, ecological construction, renewable energy, carrying capacity, green hostel, natural economic media network, demand analysis

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INTRODUCTION

Contemporary trends in creating tourist attractions originate from the 3xE rule (entertainment, excitement, education). The tourism industry in our days with its dynamic development constantly needs new attractions and travel destinations for millions of participants who have already visited recognized facilities, were everywhere and there is not much left to impress them. Furthermore, ecotourism is among the fastest growing branches of tourism, which requires an interdisciplinary approach, embracing sustainable destination development with green technologies and renewable energy-efficient solutions, careful planning of ecological load based on the carrying capacity of touristic destinations and informal education with a great deal of adventures and experience-based learning. Thus, a rich and comprehensive tourist offer (and only such an offer has a chance to be noticed among thousands of others) should be based on searching for original attractions, and if they are not enough - on creating new ones. This creation necessarily concerns primarily culture and technology, as the number of natural attractions is limited and identified. Apart from recognized attractions, such as the Niagara Falls or the Monument Valley National Park, there

are many kitschy objects - museums of wax figures, houses filled with ghosts from famous horrors, objects full of dubious memorabilia, e.g. of Elvis Presley or fairy tale characters. The creation of artificial attractions as an alternative to traditional tourist destinations, taking over a growing part of the tourist traffic, is a phenomenon that is becoming more and more common (Kruczek 2014).

The initiative to build a green hostel is all the more positive based on biologically renewable construction materials and a natural network of economic media" based on the idea of fascination with the Polish mountain landscape and the natural and anthropogenic heritage of the region offering a real encounter. The visitors can experience the nature and culture of the place they are visiting. Przeclawski (1973, 1994) described it very synthetically, suggesting that tourism should be understood as "the whole phenomena of spatial mobility, connected with voluntary, temporary, change of place of stay, rhythm and living environment, and with entering into personal contact with the visited environment (natural, cultural or social)". In the given definition there are no tourist destinations, but in another place, Przeclawski

(1979) mentions, that the main psychological factors determining tourist trips are:

- the desire to go to a specific place (motives for learning about nature, culture, and social life)
- striving to meet emotional and aesthetic needs (establishing or renewing contact with nature, experiencing adventure or risk)
- striving to meet biological needs (regeneration and treatment, feeling the need for change)

The above factors are fully met by the assessed green hostel based on biologically renewable construction materials and a natural network of economic media. Other factors described by Przećławski (1979) are partially met by this building:

- the desire to leave one's place of permanent residence for a certain period (motives for leaving the social environment in the broad sense of the word, motives for leaving one's family or work environment, a motive for leaving one's place of residence);
- trying to spend free time outside the place of permanent residence with someone close (family, loved person, friends);
- the desire to make new friends, etc.
- the desire to be in line with social stereotypes (fashion);
- the desire to satisfy creative needs (creative work, work for the inhabitants of the areas visited, etc.);
- desire to practice a wide range of tourism (e.g. earning tourism, pilgrimage tourism, congress tourism).

MATERIALS AND METHODS

The research was carried out using two basic tools: desk research and face-to-face interviews. In this case, quantitative and qualitative research was triangulated.¹

The first group of tools (desk research) was based on publicly available data, especially from the Central Statistical Office. First of all, these data were acquired from the Regional Data Bank and messages, newsletters, electronic publications (including archival data) available on the GUS (Global University Systems) website.² Moreover, the research used all other possible information obtained from employees of the broadly understood tourism sector, guides, tourist attraction managers, tour operators, teachers, experts of the Polish Tourism Association. The analyses used their own experience, as well as previously developed reports from tourism research in Kraków and Małopolska for the years 2008-2017.

In the second group of tools, direct interviews in the form of a questionnaire were used (direct interview with the respondent conducted by an interviewer, using a form. The respondents were representatives of potential target groups as well as experts of the Polish Tourism Association.

