Development of Universitas Padjadjaran as Educational Tourism Destination

Muhammad Iqbal Maulana^{1*}, Rifki Rahmanda Putra², Raden Willy Ananta Permadi¹

¹ Universitas Padjadjaran Bandung, Indonesia

² Jurusan Teknologi Infrastruktur dan Kewilayahan, Institut Teknologi Sumatera, Lampung Selatan

*muhammad18437@mail.unpad.ac.id

Abstract: Discussion about educational tourism, not only about student exchange programs or study abroad activities. However, the packaging of education-based tourism activities in a destination is also included in the terminology of educational tourism. This study aims to identify the potential of educational tourist attraction and develop alternative educational tourism programs at UNPAD, Jatinangor. This study uses a method with a qualitative approach, with primary data collection techniques through field surveys and in-depth interviews with the management of UNPAD. Secondary data obtained through literature studies related to previous research and local government policy documents. The collected data is processed using descriptive analysis techniques. The study found that there is a potential educational tourism attraction in the form of 16 faculties which are divided into concentrations of natural and social sciences. Each faculty is supported by adequate amenities and accessibility. The educational tourism development program at UNPAD, Jatinangor is divided into four main programs, including educational tourist attractions development, human resources development, activities development and marketing.

Keywords: Educational tourism, Universitas Padjadjaran (UNPAD), Tourism development.

1. Introduction

Greater Bandung area or often called the Greater Bandung Metropolitan Area is a Special Region Development Area which includes the City of Bandung, Bandung Regency, West Bandung Regency, Cimahi City, also Sukasari District and Jatinangor District in Sumedang Regency (RTRW of West Java Province in 2009-2029). The initial concept of the development of Metropolitan Bandung Raya is to advocate the acceleration of development in West Java by raising potential advantages and the concept of development that is carried out "Metropolitan Bandung Raya as a modern metropolitan with leading sectors of urban tourism, creative industries, and the development of science and technology (Science, Technology, and Art)" (West Java Province - Metropolitan Development Management, 2013).

Sumedang Regency is one of the regencies part of Greater Bandung, where the boundaries included in Greater Bandung are only two districts namely Jatinangor and Sukasari Districts. Based on the West Java Province Tourism Development Master Plan 2015 - 2025, Jatinangor District, Sumedang Regency, which is part of Greater Bandung, has its territory set on the agenda of the Provincial Tourism Strategic Development plan for the Bandung Creative Tourism Area and surrounding areas, where Jatinangor District is one of the attractions primary tourism with the theme of Jatinangor Education Tourism Area and Wooden Puppet Crafts in Pemulihan District. Same thing with the Regional Spatial Planning of West Java Province 2009-2029, Jatinangor District is included in the Provincial Strategic Area Plan (KSP), which is a means of socio-cultural interests, namely the Jatinangor Education Provincial Strategic Area Plan.

The designation of Jatinagor as a city of higher education has been planned since the 1980s in accordance with the concept of Greater Bandung Development Area (PWP) [1]. This area is classified as a middle city with housing, a trade and service centre, an education and tourism centre that has a function as a local growth generator in structuring the Bandung Metropolitan Area. To support this function, based on the Decree of the Governor of the Level I Regional Head of West Java Number: 583/SK-PIK/1989 Jatinangor is designated as a tertiary education area. Then, four universities were moved from Bandung to Jatinangor, namely the Indonesian Cooperative Institute (IKOPIN), UNPAD, the Government College of Domestic Affairs (STPDN) and Winaya Mukti University (UNWIM) which are now in the form of becoming ITB Campus II.

This region wants to adopt the concept of higher education areas abroad, such as Edinburgh, Tsukuba, and Stanford. UNPAD itself is one of the pre-eminent educational tourism attractions that are well known internationally and the region is included in the Bandung Urban and Educational Tourism Area [2]. UNPAD has been established since September 11, 1957, with locations in Bandung and spread over 13 different locations. This causes difficulties in coordination and capacity development. So to improve productivity, the quality of graduates, and the development of physical facilities / infrastructure, UNPAD's sixth Rector, Prof. Dr. Hindersah Wiraatmadja since 1977 began pioneering the procurement of land of former plantations in Jatinangor which he initiated into the "Manglayang Academic City" to carry out the construction of the UNPAD campus and starting in 1983 UNPAD has gradually moved its educational activities beginning with the Faculty of Agriculture and the rectorate building on January 5, 2012. Based on the Decree of the Governor of West Java Number: 593/3590/1987, the Jatinangor UNPAD area has an area of around 3.285,5 hectares. One reason the plan was initiated was because it was inspired by the Tsukuba Academic City owned by Japan.

