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Research Article

Designing Fieldwork Material in Geography Learning through Potential Tourism and Landscape Feature (Case Study in Srigonco Village)

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ABSTRACT

The landscape appearance of Srigonco Village is unique. This uniqueness can be used as a means of learning geography. This study aims to analyze the tourism potential and landscape appearance of Srigonco Village as a means of supporting geography learning. The method used is a field survey by making a working map which is then used to identify tourism potential and landscape appearances. Analysis of natural tourism potential was carried out using neighborhood analysis and analysis of landscape appearance using qualitative descriptive. The study's findings indicate that the tourism potential of Srigonco village is dispersed, with clusters of caves and ponor in the center, an elongated area to the south with beaches, and scattered springs around the community. In addition, the research location has fluvial, karst, and marine landscape elements such as caves, rivers, beaches, waterfalls, and biodiversity preservation, can also be utilised for natural tourism. Srigonco Village's topography can be utilized to teach geography, particularly in the study of geomorphology, hydrology, biogeography, disasters, tourism, and socio-culture. The application of geography learning can be carried out through field activities, research, or project-based learning to provide students with the opportunity to learn directly from the environment.

Keywords: Potential Tourism; Landscape Feature, Fieldwork Material; Geography Learning

INTRODUCTION

Srigonco Village has geodiversity landscape that can become village's potential. The geodiversity with geological landforms consist of 3 formations, namely Wonosari (Tmwl), Campurdarat (Tmcl) and Mandalika (Tom) [1]. Wonosari formation is shown by the development of karst area that dominates rocks in Wonosari. Landspes which commonly appear in karst area are caves and springs. [2], [3], [4]. The following is Campurdarat formation which takes place in Northern side of the village, marked by the presence of limestone. Last is Mandalika formation which is shown by the presence of volcanic deposits. Apart from the geological landform, there is coastal feature that formed by marine processes in Srigonco village. In coastal area, there are beach that become tourist attraction, such as Balekambang Beach, Anjat Beach, penantian Beach, and Krambilan Beach. Srigonco village has unique landscape but hasn't been well inventoried yet.

The landscape has different characteristics. Unique landscapes have potential to be developed into tourism objects. As it is the same thing with karst landscape which develops in to caves that can be special tourism object attraction, which is cave tour to enjoy the beauty of the growing stalactites

and stalagmites. For examples Pindul Cave in Gunung Kidul Regency, Gong Cave in Pacitan Regency, Akbar Cave in Tuban Regency, and so on. Besides, the landscape features in rivers can be made into waterfall tourism, as in Sri Getuk River in Gunung Kidul. In coastal areas, the landscape features are commonly made into marine tourism such as in along the way of Southern Passage (Jalur Lintas Selatan), South Malang, Malang Regency. Along with this, the landscape feature in Srigonco village also has its own uniqueness that can be developed into tourism activities.

Instead of tourism objects, the landscape features can be used as learning media, especially in geography learning [5]. Those landscape features can be used as learning outside classroom which are designed with fieldwork based- learning. This is intended to introduce the students to contextual study around the environment. Besides that, outside classroom learning can be developed into project based- learning, investigation, research and others. The concept and theories discussed in classroom can be connected to real life phenomena observations [6]. Apart from that, the development of the ideas that connect concept into field phenomena give opinion to the new method, interpretation, new data, and new questions about that natural phenomenon [7]. Based on those backgrounds, the aim of this research is to identify the landscape features in Srigonco village and to analyze the distribution of potential nature tourism and the relation with geography learning.

METHODS

Study Area

This research takes place in Srigonco village, Bantur District, Malang Regency. (Figure 1). Srigonco is a village that has natural resources that can be used as natural tourism objects.

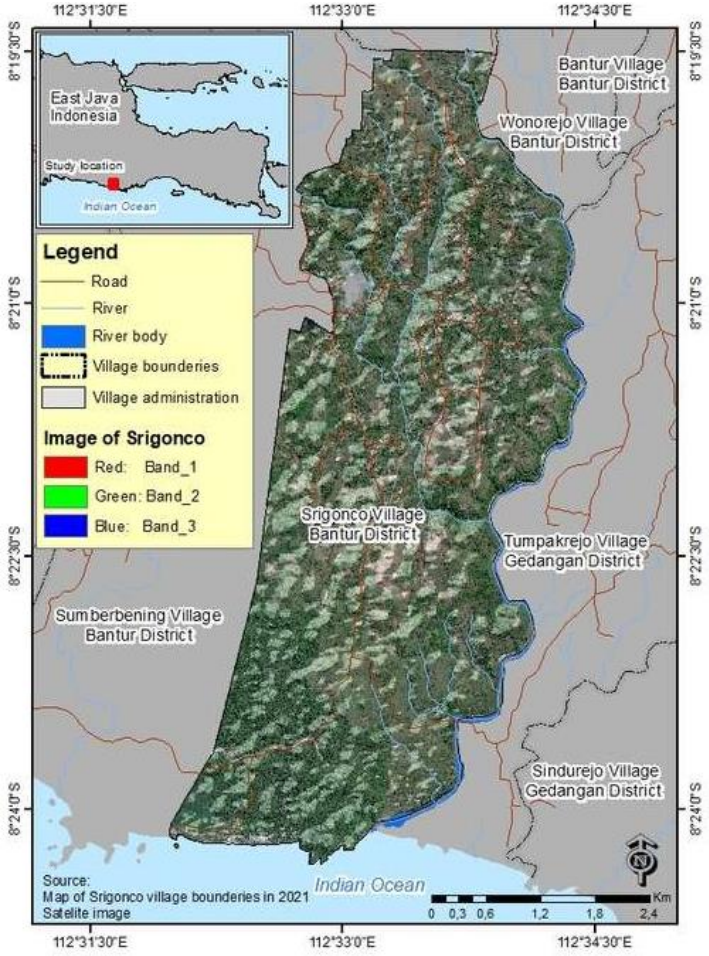


Figure 1. Study Area

Data Collecting

This research is a qualitative descriptive study. The early stage of this research is started with identifying Srigonco village potential through satellite imagery, geological maps, topographic maps, as