¹ "In simple terms, the concept of triangulation means that the subject under examination is covered from at least two different points of view. Usually, such multiple approaches are achieved by using different methodological perspectives [that is, different research techniques]" (Flick 2011, p. 79). There are several ways in which the sharp distinction between qualitative and quantitative research can be overcome. The starting point for these attempts is

SOCIO-CULTURAL GROUPS AND THEIR NEEDS

Among the factors modelling consumer activity is the social group. A social group agglomerates from individuals not closely related to other communities. According to Rudnicki L. (2010) this is defined by the "principle of distinctiveness". Social groups are relatively "homogeneous" and their members share the same value systems, have the same interests and behave very similarly.

According to Rudnicki (2010), the social group is characterized by:

- relatively durable spatial communication
- a sense of bond (community) and separateness
- interdependence of group members (division of activities, cooperation);
- similarity of cultural characteristics, recognition of common patterns of values
- to occupy a similar position within the division of economic goods, the ladder of power, hierarchy, and prestige.

"Every consumer can belong to many social groups at once. This membership is due to a reason:

- membership (e. g. in a church, sports club, political party, civil organization, etc.)
- demo-social features (age, gender, race)
- aspirations
- negative attitudes (e. g. prejudices)" (Bosiaczki and Majchrzak 2006).

CHARACTERISTICS OF THE GREEN HOSTEL

The structure of the hostel (Fig. 1) and the screened labyrinth (Fig. 5) will be made natural materials available in the surroundings and live plants which during growth strengthen the elements of supporting structure and form partitions.

The care of the whole hostel will require forest and gardening techniques. However, the whole facility will continue to live and develop. As these plants will require a lot of water, the location must take into consideration natural access to the watercourse without the need for artificial irrigation.

Main building materials

Plants as complementary building materials are used even in previously lifeless grey concrete jungles of overpopulated cities to create some green surfaces (Chairunnisa and Susanto, 2018). In case of constructing an organic hostel, the goal of using natural, living building materials is to create buildings that, as an organic, living organism, are able to respond to various environmental impacts and cause no harm to the ecosystem. The buildings created in this way use the heat of the sun, the force of the wind, the cooling of the rain,

the slow assumption that "qualitative and quantitative methods should be seen as complementary rather than competitive" (Jick 1983, 135). This leads in a straight line to a combination of qualitative and quantitative research" (Flick 2011, p. 154).

² <https://www.globaluniversitysystems.com/>

the heat of the earth, so they can use all the energy sources that surround us dynamically.

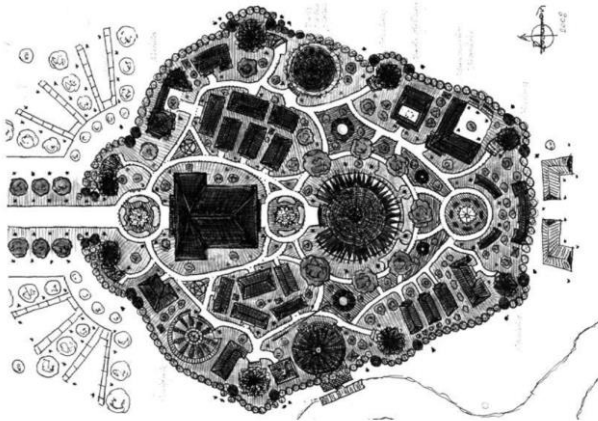


Figure 1. The structure of the site of the hostel: functional buildings integrated into a green labyrinth keeping in mind the ecology and compatibility of plants used. Drawing by J. Borkowski

Trees, and their derivative products, have been used in building construction around the world for thousands of years and they are increasingly used even in modern ecological building technologies (Ramage et al. 2017). We propose the following construction materials:

Low ornamental trees

Evergreen trees: fir, pine, yew

Deciduous trees: oak, beech, linden, birch. Willow is a particularly versatile construction material, widely used for a number of purposes, such as river-bank stabilization (Watson et al. 2007), green garden constructions (Danks, 2002) and even for bio energy purposes (Keoleian and Volk, 2007). The following willow species are particularly suitable for wicker and fast renewable building material:

- Purple willow - *Salix purpurea*
- Sand dune willow - *Salix cordata* 'Americana' (*S. americana*),
- Basket willow - *Salix viminalis*,
- Almond willow - *Salix amygdalina*,
- Purple willow - *Salix purpurea*.
- European violet willow - *S. daphnoides*,
- Goat willow - *S. caprea*,
- Holme willow - *S. dasyclados*,
- White willow - *S. alba*,
- Bay willow - *S. pentandra*,
- Crack willow - *S. fragilis*,
- Grey willow - *S. cinerea*,
- Bitter willow - *S. eleagnos*.