Based on the results of the pre-research on May 27, 2019, at least the basic elements that make UNPAD's potential as an educational tourism attraction in accordance with established policies are the potential of tourist attractions such as a broad campus and a beautiful regional landscape because it is at the foot of Mount Manglayang with views Gunung Geulis landscape, has 16 faculties divided into social sciences and natural sciences, even UNPAD has a pilot laboratory area in Ciparanje starting from dairy farms and beef cattle, rabbit cages, production garden areas, and the Environmental Management Office which has organic waste processing workshop. Then the accessibility element which is not too far from the tourist gateway that enters the Province of West Java is Bandung, which can be reached via the Soekarno Hatta bypass and also the Purbaleunyi Toll Road, supported by inter-city transportation such as Damri and other City Transportation. In fact there are also transportation such as *Ojeg* and also *Odong-odong* campus which can take you to any building or faculty at UNPAD. There are also supporting amenities such as hotels, guest houses and apartments in a radius of 500 meters to 2 kilometers from the campus area.

UNPAD also has its own history, especially related to Sundanese history and has a good image at the national or international level. According to QS Wold University Rangkings in 2018, UNPAD was in the position of 651-700 out of 1,233 universities in 151 countries in the world (news.okezone.com, accessed on 23/6/19). Then at the national level UNPAD was ranked 9th in the top 100 version of non-vocational Indonesian universities in 2018 by the Ministry of Research, Technology and Higher Education of the Republic of Indonesia.

Where if the potential of UNPAD's educational tourism attractions can be realized, it does not rule out the possibility that these attractions can support the development of educational-based tourism that is superior to the Greater Bandung metropolitan education tourism area. According to Ritchie [3], changes in the tourism industry show that the element of education is an important part of the experience of tourists when traveling. Educational tourism itself can be defined as tourism activities carried out by tourists with their primary or secondary motives for getting education and learning, such as study tours to and or from schools or universities, exchange student programs, which can take the form of individual trips or formal trips that are organized [4]. However, this potential is still inversely proportional when viewed from the existing conditions related to tourist visits to Sumedang Regency compared to other districts or cities in the Greater Bandung Tourism Destinations (Table 1).

			•	
Regency / City	Foreign Tourists	Domestic Tourist	Total	
Bandung Regency	578.321	3.385.860	3.964.181	
Sumedang Regency	352	427.132	427.484	
West Bandung Regency	480.531	1.405.920	1.886.451	
Bandung City	432.271	1.431.290	1.863.561	
Cimohi City	251	1 272	1.722	

Table 1. Tourist Visits to Tourism Destinations in Greater Bandung 2017.

Based on Table 1, it can be seen that the competitiveness of Sumedang Regency where Jatinangor is located when compared to other regencies or cities in the Greater Bandung Tourism Destination is still inferior in terms of tourist visits. Although the tourist visit data is superior to Cimahi City, the comparison is still far compared to other regencies or cities in Greater Bandung. This shows disparity or inequality that may be caused by the uneven development areas in Greater Bandung.

According to Ritchie and Crouch [4], the ability of a destination to compete with other destinations can be seen from the increase in tourist expenditure, a factor that can attract the attention of tourists to visit a destination (tourist attraction) by various ways both improving the quality of the destination, good management, innovations made and the uniqueness of the destination. The core and attractor component (tourist attraction) describes the main elements of the attractive destination. This factor is the key, motivator, or attracting tourists to visit the destination [5]. Therefore, to make Sumedang Regency (Jatinangor) a competitive destination in the Greater Bandung Metropolitan Area, one of the steps can be taken by developing a new tourist attraction, namely UNPAD Jatinangor as an educational tourism area. Because with the development of tourist attractions, in addition to providing benefits for tourists and managers, the development carried out is also able to improve the standard of living of the local community through the economy obtained from tourism activities in the region, so that the existing development can be done to maximize profits and minimize problems [6].

