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ABSTRACT - This study was conducted in Wedomartani village, Ngemplak District of Sleman Regency, Daerah Istimewa Yogyakarta. The objectives of this study are: (1) to assess the responses of Wedomartani villagers about the development of Maguwoharjo Stadium area; (2) to assess the significance of the development in Maguwoharjo Stadium area toward the land use in Wedomartani village; (3) to assess the socio-economic livelihood changes of Wedomartani villagers after the development of Maguwoharjo Stadium area. The methodology used in this study was based on the survey method. The data collection techniques included in-depth interviews and field observations. There were 50 key informants consisting of five village heads, 20 heads of Rukun Tetangga (neighborhood associations), and 25 respected figures for in-depth interviews by using purposive sampling method. Research findings and data analysis were drawn by using descriptive and qualitative approach by applying these stages: (1) data reduction; (2) categorization; (3) data synthesis; (4) conclusion. The research findings showed that according to the community's opinions, the development of Maguwoharjo Stadium area can make the socio-economic livelihood change into a better condition possible. This study also showed that the development of Maguwoharjo Stadium area affected the purposes of land use, particularly in the neighborhood of Maguwoharjo Stadium and along the road leading to Maguwoharjo Stadium area with a widespread pattern. Lastly, this study found out that the changes of how people make a living were characterized by the choice of jobs they choose and their house building' structure. The way they make a living in general was by having more various jobs available as the number of non-agricultural jobs increased. This way of living obviously resulted in the increased income and a better construction of their house buildings.

Keywords: livelihood changes, area development, Maguwoharjo Stadium

INTRODUCTION

Building and Environmental Site Layout Planning (Rencana Tata Bangunan dan Lingkungan) structured by local government of Sleman Regency states that Maguwoharjo Stadium area covering Maguwoharjo Stadium, Gebang Temple Site, and Embung Tambakboyo is the development center as they accommodate the need for sport, tourism, and culture development. It also states that the plan includes developing tourism objectives such as water parks and water booms in a devastated area around Maguwoharjo Stadium.

The government of Sleman Regency also issued Regional Regulations of Sleman Regency No. 12/2012 (Peraturan Daerah Kabupaten Sleman Nomor 12 Tahun 2012) discussing the layout planning of Sleman Regency during 2011-2031. According to the regional regulation, Wedomartani village is set as the Center of National Events (Pusat Kegiatan Nasional) meaning that this urban area can be used to accommodate any international, national, and province level events.

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Wedomartani village is also set as North Yogyakarta Urban Area. The layout planning of Wedomartani village area will be developed to be in the center system of events.

Wedomartani villagers are facing a big challenge, particularly in protecting their agricultural land and keeping their routines in agricultural sector. Those whose main jobs are in agricultural sector do not have many choices, protecting their land and continuing their jobs in agricultural sector; selling out their land and taking jobs in non-agricultural sector; or protecting their land and taking jobs in non-agricultural sector.

The impacts of Maguwoharjo Stadium area development can improve the community's quality of life due to more well-equipped facilities for socio-economic needs available. On the other hand, those facilities are somehow not appropriately utilized, particularly by teenagers, who tend to take personal advantages from them and disturb other people. Based on the researcher's observations, some problems are potentially to be more harmful in the near future. Unless taking actions to deal with that matter immediately, the problems would be more complicated in Wedomartani village area. Based on that situation, the researcher formulated statements of problems as follows: (1) what are the opinions of Wedomartani villagers about the development of Maguwoharjo Stadium area?, (2) how are the impacts of the reform of Maguwoharjo Stadium area towards the purpose of land use in Wedomartani Village?, and (3) how are the changes of socioeconomic livelihood of Wedomartani villagers since the reform of Maguwoharjo Stadium area in the period 2005-2016?

Based on these statements of problems, the objectives of the study are (1) to assess the responses of Wedomartani villagers about the development of Maguwoharjo Stadium area; (2) to assess the significance of the development in Maguwoharjo Stadium area toward the land use in Wedomartani village; and (3) to assess the socio-economic livelihood changes of Wedomartani villagers after the development of Maguwoharjo Stadium area.