Boulders, rocks and stones

Auxiliary building materials:

Evergreen shrubs: Privet (*Ligustrum sp.*), boxwood (*Buxus sp.*), juniper (*Juniperus sp.*)

ceramics, glass, horse ropes, ropes – hemp

Green infrastructure:

Watermill - micro hydroelectric power plant

Windmill - micro wind power plant

Biological wastewater treatment plant (as irrigation facility, linked to willow (*Salix sp.*) farming for further purification, building material, and biomass production)

Biofuel (willow pellets)



Figure 2. Ecological dwellings. Constructed in harmony with nature and equipped with all necessary amenities inside. Drawing by J. Borkowski

THE PROVISIONS OF THE GREEN HOSTEL

A new and fully autonomous product, which is a green hostel based on biologically renewable construction materials (Fig. 2) and a natural economic media network can provide a diverse supply for multiple demands³ broken down into domestic and foreign visitors. The study takes into account the WTO recommended disaggregation of inbound traffic for tourists (with at least one overnight stay) and 'one-day visitors'.

- Education – staying in non-urbanized spaces,
- Entertainment - a place for socializing,
- Relaxation - a labyrinth offering enclaves, green niches, natural aromatherapy,
- Biological regeneration - treatment with air baths in the chalet rooms and its labyrinth paths, through the natural complex SPAAA/SPAT = Aero- Aroma - Aquam - Spa⁴, as inhalation places,
- A psychosomatic effect - a component of transcendence and contemplation of a special place which is a unique complex of a green hostel with its unique interior design and panoramic views.

³ A demand is a quantity of goods that buyers want and can buy at a given price within a certain period of time. An increase in price causes a decrease in demand for a given good, and a decrease in price causes an increase in demand for that good (ceteris paribus). Demand and Taste

http://coin.wne.uw.edu.pl/tkopczewski/MIKROsite/Popyt_i_podaz.htm

⁴ SPAT Original author's concept: Jakub Antoni Borkowski, Krzysztof Paweł Borkowski meaning natural complex SPAAA Aero- Aroma - Aquam - Spa / SPA3/ SPA#/ SP3A/ SPA THREE#TREE / SPAT © [sanus per aero, aroma, aquam or sanitas per aero, aroma, aquam, which means "to health by air, smell and water # among trees"].

- Self-realisation - Eco-educational pavilions, created with recycled and repurposed materials, revealing the potential of architecture to adapt to environmental needs.

The target group of visitors of the green hostel are people who are curious about life, seeking silence and at the same time an answer to the curiosity appearing in their minds or in the social space. Questions include “what is it, how is it there, how does it work, what you see, what you hear, is it true that ...” and so on. Such a person, obtaining true answers to the questions that concern him or her, raises his or her level of knowledge, which generates a socially desirable toning effect with a didactic and educational profile.



Figure 3. Thematic constructions, such as Hunter Guild serve both entertaining and educational purposes (‘edutaining’). Drawing by J. Borkowski



Figure 4. Thematic constructions with adventure elements: The Thieves’ Guild. Drawing by J. Borkowski

PRO-ECOLOGICAL EDUCATION

Education is an essential tool in creating the right environmental attitudes in society. The popularization of knowledge about the protection of natural resources and the constant raising of ecological awareness take on importance

in areas of exceptionally valuable natural and cultural values (Bonnett, 2007). Active further education activities should involve all visitors, the local community, teachers, pupils and youth.

The continuing popularity of tourist stays in National Parks as a tourist destination causes increased human pressure on protected ecosystems. As the traffic on the trails as the number of visitors with insufficient knowledge of the visited area increases. An important source of information in this respect may / should be provided by a green hostel based on biologically renewable construction materials and a natural economic media network.