well as processed data from the previous studies. The next stage is surveying the field to observe and identify the potential landscape features at the study area by using survey equipment such as cameras, digital work map, and drone. Digital work map covers data related to coordinate, description, elevation, survey plot, and location photos. The use of drone is when the research location hard to be reached due to minimum accessibility. The data collecting technique is conducted by exploring the area that can be reached and digging information related to the landscape feature in Srigonco village from the society. After that is exploring the landscape feature to identify. The landscapes that have been identified are mapped into fieldwork map that can be used in geography learning. The map is made digitally by using ArcGIs apps. Therefore connect it to smartphone so that it can be used as guideline or reference in conducting fieldwork-based learning, through survey, observation, interview, and so on.

Data Analysis

The data analysis used in this research is nearest neighbor analysis. Nearest neighbor analysis is a method for classifying case based on the similarity pattern to other case. For example analyzing nearest neighbor is used to identify the pattern happened in cave entrance in Sendang Biru Karst [8], [9]. Nearest neighbor analysis can classify the distribution into random pattern, classified or distributed. The landscape feature that has classified pattern can be made as related natural tourism and to be part of a tour package. Travel route and natural tourism spot area are presented using geographical information system. The analyzing is conducted using route and time estimation needed in conducting fieldwork-based geography learning. Those natural landscape feature spots are made into a matrix to present the correlation between geography learning with study area's condition. The mind mapping of this study can be seen in Figure 2. Where the landscape approach is the basis for developing natural tourism potential in Srigonco Village, and this landscape approach can also be used as a geography lesson outside the classroom.

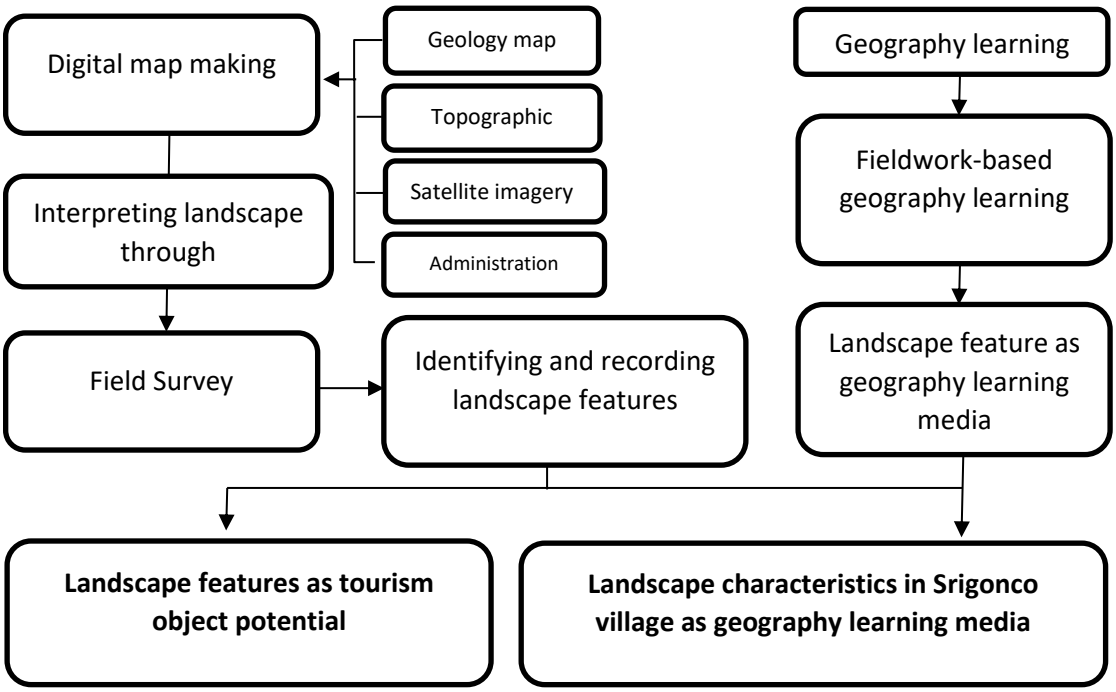


Figure 2. Research Mind Mapping

RESULTS

Field Work Map

Identifying landscape in Srigonco village was done by using digital work map. The landscape feature was used as a field workflow that showed survey area, route to the location, and various characteristics of landscape features (Figure 3). The result of field survey showed some features such

as in cave in karst area, springs, lakes, dolines, river valley. In the coastal area of Srigonco village, beaches, river estuaries and dense vegetation are found. In the river flow on the surface, it was found that there were river waterfalls with different surface levels.

The field workflow in Srigonco village can be started from the north side of the village. The natural landscape that is visible from the north side of the village is in the form of spring. In this spot, students can observe the water quality both qualitatively and quantitatively. The qualitative research can be done through interviewing society who consume water from the spring; while the quantitative research can be done by measuring pH (power of Hydrogen), TDS (Total Dissolved Solid), COD (Chemical Oxygen Demand), limestone substance, and so on. In the next spot, students will be able to observe the cave landscape. This time students can examine the geological and geomorphological process in Srigonco village. All the way of these flow, students can identify the use of the land by the the society. Besides, students can also observe the biodiversity in forest reserves Srigonco area. To the southern side, there is a cultural site and coastal area that is potential to be tourism object.