Even in England, precisely in Scotland there is the University of Glasgow which has a campus tour program with a self-guided tour program and also guided tour with the theme of interpretation related to the architecture and history of the campus. Then there is Emory University in the United States which has a campus walking tour program related to the theme of forest and water interpretation in the campus area, environmentally friendly buildings, and campus history [7]. However, there is no specific research that examines Jatinangor UNPAD as an educational tourism area along with alternative development programs.

In developing UNPAD Jatinangor as an educational tourism area in accordance with the policies set and potential previously mentioned, of course it needs systematic and holistic planning so that the results can be sustainable. So based on this background this article aims to identify the potential of educational tourism in UNPAD and also plan alternative development programs to improve the competitiveness and welfare of the people in the region.

2. Methods

In this research, a survey method with a qualitative approach was used. According to Sugiyono (in Shiddiq [8]), qualitative research is a research method based on the philosophy of postpositivism, used to examine natural object conditions, (as opposed to being an experiment) which states that researchers are key instruments, sampling data sources is done purposively and snowball, collection techniques with triangulation (combined), data analysis techniques are inductive / qualitative, and the results of research emphasize more meaning than generalization.

In qualitative data collection techniques according to Idrus [9], everything that is obtained from what is seen, heard and observed is therefore the researcher himself who acts as an instrument or commonly referred to as a human instrument. When viewed from the data source, the data collection can use primary sources and secondary sources [10].

Primary data in this study were obtained through field observations by referring to the theory of the tourism component (3A) and unstructured interviews to provide opportunities for researchers to develop research questions to mandalam to key informants (Office of Public Communication Unpad and Technical Implementation Unit of Campus Environmental Management). While secondary data obtained through literature and policy studies.

Qualitative data analysis is inductive in nature, namely an analysis based on the data obtained, then developed into a hypothesis [11]. According to Miles and Hubermen (in Idrus [9]), qualitative data management is called an interactive model consisting of 3 things, namely data reduction, data presentation and drawing conclusions / verification to build general insight. Researchers themselves use data analysis through the stages of Miles and Huberman's surface.

3. Findings and Discussions

A. Educational Tourism Potential of UNPAD Jatinangor

1) Attraction: In this case what is meant by the potential of the existing tourist attraction is the attraction of special interest tourism that is the attraction of educational tourism, which in accordance with the initial

purpose is to make UNPAD Jatinangor an educational tourism area in Metropolitan Bandung Raya. The resources identified as potential tourist attractions are (Figure 1):



Fig. 1. a) Faculty area, b) Rectorate, c) Sports area, d) Animal husbandry laboratory (Pimary Data, 2019).

The 16 faculties of UNPAD are divided into two sciences, namely the area of the faculty of social sciences and the faculty of natural sciences where this potential is intended to be a tourist destination distribution point with the main study tour activities related to the introduction of the faculty or the intended majors. The 16 faculties are divided into two sciences, for the social sciences themselves which are as follows:

Social Sciences (IPS):

- 1) Faculty of Law
- 2) Faculty of Economics & Business
- 3) Faculty of Cultural Sciences
- 4) Faculty of Social & Political Sciences
- 5) Faculty of Psychology
- 6) Faculty of Communication Sciences

Natural Sciences (IPA):

- 7) Faculty of Medicine
- 8) Faculty of Mathematics & Natural Sciences
- 9) Faculty of Agriculture
- 10) Faculty of Dentistry
- 11) Faculty of Animal Husbandry
- 12) Faculty of Nursing
- 13) Faculty of Fisheries & Marine Sciences
- 14) Faculty of Agricultural Industrial Technology
- 15) Faculty of Pharmacy
- 16) Faculty of Geological Engineering

One example of a potential tourist attraction that can be a highlight on the IPS path is the language centre of the Faculty of Culture (FIB). Where the target of tourists is not only for domestic tourists who need foreign language knowledge, but also does not rule out the possibility of foreign citizens who want to learn Indonesian language and culture even Sundanese which can be fulfilled at the FIB language service centre.

Then the potential of tourist attractions that can be a highlight on the natural science path include the animal husbandry lab owned by the animal husbandry faculty (FAPET). Where tourists who are biased towards something that smells of biology, one of which can be visited is the test farm area or FAPET animal husbandry lab where it can see the results implemented by students of the animal husbandry faculty in their lectures, raising cattle and other livestock for research purposes. field.