The location of the hostel itself will make tourists aware of the uniqueness of the place they are in. The workers (residents) of the hostel will have the opportunity to make the visitors aware of the advantages of the place (Ilina et al. 2019). The experts of the Polish Tourist Association see the green hostel designed based on biologically renewable construction materials and a natural network of economic media as an opportunity for the whole system of National Parks by keeping a large number of people who want to visit a given National Park only in this place and by satisfying these potential "viewers" who are not tourists for a particular season, without going deeper into the trails of the National Park (some of which might be restricted areas such as nesting places for birds, strictly protected sites of rare and endangered plant and animal species).

At the same time, a properly functioning hostel has a chance to play not only the role of an "agglomerating dam of inquisitive and playful people", but also to play an initiation and preparation role to meet with nature for those who, however, decide to wander along the trails of a given National park. How much practical education of tourists entering national parks or reserves is needed can be proved by the list of questions, which the employees of the Bieszczady National Park met during the scientific research of University College of Tourism and Ecology on the influence of tourist anthropo-pressure on the resources of the park. Many of these questions may indicate the specificity of contemporary visitors. The list below shows, for example, what kind of questions the employees of the information and cash point in Brzegi Górne met with (Sidor, 2017).

The most unusual questions asked by tourists – interesting, because these questions have nothing to do with the touristic attraction – but a good service provider should be prepared even for petty or unusual wishes from their clients:

- Do you have sugar?
- Will I get a map of Krakow from you?
- Do you have a thimble with the inscription Bieszczady?
- Which is the right way to Wetlina Carinsky?
- When will it rain?
- Will my child be able to climb this mountain?
- Why does no one clean up these wet leaves from the trails?
- Are there any tickets here?
- Where do you go from here?

- Do you have bear bells? (Referring to the commercial product called "Hear Me Bear Bell" that alerts nearby animals of the visitor's presence).
- Do you have socks?
- Are there cups with the Pope?

The environmental education plan for each National Park includes teaching about the natural values for which a specific National Park was created. Through its activities, the Park also promotes the cultural values of a given part of the country. It shows the traditional links between nature and human and the history of the area. The assumption is that effective education should lead to a balance between social needs (consumer use of the Park area) and the need to protect nature, to accept a different way of management, access and even living in a protected area. It also enables the acquisition of knowledge and convinces about the justification for including this part of the National Park in the highest form of nature protection.



Figure 5. Both educative and entertaining is the green labyrinth. Drawing by J. Borkowski

A green hostel based on biologically renewable construction materials and the natural network of economic media is an important and synergic part of the Security Plan developed by each park. At the same time, it will effectively transfer tourist traffic in a particular Park, keeping it for a long time in one place in a small strictly controlled area.

From a practical point of view, the most important measures are those implemented precisely in this spatially limited area, which will be protected not by the law on National Parks but by property law. To be a product that is attractive to tourists and at the same time competitive not only in terms of price, but the owner of the facility must also take care of the correct standard of protection for the flora and fauna of its area, as well as the phytosanitary conditions associated with the presence of a very large number of visitors in the hostel. This place will allow visitors not only to get to know the environment on their own but enable them to broadly understand the education and popularization of botanical knowledge. With the constant development of the hostel and enrichment of plant collections, exposing new species and varieties of trees and shrubs (Tamang et al. 2019) will increase its attractiveness and you will be able to admire the diversity and beauty of plant forms, not only relax but also learn.

In the long-term perspective, it should be assumed that the number of visitors to the green shelter based on biologically renewable construction materials and natural economic media network will remain between 5 - 8 thousand people, including 200 school trips per year. The number of overnight stays in the hostel on an annual basis, of which by 4 months in extreme conditions, about 14 thousand people (person/night) are expected. In the perspective of the following years, it should be assumed that the attendance will start to increase rapidly from 6 to 20 thousand visitors, while in the second year of the hostel's operation from 24 to 52 thousand visitors, as evidenced by the growing interest of the society in nature and the need for direct contact with nature. In the fifth and sixth year of operation of the "green hostel based on the biologically renewable construction materials and natural economic media network" the number of organized tours will increase to around 500 per year and the total number of visitors/visitors will reach around 50-60 thousand. This perspective imposes new obligations on creators to prepare and make available a green shelter based on the biologically renewable construction materials and a natural network of economic media, both for visitors and residents. This will be achieved by increasing the area and new plant species marked with multimedia plates with names and characteristics of plants, folders and guides, preparing resting places and providing eco-friendly parking places with the possibility to access caravans and campers to the eco-network of economic media. In the green shelter, the staff-residents will provide advice and information on the know-how of the "green shelter based on biologically renewable construction materials and a natural network of economic media" including plant designation, their habitat requirements, propagation methods, care, protection, the suitability of specific plants for the construction of the visited facility, etc.