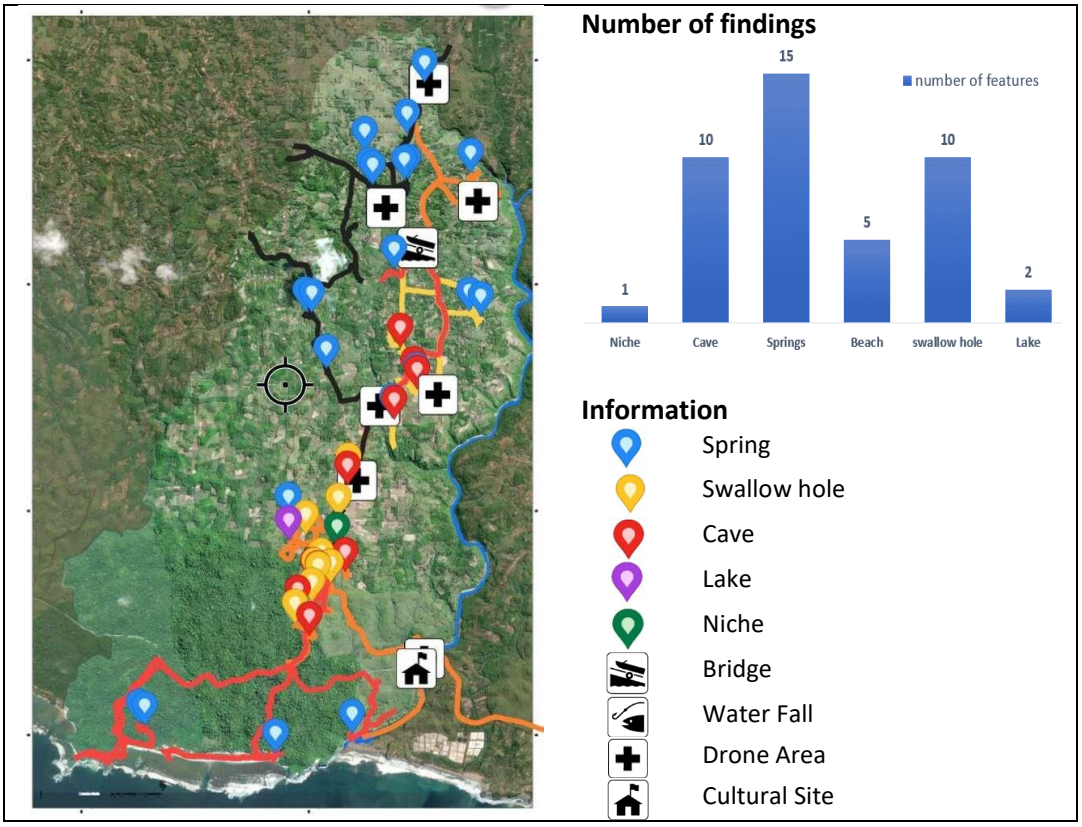


Figure 3. Field Work Flow in Srigonco Village

Identifying Landscape

The landscape appearance in study location is presented in karst landscape, fluvial, and marine. Each of them has its own landscape characteristics. Figure 4 is the distribution of the landscapes in Srigoncoo village. The data collecting was done in reachable area and supported by information from the society.