THEORETICAL FRAMEWORK

According to a research conducted by Sofyan (2007), one's opinion towards a phenomenon can make effects in two ways (a) one's opinion towards other people can determine his/her impression to them or (b) one's opinion can affect his/her behaviour in the future. If his/her opinion towards the object is positive, his/her behaviour will be good. If his/her opinion towards the object is negative, his/her behaviour will be bad.

According to Dardak (2005), the number of people requiring land for work will be drastically increasing as the number of population and economic growth increase as well. According to Prasena and Shrestha (2013), as it can be seen in Bedog region, the purpose of land use in Bedog has significantly changed in the last few decades due to agglomeration in Yogyakarta City. The research findings drawn by Aswan et al. (1994) in Tropodo village showed that the people of Tropodo no longer had agricultural land and gradually they changed their jobs to non-agricultural sector. In relation to the growing industry in their neighbourhood, they earn money by building boarding houses for rent, setting up food stalls, setting up refill stations for water, and setting up small shops.

The relevant theory used as the frame of reference of building development in one area is the theory offered by Walter Christaller in 1933 concerning Central Germany. Initially, Christaller observed the city development by either its well-ordered layout or its hierarchy. Then, based on that observation Christaller analyzed the service center and the hierarchy of those service centres. Maguwoharjo Stadium area is one of the areas designed to be a service center as well as sport, culture, and tourism center. The area will affect other areas in terms of hierarchy. The nearest areas to Maguwoharjo Stadium area will get the most impacts and the farthest area of it will get the least impacts.

RESEARCH METHODOLOGY

This study was conducted by using the ecological approach and the temporal approach, which are integrated with the qualitative-descriptive method. According to Yunus (2010), the

ecological approach is a method used to analyse the connection between human and environment (man and environment analysis), human activity and environment analysis, and physical-artificial features and environment analysis. The temporal approach was used to analyse the changing purpose of land use, economic activities and social activities. The qualitative-descriptive method was used to elaborate the community opinions in relation to the Maguwoharjo Satdium area development, the process of how the purpose of land use changes, and the changes of socioeconomic activities of the community.

In this study, the data collection was performed by using in-depth interviews, field observations and documentations. The sampling technique used for in-depth interviews with informants was purposive sampling. The accentuation of this purposive sampling technique was on the characters of the sampling participants as the researcher considered they could fully represent the population character. According to Yunus (2010), the qualitative research accentuates on the intention to elaborate things related to the process not the product.

Based on field observations, the area, which happened to receive direct impacts of Maguwoharjo Stadium area development, is obviously the neighbourhood area and areas leading to the stadium area. They include Jetis hamlet (Dusun Jetis), Malangrejo hamlet (Dusun Malangrejo), Karangsari hamlet (Dusun Karangsari), Kenayan hamlet (Dusun Kenayan) and Blotan hamlet (Dusun Blotan). There were fifty people from those five areas taken as samples consisting of five village heads, 20 heads of Rukun Tetangga (neighbourhood associations) and 25 respected figures. The selection of respected figures was based on diversification of education level, profession, positions in community organizations and geographical location.

Moleong (2013) states that the main resources in qualitative research are words and acts, the rest is additional data. In-depth interviews were the main technique of data collection in this study, in addition to the observation technique and documentation. Types of data collected in this study were (1) primary data consisting of the results of field observation and data from in-depth interviews with the informants on the field; (2) secondary data, data obtained from documents belonging to neighbourhood associations (rukun tetangga), hamlets and villages. The variables used in this study were (1) opinions of the community; (2) how the purpose of land use changed, and (3) the changes of community's socio-economic activities.

According to Sugiyono (2013), the main instrument of qualitative study is the researcher himself/herself. The research findings were analysed by using qualitative methods in the frame of inductive thinking based on the data obtained from field observations, documentations and in-depth interviews. To measure the reliability level or data validity, the triangulation technique was used. The type of triangulation used to measure the reliability level or data validity was cross checking from different information sources. The method used for data presentation was the descriptive qualitative approach, so the research findings from the field would be described systematically and holistically structured among variables as the objectives in the study.

RESEARCH FINDINGS AND DISCUSSIONS

A. Community's Opinions toward the Changes of Socio-Economic Livelihood as the Result of Maguwoharjo Stadium Area Development

Opinions are the reflections of one's perception about an event or object expressed in his/her words and behaviour. The research findings about residents' opinions from five hamlets located in the neighbourhood of Maguwoharjo Stadium are as follows:

1. Benefits the Community Received from the Socio-Economic Activities in Maguwoharjo Stadium Area

The community gave positive impressions toward the Maguwoharjo Stadium development based on several aspects considered beneficial to them. Some aspects considered beneficial by the community were that road infrastructures got better, land sales value increased, more jobs and business opportunities were available, and community's welfare got much better.