The increase of the region's attractiveness translates directly into the economic activity of the region's inhabitants. The service sector (accommodation, catering, transport, etc.) is developing, thus increasing the level of tourist reception. This process has its benefits, but also certain threats. That should be the subject of constant interest of the green hostel manager

and the management of a particular National Park. To mitigate the effects of seasonal overloading of the area, the management of the NP should conduct a dialogue both with the owner of the hostel and with the local community which benefits materially on its existence, however, intervening only in conflict situations, while cooperating in prevention activities, and perhaps even initiating them.

Although the National Park's regulations are always made available in a legible form at every information and checkout point, one can be tempted to say, based on the private observations, that not everyone takes the time to read it. For the "real tourists", most of the rules placed there are natural. Unfortunately, there are also visitors with strongly negative social attitudes. Among the so-called "pseudo-tourists" there are visitors who think "if I pay, I require". Even if the fee for entering a protected area, as in the case of national parks, is symbolic, they litter the area in the belief that since there is no bin, the Park is obliged to clean up after them. It is also difficult to enforce the ban or suggestion to smoke only on the tobacco route.

At this point, it is worth to emphasize the role of possible education during the stay in the Green Hostel. A collection of orders and the prohibitions on the notice board in the park do not appeal to certain groups of people. The Park's communication with visitors lacks pictorial associations which would clearly and playfully build a sense of responsibility for those entering the trail. An attempt at marketing the personification of nature could increase public awareness of the dangers posed by man. This approach to preventive education is not only for the young generation but also for the newly created green hostel based on biologically renewable construction materials and a natural economic media network.

Based on biologically renewable construction materials and a natural network of economic media, the hostel can generate the gravitational forces of tourist traffic, i. e. attract completely normal incoming tourist traffic: holiday, weekend. However, and most importantly, it is adapted to different consumption behavior than in normal facilities. This is about the organization of contemplative and recreational stays on the borderline of biological regeneration.

WORK IN A HOSTEL

The project of preparing and implementing the whole process of creating such a shelter is not very complicated. However, it is a large undertaking, with many ideas for reducing the foreseeable costs of construction and its operation.

Firstly, it is important to create a system of original beneficiaries of this complex, the residents. This will be an initiative for all those who would want to work on the construction and operation of the hostel. These people, not being anonymous, are subject to a specific (customary) local law, which defines the rules of conduct, duties and dress

code⁵. These people should create the basis for the functioning of the shelter. Goods and services produced by the local community and offered to visitors in the hostel can also be offered and sold outside the hostel e.g. in shopping malls in large cities, being an excellent form of promotion of the green hostel, having an automatic eco-label. In this way, every employee of the hostel and their family will have a chance to be employed. and will have reason to perform his duties reliably.

SURVEY OF POTENTIAL CUSTOMERS AND TOURISM EXPERTS

Pilot surveys were carried out on the opinions of the potential clients of the green hostel in December 2018 and January 2019 in Galeria Krakowska, Galeria Kazimierz and Galeria Bonarka (shopping centres in Kraków), as well as in secondary schools (teachers, students), universities (teachers, students) The respondents were asked to fill a questionnaire, after a prior presentation, about the idea and offer of the green shelter, its programme, function, as well as its prospectus with graphic visualization. During the survey, 317 questionnaires were collected. After checking the completeness of the questionnaires, 288 questionnaires were qualified for further analysis.

Characteristics of respondents:

Gender of respondents:

Women	208
Men	80

Age of respondents:

Below 20 years	48 people,
21 to 24 years	148 people,
25 to 30 years	38 people,
31 to 40 years	32 people,
Over 40 years	22 people.