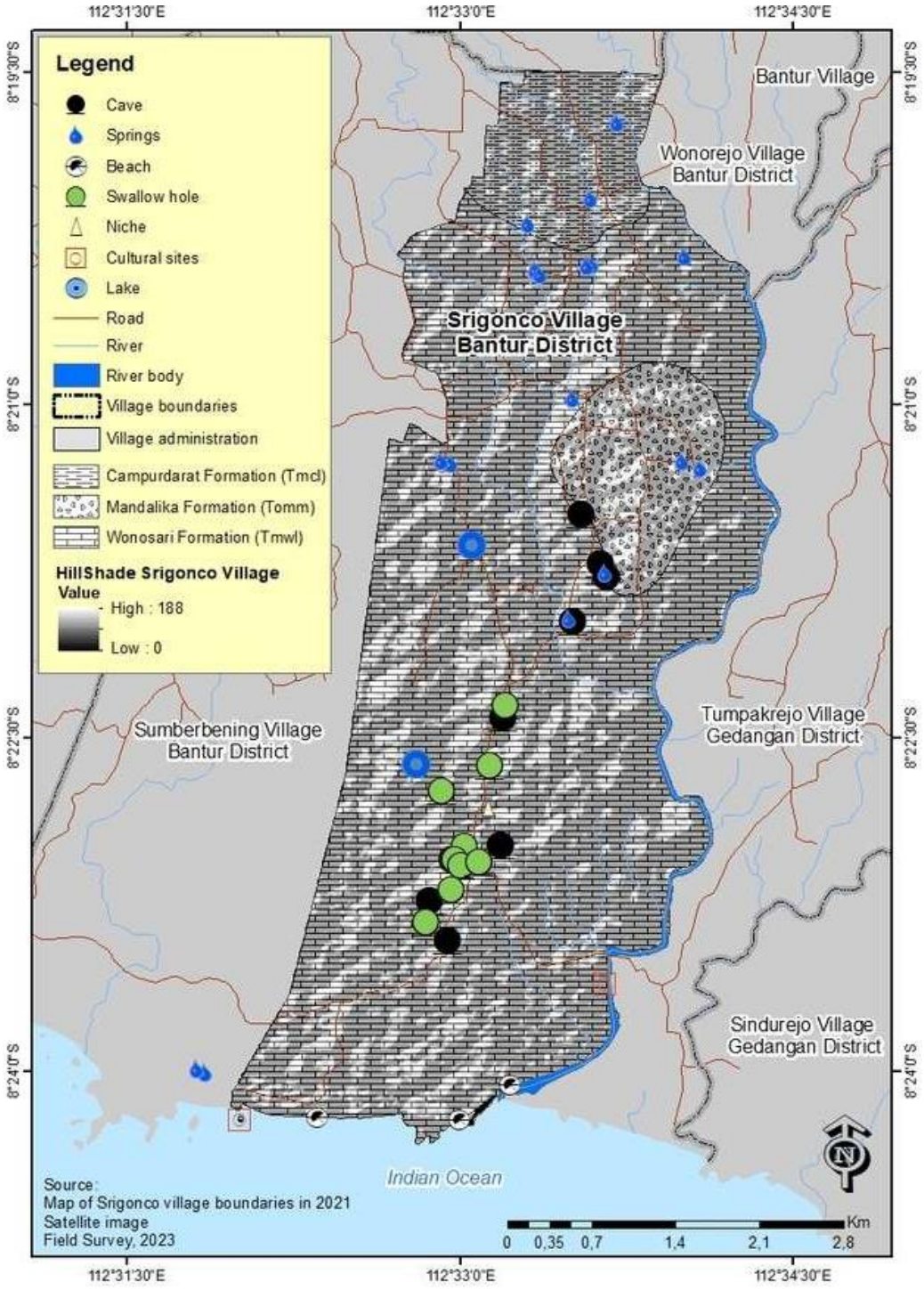


Figure 4. Landscape Distribution in Srigonco Village

The inventory result of Srigonco landscape, was later been analyzed using nearest neighbor analysis. The calculation of neighbor analysis showed ratio 0,704859 which showed classified distribution pattern in study area. This classified pattern was the result of observation mean distance result as much as 250,2741 m and the expected mean distance in the number of 355,0696 m (Figure 5). The distribution of the classified landscape can be seen from the karst landscape feature, such as cave, ponor, classified closed basins. Apart from that, there is coastal landscape feature that has clustered characteristic. In northern part of study area, there is a spring, which also closed to other springs.

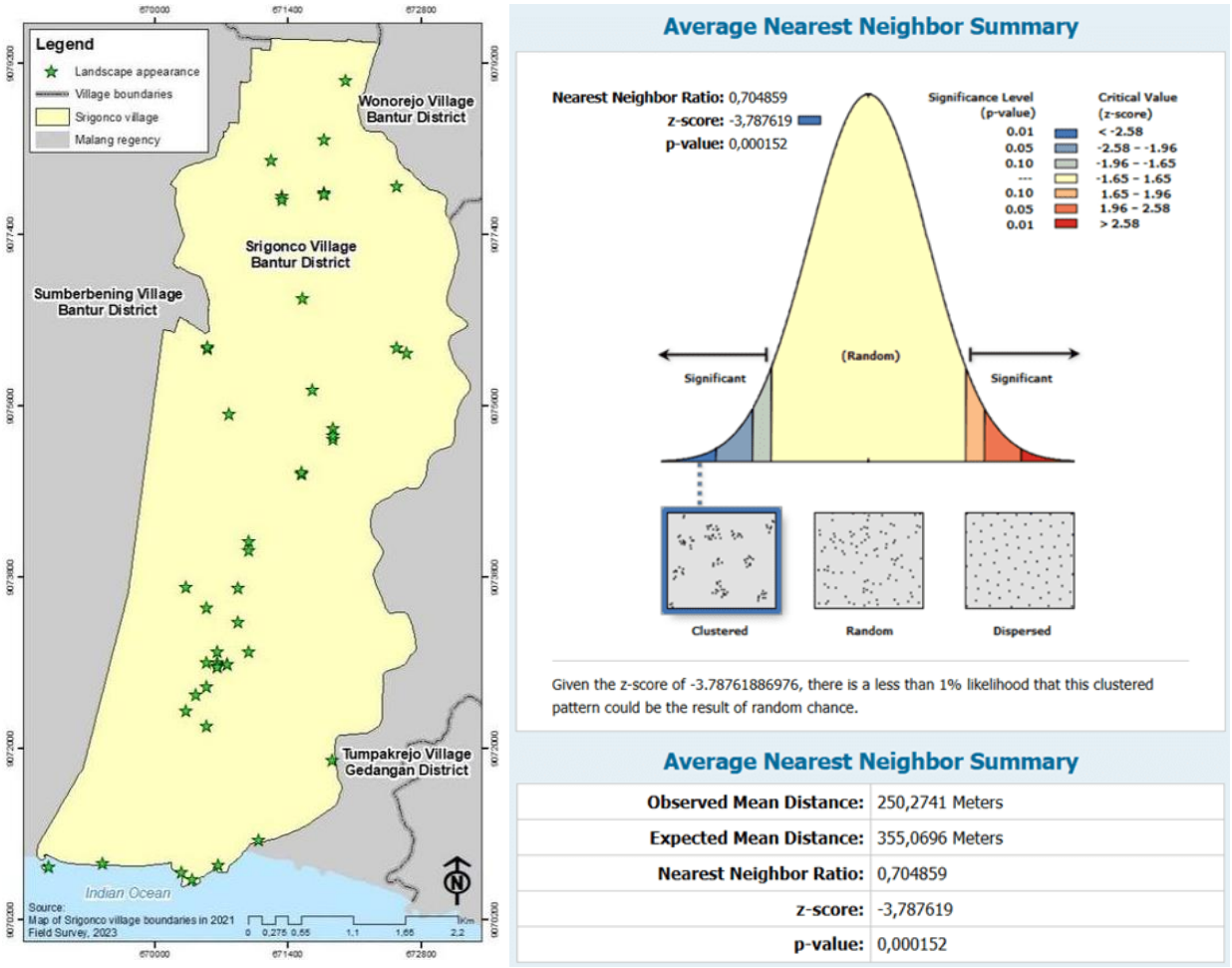


Figure 5. Clustered Distribution Pattern in Landscape Features in Srigonco Village