Whereas in the Rectorate area, there are several bale available for meetings and reception for public visits, with an interesting architectural condition of the building if interpreted at the same time as an iconic building in UNPAD Jatinangor. Even in some corridors, there are several displays related to UNPAD's historical interpretation, interpretation of the UNPAD logo, the concept of the rector's building shape, and also mysterious stones that are said to be immovable (Figure 2).



Fig. 2. Attraction of Unpad rector's area (Primary Data, 2019).

2) Accessibility: Then there are sports areas that can support sports tourism activities at UNPAD starting from the Soccer Field which has a jogging track, Basketball Court, Multipurpose Gor (Volli, Badminton Futsal) which can be opened to the public. While the Pilot Laboratory area in UNPAD has a variety of interesting attractions, ranging from the pilot plantation area, various animal husbandry areas ranging from cattle, rabbits, goats, to the area of organic waste processing that can be appointed as an educational tourism attraction with the theme of environmentally friendly tourism related to organic waste treatment (Figure 3).



Fig. 3. Attraction of Ciparanje UNPAD Laboratory Area [12].

If using a private vehicle, especially from the direction of the city of Bandung can use the line via Soekarno Hatta or enter the Purbaleunyi Toll with a distance of approximately 20-30 Km. When using public facilities such as buses, Damri fleets are available from the Dipati Ukur Unpad Campus with units that pass through the Purbaleunyi Toll Road and Units that pass through the Soekarno Hatta road.

As for Damri from the Leuwi Panjang Bus Terminal which is going to end at Cibiru then continue using other public transportation. Based on existing policy documents, there will be reactivation of the Rancaekek-Jatinangor-Tanjungsari Urban Railroad.

3) Amenities

a) Campus transportation facilities: There are bicycle rental and campus halls (Figure 4) totaling 16 units with two waiting stops and two different crossing lanes with a capacity of approximately 12 people per car. Where facilities are supported by bell technology for stop signs and QR Code to track the whereabouts of odong-odong in real-time. For free of charge for internal or external where this vehicle can directly take each faculty through which it passes.



Fig. 4. Transportation facilities on campus (Primary Data, 2019).

- b) Banking facilities: The banking facilities are in the form of an ATM Center center which is located not far from the campus transportation facilities. Where ATM machines from various types of banking companies are already complete in them.
- c) Meeting room facilities: The meeting room facilities at Unpad Jatinangor are divided into several rooms with the name Sundanese. The first is Bale Sawala, located in the Rectorate Building with a capacity of 238 people, sound system, projector, air conditioner used for the academic community. Then there is also Bale Rucita and Bale Santika Auditorium with a capacity of 248 people intended for academic civitaas as well.
- d) Accommodation facilities: There are various dormitory in Jatinangor Unpad Campus (7 dormitory), however it is not yet open to the public but only facilitated for the academic community. Whereas potential accommodations for tourists can be found in three-star hotels namely Bandung Giri Gahana Golf & Resort, Appartel Taman Melati Jatinangor, Sahid Skyland City Jatinangor, Pine Wood Apartment, Easton Park Jatinangor, La Fasa Syariah Hotel, Puri Khatulistiwa, Yokotel Hotel Jatinangor, and Jatinangor Hotel & Restaurant where the accommodation is ranging from 400 meters to 2 km from the Unpad Jatinangor Campus.
- *e) Clean Water Facilities:* There is Jalatista (figure 5), which is ready-to-drink tap water which is one of the facilities provided by UNPAD, which is the technology used by UNPAD to facilitate the public and academic community to reduce plastic bottle waste. Where Jalatista itself consists of 11 points scattered in UNPAD Jatinangor.



Fig. 5. Jalatista [12].

B. UNPAD Jatinangor Educational Tourism Development Program

1) Educational tourism attraction development program: Based on the identification of the potential of educational tourism attractions in UNPAD, the determination of primary tourism attractions is based on existing conditions in the field. Where most of the visitors who attended were from students who had an interest in further education at UNPAD (results of an interview with the Office of Public Communications, 2019). Then the primary tourist attraction that can be determined is the Faculty Area which is spread into 16 points, with the theme of study tours, namely the designation of traveling around using odong-odong to provide general information related to the educational environment at UNPAD, facilities at each faculty, and concentration of departments at each faculty.