Before the development of Maguwoharjo Stadium area started, the road had not had asphalt concrete and no proper drainage had been constructed. After the development of Maguwoharjo Stadium area finished, the road got asphalt concrete, drainage was built, and streetlights were installed.

The increase of the land values in Maguwoharjo Stadium area is the biggest benefit for the people owning land or field located near Maguwoharjo Stadium. Before Maguwoharjo Stadium area developed, the land value had been about 200,000 IDR up to 400,000 IDR per square metre. In 2016, when this study was conducted, the land value was about 2,000,000 IDR to 5,000,000 IDR per square metre. This finding is parallel to a research finding of Fitrawan (2014).

Maguwoharjo Stadium development affected in such a way that there are more jobs and business opportunities available for local people. This statement is similar to that of Informant 1: "The Maguwoharjo Stadium development was quite beneficial for people living nearby, like those living in RT 03 Pedukuhan Malangrejo where people will open up the parking area every time there is an event taking place in Stadium Maguwoharjo and people also create more businesses not far from Maguwoharjo Stadium".

Before Maguwoharjo Stadium area development got started, the jobs available had been only farm labourers, breeders and merchants of agricultural products. After Maguwoharjo Stadium area development finished, more jobs and business opportunities were available. The jobs available include development projects that require many labourers, carpenters, workers, security guards, and employees for industrial field. For women, jobs such as becoming laundry lady, housekeeper, and industrial and office employees were available.

This research finding is parallel to research finding drawn by McGee (1990). In McGee's research, the number of women got involved in job sectors increased. A research conducted by Subroto and Setiadi (1997) in rural areas of Yogyakarta city also supports this research. Business opportunities people in Maguwoharjo Stadium area can create are setting up restaurants, simple food stalls, barbershops, and other informal businesses. The community assumes that Maguwoharjo Stadium area reform can improve their welfare. This research finding is also in line with research findings of Rachmawati (2004) and Sarwadi et al. (2013) that there are more economic opportunities after the socio-economic infrastructure development finished in an area.

2. The Loss Community Had to Suffer as the Result of Socio-Economic Activities in Maguwoharjo Stadium Area

The community had negative opinions toward the development of Maguwoharjo Stadium area as there were some negative impacts that occurred after it was finished. The matters considered harmful were crime threats, motorcycle racing taking place in the streets around Maguwoharjo Stadium, moral degradation and noise. Informant 3 stated this as follows: "I cannot accept the idea of the Maguwoharjo Stadium area development due to the negative impacts occurred such as the increased number of crimes, illegal motorcycle races, irresponsible acts of teenagers that are detrimental to the community, and more young people who sit and do nothing in the street that can disturb the passers-by".

Before the Maguwoharjo Stadium area development got started, crimes rarely had happened. If any, there had been simply unplanned crimes and just in the neighbourhood, meaning that the crime happened if there were slight chances and the culprits were local people. After the Maguwoharjo Stadium area reform finished, the number of crimes increased and had many motives. In one month, there might be even five crimes. Informant 4: "I am so anxious and afraid of going home rather late at night when passing by the road before the stadium; because sometimes there are young people drunk wandering around. So, when going home rather late at night I take Jalan Anggrek and pass through Dusun Malangrejo which is considered safer. I hope there will be security guard stations near the stadium to make sure people can feel safe".

This research finding is not different from the research conducted by Giyarsih (2016), who found negative impacts such as security threats around UMY campus after UMY campus was built. The research conducted by Sarwadi et al. (2013) also supports the findings of this research.

Informant 5 added details about the loss community had to suffer after Maguwoharjo Stadium development finished: "I sometimes have to drive away a group of young people who sit and do nothing in front of the stadium. Somehow there is an assumption that they belong to a gang group having a bad intention to steal money and hand phones from passers-by, particularly at night".

Before Maguwoharjo Stadium area development had been initiated, there were no motorcycle races. Initially, motor racing was performed by young people in the neighbourhood of the stadium area. However, since 2010, motor racing events became an occasion to test out racing motorcycles and competitions among racing motor repair shops.