The natural landscape in the coastal area of Srigonco Village is dominated by sand sedimentation, as seen at Balekambang Beach. The beaches in Srigonco area are generally flat and sloping. The beach location in Srigonco should pass through reserved forest in southern part of the village. Figure 6 shows the appearance of the beaches in Srigonco.that generally used as tourist destination. There are also steep rock cliffs, which can be used as fishing spots on some beaches.

Figure 6. Coastal Landscape Features in Srigonco Village

Coastal landscapes have characteristics that can be seen from the materials, the leght of the coastline, and the used area. These characteristics become the base in determining policies in managing coastal area in Srigonco. The list of beaches and their characteristics can be seen in Table 1.

Table 1. Characteristic of Coastal Landscape in Srigonco Village

Beach Name	Information			
	Characteristics	Length of coastline	Material	Utilization
Balekambang	Having sloping topography and river estuary that originates from karst spring	1.356 m	Limestone sand deposit	Beach and cultural tourism
Pesangerahan	Having flat topography, cliff on the right, river estuary on the left.	551 m	River rocks and sandy	Beach and river walking tourism
Krambilan	Having pocket-like shape, cliffs on both left and right.	41 m	Limestone sand deposit	Beach tourism
Penantian Beach	Having pocket-like shape, cliffs on both left and right.	33.19 m	Limestone sand deposit	Beach tourism and fishing spots
Anjat Beach	Having long coastline, not wide.	55.86 m	Limestone sand deposit	Beach tourism and fishing spots

Source: analysis and field survey, 2023

Karst landscape in Srigonco Village shows that there are quite lot of springs in karst area. This makes the springs are used by the local people for their daily needs. The appearance of dolines also develops in this area, where the dolines that are filled with water so that become Karst Lake. Figure 7 shows some springs and karst lakes in the study location.

Figure 7. Spring Landscape in Srigonco

Karst landscape features in Srigonco village can also be seen through the existence of cave that develop in the southern area of Srigonco. There are also dolines that are filled with water so that they become a karst lake. This signify the karst in southern area develop from the north side of Srigonco where karst springs easily found. The appearance of dolines/ closed basin is also easily found in the south side of the village. Figure 8 shows the appearance of karst hill, ponor, and several cave found in Srigono village. Those cave have never been explored or utilized by the local people.

Figure 8. Karst Landscape Feature with the presence of Karst Hill, Ponor and Caves

The appearance of surface rivers in Srigonco originates from the no-limestone area to the north area of Srigonco. It flows through the rivers in Srigonco into the sea. Besides, the appearance of springs spread all over the village, and supply people's need of water with surface river water. Figure 9 shows the appearance of surface river in Srigonco. Most area in Srigonco are taken place in limestone area with seasonal rivers and water surface supply from non-limestone area, so in dry season water can still flow though low in volume. While in valleys karst, water supply is not found.

Figure 9. Surface River Landscape in Srigonco

In the downstream part, the surface river will flows into the sea. It happened in Barek river in Pesanggrahan River, Sumur Pitu River and Kondang Buntung River. Barek River flows from outside of Srigonco, so the water catchment is wide. This is different from Sumur Pitu River and Kondang Buntung River, they're from karst spring. The mouth of this river will be connected to sea water, making the water brackish. Figure 10 is the landscape of Pesanggrahan River and Kondang Buntung estuary.

Figure 10. River Estuary landscape in Srigonco Village

Potential Natural Tourism in Srigonco

The natural landscape features in Srigonco have been widely used for tourism activities, especially in Balekambang Beach that become famous natural tourism in Malang regency. Besides that, it developed fast. Beaches in South Malang that used to difficult to reach, now become reachable and become tourism destination in Srigonco. The natural tourism is not only about beaches. Natural tourism offers various uniqueness, that can educate visitors. The result of this study shows some places that can be made into natural tourism, such as beach, river tour, conservation tourism, cave tourism and waterfall tourism. Figure 11 shows the use of river estuaries as water tourism in Srigonco village.

Figure 11. River Estuary for Tourism

The Relationship between the potential and landscape in geography learning

Srigonco village has natural potential that can be used as a tourist destination, this landscape can also be used as a contextual learning media in geography learning. The landscape that develops in the village is the result of processes in the past that have shaped the landscape configuration up to now. The appearance of Karst, fluvial and marine landscapes provide formation characteristics that can be studied in geography leaning. Table 2 shows the potential of village that can be linked to geography learning.