RESULTS OF THE SURVEY

The results of the survey show some differences among the respondents regarding their age and gender, mainly when the questions were related to the attractiveness of the green hostel and the environmental awareness in terms of structure and renewable green construction materials. Although the overall opinion of the green hostel is overwhelmingly positive, women are usually a little more positive than men while the younger generation is more attracted to those attractions, which offer some elements of entertaining adventures.

Answers to the questions

Table 1. Please indicate which activities would be interesting to you in the newly created green shelter based on biologically renewable construction materials and natural

⁵ The way of dressing a specific group of employees, assigned by the rules of the green center.

economic media network near the National Park ("Yes" - interesting, 'No' – not interesting).

Green hostel	No	Yes	Total
Women	0.00%	100.00%	100.00%
Male	12.82%	87.18%	100.00%
Average	3.50%	96.50%	100.00%

Table 2. Ranking of YES answers for the attractiveness of a green shelter based on biologically renewable construction materials and natural economic media network by age group [share of indications].

Age groups	Restaurant chalet PANORAMA
Age	%
≤20	17
21-24	52
25-30	12
31-40	12
40≥	7
Sum	100

Table 3. Attractiveness preferences for the elements of the hostel based on biologically renewable construction materials and a natural network of economic media by age group [percentage of indications]

Preferences of age groups	Green hostel
Age	%
≤20	1
21-24	0
25-30	-2
31-40	0
40≥	0

Table 4. Evaluation of the attractiveness of the hostel elements based on biologically renewable construction materials and natural economic media network by age group [percentage of indications]

Age groups	Green hostel
Age	%
≤20	100
21-24	97
25-30	84
31-40	100
40≥	100
Sum	97

Table 5. Attractiveness preferences for a green hostel based on biologically renewable construction materials and natural economic media network by age group [percentage of indications]

Age groups	Green hostel
Age	%
≤20	3
21-24	1
25-30	-12
31-40	3
40≥	3

A green line with a negative value means the age group of 25-30 is the least interested (not preferable) in staying in a green hostel. It looks likely that they prefer to use the "normal hostel" to enter the proper routes of the National Park and a chose a natural viewpoint to look at the sights and consume their own "backpack-food". It seems that the filtering function of the tourist stream assumed in the project has been confirmed. People providing values around zero and on a slight plus (non-negative) are willing to use the services of this facility. This means for the green hostel manager and the investor to either profile the offer strongly towards this age group (programmatically, e. g. music or menu, night conventions, etc.) or to find other solutions for the young.

Table 6. Would such a green shelter based on biologically renewable construction materials and a natural economic media network be an interesting tourist attraction and should it be built?

-12% was deducted from the result of the YES indications for the age group 25-30, i. e. 84% of the final result of 97%.	Restaurant in the green hostel
20	100%
21-24	97%
25-30	84%
31-40	100%
Pow.40	100%
Final sum	97%

Regarding the reasonableness of undertaking a possible investment in the described location, 100% of respondents was supportive (both genders). 288 respondents unanimously (with the same thought) were in favour of building a Green Hostel based on biologically renewable construction materials and the natural network of economic media regardless of gender, age and education, recognizing herewith the legitimacy of investing in the given location.

As can also be seen from the preference table, the respondents dedicated this facility: "A green shelter based on biologically renewable construction materials and a natural economic media network", describing young people up to 24 years old as single or students. This may be due to the tradition of multi-

generational academic youth ownership precisely in the top mountain huts.

Table 7. What can encourage people to visit a newly established hostel? Total quantitative indications.

What can encourage tourists to visit the green hostel?	Number of indications
Attractive offer (the offer besides the menu) and its price e. g. theme evenings, animations, Christmas and weekend attractions etc.	122
Curiosity about the place and offer (menu)	86
Good publicity and a reasonable price to enter the labyrinth because there was a barrage of information as to whether you can enter the labyrinth for free or whether you have to pay.	48
Communication accessibility of the place (time of arrival, possibility of parking, etc.)	2
(Empty) No answer	30
Final sum	288

Table 8. What is the target group for a newly established hostel? Total quantitative indication.