Then the secondary tourist attraction that can support the study tour activities is the UNPAD Rector's Area with the theme of historical and architectural tourism. Then the UNPAD Sports Area with the theme of sports tourism. Followed by the Laboratory Area of animal husbandry, plantation and processing of Ciparanje

organic waste with the theme of environmentally friendly educational tourism. However, the object that will be determined to be a primary tourist attraction or secondary tourist attraction must be supported with adequate facilities starting from the smallest things, namely the interpretation media both personally (interpreters) or non-personal (leaflets, interpretation boards, interactive videos, etc.).

- 2) Expert resource development program: This program is one that needs attention because it involves who is responsible for delivering the learning component of the educational tourism activities. What is meant by expert resources here are resources that are experts in the field of educational tourism such as interpreters and the academic community who are responsible for external guests who come. Because based on the results of a research interview with the Office of Public Communication, UNPAD Jatinangor does not have written plans related to campus tourism. Where guests visiting the study tour go directly to the faculty they want to go to without a clear route and package tour program. For this reason, it would be better if the program implemented was in the form of:
 - Human resource training program as an interpreter.
 - Planning program structure and management scheme.

When reviewing the benchmarking related to Glasgow University, UNPAD Jatinangor can imitate the concept of empowerment namely the Student Executive Board (BEM) of UNPAD to form a sub-sector that handles external guests who come. However, not all students in BEM UNPAD are competent according to their fields. Therefore to initiate the weaknesses of the model, at least each faculty in UNPAD established an Interpreter Student Activity Unit (UKM), in accordance with their respective scientific studies. For example the Faculty of Communication Sciences (FIKOM) can collaborate with UNPAD's Public Relations in receiving guests to try out study tours to primary tourist attractions. Then the Faculty of Animal Husbandry (FAPET) and the Faculty of Agriculture (FAPERTA) can collaborate with people who work as Public Service Agencies (BLU) in secondary tourism attractions namely the Pilot Laboratory Area. Then students of the Faculty of Cultural Sciences (FIB) with a history study program, can become interpreter resources related to the history of UNPAD in the area of the Rector of UNPAD. However, as long as the agenda of the UKM activities is carried out, of course there is a need for penetration by UNPAD, for example in collaboration with the Institute of Tour Guide Certification for technical guidance and professional tour guides for the academic community who are members of the Interpreter UKM.

C. Development Plan for Educational Tourism Program Activities

This section is structured to provide direction for planning methods or types in conducting educational educational trips and also giving opportunities to university institutions or special organizations such as organizations working in the field of special interest tourism. Following below (Table 2) alternative UNPAD campus tour program.

Attraction	Media	Theme & Activity	Duration
Primary Attraction	Interpreters (Public Relations & FIKOM)	UNPAD General Information	± 2 Hours
UNPAD Faculty Area	Odong-odong	Odong-odong • Provision of information on UNPAD facilities	
	Campus Bike	Provision of information on the UNPAD learning environment	
Secondary Attraction	Interpreter (FIB History Study Program)	History of UNPAD	± 1 Hours
UNPAD Rectorate Area	Non-personal interpretation media	Self Photos	
	 (leaflets and interpretation boards) 	Historical interpretation of the UNPAD logo	
		Historical interpretation of UNPAD's establishment	
		Interpretation of Rector's architectural philosophy	
		Interpretation and activity of trying Jalatista	
Secondary Attraction	Campus bicycle rental	Sports Tourism	-
UNPAD Sports Area	 Provision of Jalatista tumblers 	Jogging	
		Cycling	
		Basketball, Ball, Badminton, Volleyball, Futsal	
Secondary Attraction	• Interpreters (Communities with FAPET	Eco-friendly educational tourism	± 2 Hours
Ciparanje Laboratory Area	& FAPERTA)	Educational tourism on processing organic waste	
	Bicycle rental	into compost	
		Tourism planting tree seeds with compost	
		Educational tourism for making biodigesters	
		Dairy milk tourism	

Table 2. Alternative UNPAD Campus Tour Program.

Source: Processed Researcher's Data (2019)

D. Marketing Development Plan

Indication of this program is the collaboration with tour package makers, both agencies or online platforms that create tour packages to package tourist experiences. So Jatinangor UNPAD as an educational tourism area can use the available resources starting from the UNPAD PR Office which has UNPAD Radio and also some Instagram fun pages managed by UNPAD students for media promotion.