Table 2. The Correlation between Potential Village and Its correlation with Geography Learning

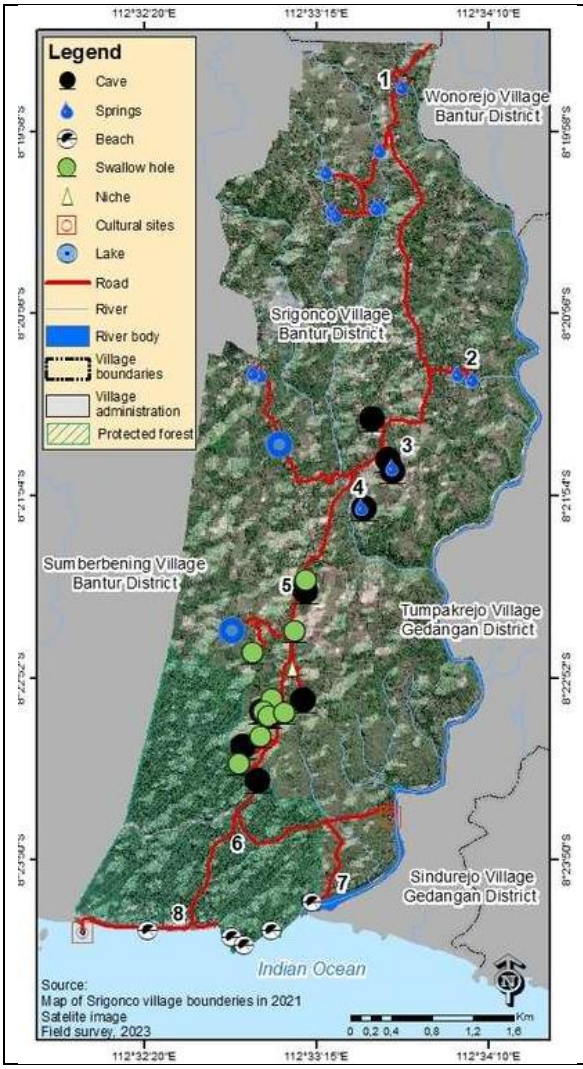
Potential Village	Landscape		
	Fluvial	**Marine**	**Karst**
Caving	The role of dry valleys to water supply in Karst area	-	The analysis of landscape and existence of karst morphology
Rafting	Identify river characteristics, both quality and quantity of the river.	The interaction of surface river and sea water can shape the morphology of river estuaries.	Karst spring supply in rivers
Waterfall	Characteristics of river area in waterfall	-	Supply karst water sources at waterfalls
Beach	Sedimentation material from surface rivers	Coastal areas processes and dynamics	Sedimentation material from surface rivers
Conservation	Having surface flow that comes from springs	-	Located in a karst area that has natural biodiversity

These natural tourist spots certainly have different landscape characteristics based on the processes that occur and the results seen now. The landscape features in Srigonco can be used as research-based learning, project, investigation, fieldwork, or others, that can give understanding to the students in correlation to outside class learning. Figure 12 shows the location and feature condition of potential tourism in Srigonco. This condition can be used as means of geography learning implementation.

The contextual geography learning in Srigonco shows the existence of fluvial-karst, karst, fluvial-marine, and marine landscape. These landscape conditions create unique formation configurations in each landscape. The learning aspect that can be conveyed to students by looking at the needs and the connection to classroom learning. Fieldwork learning generally used to apply the material in classroom learning.The understanding of landscape, field practice, investigation, research projects can be carried out in Srigonco village, by paying attention to the conditions in Srigonco as the object of geography learning.

Figure 12. Landscape Features that can be Used for Learning

The various landscape features can be used as area that support students' learning process. Students conduct fieldwork by coming to the study location, observing and measuring to collect the data. The learning flow can be done by observing some study areas. Figure 13 is the flow that can be done in implementing geography outside class activity. There are 8 stop sites to get information, to observe, to measure and other activities that can be done in these spots.



Site	Note :
1	In the waterfall and spring area is a limestone area in the upper part of Srigonco village
2	Identifying the river flow in Karst area, a place of many waterfalls
3	in spring landscape to the change of rocks formation, that is exposed to the surface.
4	The spring landscape, caves, hills, shows the features of karst landscape.
5	Seeing the dry valley, where the flow pass the dry valley and enter the ponor.
6	Conservation area of reserve forest in Malang regency.
7	In fluviomarine area which has physiography characteristic and connected to the sea.
8	The coastal area at Balaekambang Beach shows the dynamics of the coastal area.

Figure 13. Travel Routes and Geography Learning Sites in Srigonco

DISCUSSION

Geography learning is a type of learning that has attractions and challenges to learn. This is because in learning geography there is a need of spatial analysis and description of the earth which has become a human activity [10]. Natural landscapes have characteristics of some features that become attraction in learning geography. The existence of natural landscape can be used as media in geography learning, especially in implementing fieldwork-based learning.

Fieldwork-based learning provides students with the opportunity to gain new knowledge through observation, interviews, and exploration. Fieldwork-based learning will provide many benefits to students in learning geography [10], [11], [12], [13]. The benefits of fieldwork for students include: developing skills in observation, having experience in experimental learning, fostering an attitude of responsibility in students in learning, developing analytical skills, training skills in conducting research on problems in the field, developing attitudes and responsibilities. responsible for the environment, training collaboration between students, and training skills in using tools. Through fieldwork, it can create holistic learning in improving students' understanding, improving skills and memory [14].

Fieldwork can be carried out at locations that have studies included in geosphere phenomena. The selection of locations for field work is carried out based on the results of field identification [15]. Choosing a location in a place not only includes knowledge about the chosen place, but can shape the appropriate direction of thinking or the quantity and quality of incoming stimuli [16]. When choosing

a fieldwork location, it is also important to pay attention to places that are able to form students' pro-ecological attitudes [17]. At the designated spot, the students by taking data and notes, observing, measuring [18]. The same thing with the landscape in Srigonco, that have spots that can be used to conduct learning process, students will actively participate in interpreting, taking notes, recording, measuring dan presenting the result [19]. Besides, the outside class geography learning has been done in several places to apply the materials from classroom learning process [20], [21], [22], [23], [24], [25]. This aims to implement contextual learning and material during the lecturing. Surely, the learning of topics had been done before, both presenting contextual learning in physical geography, social geography, tourism, or geographical studies as a whole.