Target group	Number of indications
Young people, students, singles	164
Organized groups	40
Residents of the area	30
All young people in spirit	20
Parents with children, schoolchildren	10
Families with children	10
School groups	6
Adults	6
(Empty)	2
Final sum	288

Organized groups of hikers with a field guide along the trails of national parks are likely to have such an attraction in their hiking plan, as an alternative to a break in the hike, with the possibility to take advantage of sanitary conditions and facilities, a café menu, a shelter in case the weather breaks, a viewing point, and the attractiveness of the construction material. Also, inhabitants from the area will appear in the "green shelter" guided by ordinary human curiosity, as well as because it can be an attractive place to meet other people, not necessarily neighbors. Probably during the periods of wedding parties and other events, the facility will also enjoy great interest from the local community.

The target group of the "green hostel based on biologically renewable construction materials and natural economic media network":

1. Young people, students, singles
2. Organized groups
3. Residents of the area

Table 9. Alternative target groups for a "green hostel based on biologically renewable construction materials and natural economic media network."

Category	Number
Youth 18 – 25 years old, school trips	50
Youth, adults (singles)	44
Students young singles	26
Organised groups	24
Company integration, motivation and business events	22
Company integration trips, social fund	20
Adults	18
Young couples peer	12
Families with children	12
Active mountain tourists	10
School groups	10
Persons over 60 years of age	8
Retirees	6
Rehabilitation groups	4
Persons with an income exceeding PLN 4,000 per person	4
Rich customers renting an exclusive property	2
Preschool children	2
Cyclists	2
(Empty)	12
Final sum	288

Needs identified of the target group:

1. Active leisure activities
2. Education, common entertainment, nature
3. Gastronomy, physiology, safety
4. Eating, resting, accommodation
5. Landscapes, active recreation
6. Gastronomy, education, entertainment
7. Nice, safe time spent with the family
8. Adventure experience communing with nature, recreation
9. Rehabilitation, education, meeting with nature
10. Entertainment, education
11. Entertainment. Education. Common leisure time
12. Diversity of offer, educational offer, good catering and leisure facilities (for families with children,
13. Variety of offers, sightseeing, views, gastronomy
14. Spending your free time outdoors.
15. Meeting with nature, curiosity
16. Meeting with nature, leisure
17. Escape from everyday life, "adrenaline"

18. Impressions, security, adventure
19. Spending free time together. Entertainment and education
20. Resting curiosity about the place
21. Leisure and entertainment in the open air

Alternative target groups for a "green hostel based on biologically renewable construction materials and natural economic media network":

1. Youth 18=25 years old, school trips
2. Youth, adults (singles)
3. Students young singles

Needs identified of an alternative target group:

1. Adrenaline in a peer group
2. Rich gastronomic offer, possibility to organize closed events, safety, anonymity
3. Evening programme
4. Relaxation, recreation,
5. High standard services
6. Supplementing the stay with possible mountain tours
7. Adrenaline-filled recreation meeting with nature
8. Fun, entertainment, leisure activities, adrenaline

CONCLUSIONS

The study identifies the target group of the offer's recipients as well as an alternative group for which a product offer can be strategically prepared in a green hostel as an educational and nature center. The needs of the target groups and the scope of needs were also demonstrated. The potential number of direct recipients of the offer in the first year of operation was estimated from 6 to 20 thousand visitors and in the second year of operation of the hostel from 24 to 52 thousand visitors.

An analysis of the demand for the offer was carried out and determined based on own research and secondary data, concluding that the newly created "green hostel" significantly complements the tourist offer in the vicinity of each National Park, creating additional opportunities for gravitation and reception of part of the tourist traffic flow that so strongly frequents Kraków and Małopolska.

From the analysis of the needs of the tourist traffic flow flowing out of Cracow Towards the south of Poland, it appears that we are not making use of approximately 50% of its potential possibilities to generate visits by foreign tourists to the southern region of Małopolska. That is why the investment under analysis, a new 'green hostel', has a chance to significantly expand the range of places attractive to foreign and domestic tourists in Małopolska.

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