Then UNPAD can collaborate with several tour agents to sell tourism packages by making packages and accommodation around the UNPAD area which incidentally is fairly close. Online platforms such as Traveloka which are now expanding to sell thematic tour packages can also be utilized. Or by holding a routine event from each faculty exposed for one of the promotion sites of Jatinangor UNPAD Campus as a tourist area.

Then, Unpad can also target potential markets such as high schools in Bandung Raya, where the segmentation is felt to be appropriate because tourists with a high school education background are curious to get information from favorite universities that they might later choose for activities on primary tourist attractions. As for activities on secondary tourist attractions such as sports tourism and also historical tourism UNPAD will have a more general segment. Then for tourism activities on the secondary attraction of the Ciparanje Laboratory Area, it can target the academic segment that has an educational concentration on the environment, animal husbandry, or agriculture and plantations. The steps that can be taken in marketing this secondary tourist attraction are to establish a UNPAD compost fertilizer sales centre, compost seeds or fruit, and packaged pure milk sales.

4. Conclusions

The potential of the UNPAD Jatinangor as an educational tourism area in terms of tourist attractions is that there are 16 faculties spread into two sciences, namely Natural and Social Sciences which are primary tourist attractions. Whereas the sports area, rectorate area, and laboratory area of Ciparanje can be appointed as secondary tourism attractions. Access and amenities available are also a supporting factor that makes UNPAD potentially an educational tourism attraction. Expert resources that can be planned are by providing opportunities for students to become an important part of campus tour activities, namely as an interpreter. Educational tourism development programs can be divided into types of guided tours and self guided tours. Then, the marketing program can establish partnerships with the UNPAD Public Relations Office, online platforms, tour agents, and organizing annual events. In practice, this can certainly be implemented if there is a joint commitment of the UNPAD academic community, students, educators, education staff, the Board of Trustees, and other stakeholders.

5. References

- [1] A. Kartiwa, Sintaningrum, E. Maulina, M. Rizal, H. Nurasa, D. Heryadi, H. Bekti, and Rusdin, Model Pengembangan Jatinangor Sebagai Science And Technology Park. Universitas Padjadjaran: Hibah Penugasan Penelitian Unggulan, 2015.
- [2] Badan Perencanaan Pembangunan Daerah, Rencana Besar Pengembangan Destinasi Wisata Kelas Dunia Provinsi Jawa Barat. Bappeda Provinsi Jawa Barat, 2016.
- [3] B. W. Ritchie, N. Carr, and C. Cooper, Managing Educational Tourism. Aspects of Tourism, England: Channel View Publications, 2003.
- [4] B. W. Ritchie and G. Crouch, The Competitive Destination: A Sustainable Tourism Perspective. CABI Publishers: Wallingford, 2003.
- [5] B. W. Ritchie, "Tourism, Competitiveness, and Societal Prosperity," Journal of Business Research, 1999.
- [6] R. C. Mill, Tourism The International Business. Jakarta: PT Grafindo Persada, 2000.
- [7] P. F. Barlett, The Emory University Campus Walking Tour: Awakening a Sense of Place. Atlanta, Georgia: Department of Anthropology Emory University, 2002.
- [8] N. Shiddiq, "Pengaruh Pengalaman Kerja, Independensi Objektifitas, Integritas, Kompetensi, dan Komitmen Organisasi Hasil Audit," DIPONEGORO JOURNAL OF ACCOUNTING, vol. 1, no. 2, 2012.
- [9] Idrus, Metode Penelitian Ilmu Sosial. Jakarta: Erlangga, 2009.
- [10] Sugiyono, Metode Penelitian Kualittif. Bandung: Alfabeta, 2011.
- $[11] \ \ Sugiyono, Metode \ Penelitian \ Kombinasi \ (Mix \ Methods). \ Bandung: \ Alfabeta, \ 2015.$
- [12] Novianti, E., Putra, R. R., Permadi, R. W. A., Maulana, M. I., & Wulung, S. R. P. Perencanaan Program Wisata Edukasi Berbasis Lingkungan di Universitas Padjadjaran Jatinangor. Journal of Indonesian Tourism, Hospitality and Recreation, 4(2), 121-133.