Learning topics that can be carried out during fieldwork-based learning in Srigonco Village include karst, fluvial and marine landscapes. In this area students can study the characteristics of karst landscapes, springs in karst areas, river channels in karst areas, and the appearance of dolines, karst, and the appearance of caves. Furthermore, students can also study tourism topics in Srigonco Village. In this topic, students can learn about coastal tourist attractions that stretch in the southern part of Srigonco Village, tourists' interests and motivations in carrying out tourism activities, the characteristics of each tourist attraction, cultural tourism, and others. Another topic that can be studied is biodiversity and conservation in protected forest areas. This biodiversity can be in the form of a diversity of flora and fauna, as well as efforts to preserve them.

There are several stages in designing learning activities that can be carried out during fieldwork. These stages include preparation, motivation, data collection, data processing, communication and reflection. Preparation is carried out by determining the study topic, methods used, and preparing the instrument. Motivation is carried out by providing direction to students and attracting students' interest in asking questions related to the topic to be studied. Data collection is carried out by observation, surveys, interviews, experiments, sampling, or others. Data processing is carried out by grouping data and can also be analyzed using appropriate tools. The results of data processing are then compared with the topics in class through the literature used [26]. Communication is carried out by showing the results of field work studies through presentation activities in class. Reflection is carried out by drawing conclusions and providing follow-up regarding the topic studied.

Fieldwork-based learning in Srigonco Village which is designed based on learning objectives can develop students' competencies. Competencies that can be improved through fieldwork-based learning activities include students' ability to make observations, reading maps, location skills, making schemes, with the aim of developing a sense of place [26]. On the other hand, fieldwork-based learning can also develop students' research attitudes, increase interest and retention of knowledge gained [27].

CONCLUSION

The landscape features in Srigonco have a unique appearance. These appearances can be used as potential natural tourism ad media in geography learning. The landscape features at the study location are fluvial, karst and marine landscapes. This can be used as natural tourist attraction with cave trails, river tour, conservation/biodiversity, waterfalls and beaches. The aspects of geography learning can be carried out in this landscape by dividing areas into learning spots outside the classroom which are presented in the form of travel routes and geographic learning locations in Srigonco village.

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DECLARATIONS

Conflict of Interest

The authors declare no conflict of interest with any financial, personal, or other relationships with other people or organizations related to the material discussed in the article.

Ethical Approval
On behalf of all authors, the corresponding author states that the paper satisfies Ethical Standards conditions, no human participants, or animals are involved in the research.

Informed Consent
On behalf of all authors, the corresponding author states that no human participants are involved in the research and, therefore, informed consent is not required by them.

DATA AVAILABILITY

Data used to support the findings of this study are available from the corresponding author upon request.

REFERENCES

[1] Suyanto, R. Hadisantono, Kusnama, R. Chaniago, and R. Bahruddin, *Geology Lembar Turen, Jawa.* Bandung: Geological Research and Development Center, 1992. [Online]. Available: https://www.scribd.com/document/649289976/Geologi-Lembar-Turen-1607-4

[2] A. Sahrina, D. Fitrianti, A. Suprianto, and M. A. Labib, "Potential and Challenges of Karst Water Resources in Sumbermanjing Wetan District of Malang Regency," *IOP Conf. Ser. Earth Environ. Sci.*, vol. 412, no. 1, 2020, doi: 10.1088/1755-1315/412/1/012032.

[3] M. J. Salaka, *Karst Exploration of Sendang Biru Malang Regency.* Malang: CV Komojoyo Press., 2018.

[4] A. Suprianto *et al.*, "Identifikasi Hubungan Kelurusan dan Pola Lorong Gua Karst di Kecamatan Sumbermanjing Weta Kabupaten Malang," *Pros. Semin. Nas. Geotik*, pp. 20–30, 2017.

[5] A. Sahrina *et al.*, "The Use of Smartphones in Geography Learning: A 21st Century Learning Innovation in Identifying Nature Appearances Based on Fieldwork ," *Int. J. Interact. Mob. Technol.*, vol. 16, no. 22 SE-Papers, pp. 15–31, Nov. 2022, doi: 10.3991/ijim.v16i22.36151.

[6] A. Hofstein and V. N. Lunetta, "The laboratory in science education: Foundations for the twenty-first century," *Sci. Educ.*, vol. 88, no. 1, pp. 28–54, Jan. 2004, doi: https://doi.org/10.1002/sce.10106.

[7] V. Lunetta, A. Hofstein, and M. Clough, "Learning and teaching in the school science laboratory: An analysis of research, theory, and practice," *Handb. Res. Sci. Educ.*, pp. 393–441, Jan. 2007.

[8] R. Pambudi, A. Damayanti, and K. Marko, "Distribution Pattern of Cave Entrance Based on Morphometry in Gunung Sewu Karst Landscape," *E3S Web Conf.*, vol. 73, p. 4011, Jan. 2018, doi: 10.1051/e3sconf/20187304011.

[9] M. A. Labib and A. Suprianto, "Estimasi Penentuan Tingkatan dan Pola Lorong Gua Banyu dan Sekitarnya dengan Menggunakan GIS," *JPIG (Jurnal Pendidik. dan Ilmu Geogr.*, vol. 4, no. 1, pp. 1–8, 2019, doi: 10.21067/jpig.v4i1.3086.

[10] T. Day and R. S. Smith, "Geography Education: Fieldwork and Contemporary Pedagogy," in *International Encyclopedia of Geography*, 2017, pp. 1–10. doi: https://doi.org/10.1002/9781118786352.wbieg0523.

[11] Y. S. Onn and W. P. Poh, "Fieldwork in Geography —importance, objectives and scope," *Singapore J. Educ.*, vol. 1, no. 1, pp. 24–27, Jan. 1978, doi: 10.1080/02188797808548515.

[12] A. Dunphy and G. Spellman, "Geography fieldwork, fieldwork value and learning styles," *Int. Res. Geogr. Environ. Educ.*, vol. 18, no. 1, pp. 19–28, Mar. 2009, doi: 10.1080/10382040802591522.

[13] D. France and M. Haigh, "Fieldwork@40: fieldwork in geography higher education," *J. Geogr. High. Educ.*, vol. 42, no. 4, pp. 498–514, Oct. 2018, doi: 10.1080/03098265.2018.1515187.

[14] P. H. Wilson, B. Smits-Engelsman, K. Caeyenberghs, and B. Steenbergen, "Toward a Hybrid Model of Developmental CoordinationDisorder," *Curr. Dev. Disord. Reports*, vol. 4, no. 3, pp. 64–71, 2017, doi: 10.1007/s40474-017-0115-0.

[15] I. Piotrowska, M. Cichoń, D. Abramowicz, and J. Ypniewski, "Challenges in geography education

- A review of research problems," *Quaest. Geogr.*, vol. 38, no. 1, pp. 71–84, 2019, doi: 10.2478/quageo-2019-0009.

[16] M. Cichoń, "Ocena i wybór terenu w projektowaniu geograficznych ścieżek dydaktycznych," in *Geografia w szkole*, 1st ed., Warszawa: Wydawnictwo Raabe, 2009, pp. 28–34.

[17] M. Cichoń, *The Gosławice as an example of an object attractive and useful for fieldwork in degraded area. [W:] Geography in European higher education. Fieldwork in Geography bilingual teaching, 14, Charzyński P., Donert K., Podgórski Z.(eds)*. Herodot Network & Association of Polish Adult Educators, Toruń Departament, 2010.

[18] A. Sahrina, M. A. Labib, F. I. Aksa, Purwanto, and L. Y. Irawan, "Landscape as a Nature Laboratory in Geography Learning in South Malang, Indonesia BT - Proceedings of the 2nd International Conference on Social Knowledge Sciences and Education (ICSKSE 2022)," Atlantis Press, 2022, pp. 111–127. doi: 10.2991/978-2-494069-63-3_12.

[19] J. Ostuni, "The Irreplaceable Experience of Fieldwork," 2000, pp. 79–98. doi: 10.1007/978-94-017-1552-2_5.

[20] Mulyantari, "Field Work Lecture (KKL) I Geography as a Contextual Learning Method and Its Influence on the Learning Achievement of Geography Education Students.," State University of Semarang, 2005. [Online]. Available: https://www.scribd.com/document/48298218/Kuliah-Kerja-Lapangan-KKL-I-Geografi-Sebagai-Salah-Satu-Metode-Pembelajaran-Kontekstual-dan-Pengaruhnya-Terhadap-Prestasi-Belajar-Mahasiswa-Pendid

[21] S. Sugiharyanto, "he Eligibility of Jiwo Hill Area as Nature Laboratory to Field Work Lecture Physical Geography Students of Geography Educational Program.," *Geomedia Maj. Ilm. dan Inf. Kegeografian*, vol. 5, no. 1, 2017, doi: 10.21831/gm.v5i1.14198.

[22] Khairani, Rahmanelli, Surtani, and Nofrion, "Evaluasi Pelaksanaan Kuliah Kerja Lapangan Geografi di Jurusan Geografi Fakultas Ilmu Sosial Universitas Negeri Padang," *J. Geogr.*, vol. 4, no. 1, pp. 33–41, 2015.

[23] D. Arinta, S. Utaya, and I. K. Astina, "Implementasi pembelajaran kuliah kerja lapangan dalam meningkatkan minat belajar mahasiswa program studi pendidikan Geografi Universitas Negeri Malang," *J. Pendidik. Teor. Penelitian, dan Pengemb.*, vol. 1, no. 8, pp. 1665–1670, 2016.

[24] A. Syam, "Arahan Pengembangan Pembelajaran Geografi Berbasis Kuliah Kerja Lapangan Mahasiswa Program Studi Pendidikan Geografi STKIP Pesisir Selatan," *J. Manaj. Pendidik.*, vol. 2, no. 3, pp. 535–544, 2017.

[25] D. Norsandi, "PENGARUH KULIAH KERJA LAPANGAN (KKL) TERHADAP PRESTASI BELAJAR MAHASISWA PENDIDIKAN GEOGRAFI UNIVERSITAS PGRI PALANGKA RAYA," *Meretas J. Ilmu Pendidikan; Vol 5 No 1 J. Ilmu Pendidik. Meretas*, Aug. 2018, [Online]. Available: https://jurnal.upgriplk.ac.id/index.php/meretas/article/view?path=

[26] M. Esteves, M. João Hortas, and L. Mendes, "Fieldwork in Geography education: an experience in initial teacher training program," *Didáctica Geográfica*, pp. 77–101, Jan. 2019, doi: 10.21138/DG.417.

[27] M. Cichoń, *Pattern and environmental determinants of perception during experimental fieldwork in different landscape conditions. In: K. Donert, P. Charzyński, Z. Podgórski (eds.), Teaching geography in and about Europe.*, First edit., vol. 4. Herodot Network with the arrangement of Association of Polish Adult Educators, Toruń Departament, 2007. [Online]. Available: https://repozytorium.umk.pl/bitstream/handle/item/353/Teaching Geography in and about Europe.pdf