People living in the stadium area felt insecure with the teenagers' behaviour in the streets leading to the stadium. The teenagers were leisurely watching motorcycles racing, sitting in a group while drinking alcohol, having a date. Presumably, there was also a prostitution practice in the area.

The noise of racing motorcycles and the loud voice of soccer spectators were considered very disturbing by the people living nearby, especially in Jetis hamlet (Dusun Jetis) and Malangrejo hamlet (Dusun Malangrejo), which are located quite close to Maguwoharjo Stadium.

B. Impacts of Maguwoharjo Stadium Area Development toward the Changes of Land Use at Wedomartani village

The result of field observation showed that the area located near Maguwoharjo Stadium area changed significantly, from agricultural land to non-agricultural land. Figure 1 shows the changes of land use in the area observed between 2007 and 2016.

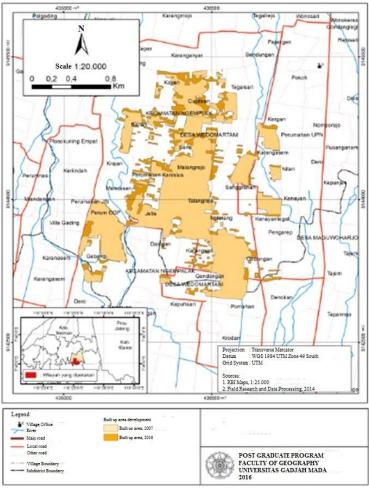


Figure 1. Built-up area development in the research area, 2016

Based on Figure 1, it can be seen that the use of land is more intense in locations around Maguwoharjo Stadium and along the main road leading to the stadium.

The changes in land use in Wedomartani village can be categorized into four systems: sales and purchases system, estates system, land tenure, and bequest system for public. The land use had been more on by estates system and bequest system before Maguwoharjo Stadium area development started, when the purpose changed from agricultural to non-agricultural use.

After Maguwoharjo Stadium area development had finished, the changes of land use were more likely by sales and purchases system and land tenure. Sales and purchases system and land tenure resulted in the change of land use from agricultural to non-agricultural use in Wedomartani village, particularly in the five hamlets located near the stadium area, where the change took place rapidly as seen in Figure 2.



Figure 2. House building constructions on the streets leading to Maguwoharjo Stadium conducted by developers

Investors (stakeholders) were taking a risk in buying rice field or farmyard with high sales value as long as the land is located near to Maguwoharjo Stadium area or located by the main road leading to Maguwoharjo Stadium area.

C. Changes of Socio-Economic Livelihood of Wedomartani villagers

Before the stadium area development started, 30.9 % of the people living in five hamlets, Jetis, Malangrejo, Karangsari, Kenayan, and Blotan had been mainly farmers. The others earned money by becoming public officials, employees, entrepreneurs, labourers, and setting up service businesses.

After the Maguwoharjo Stadium area development, people's choice in making a living changed. The research findings showed that the number of farmers in four hamlets declined. Meanwhile, non-agricultural jobs such as public officials (PNS, TNI, POLRI), office employees, entrepreneurs and service business owners increased, particularly the number of those becoming employees and working in informal service business. This finding is not different from the research conducted by Harini (2012). The hamlet whose number of farmers increased from 2005 to 2016 is Kenayan, where the increase was caused by marriages resulting in families that continue the agricultural work from parents or parents-in-law.

The factors that caused changes in the people's way of making a living were the narrower agricultural land because of different purposes of land use, the decline in harvest, and the lack of motivation and commitment from young people working as farmers. This research finding is compliant with the research conducted by Sudrajat (2013). On the other hand, job opportunities and businesses in the non-agricultural sector in the neighbourhood of the area under analysis were increasing and more economically promising.

Social activities in the area also changed. Initially, people used to work together collaboratively: "In the past, the number of social-based activities in the village was high, every activity requiring much labour would be done together such as installing rooftops, throwing a wedding party or khitanan, farming, pulling out straws after harvesting. By doing so, people throwing an event will not be spending too much money; they simply provide food and drink to those who give a hand. Nowadays, almost every activity requires other people's labourers which demand more expenses" (Informant 6).

The mutual aid activities are basically various, from fixing damaged road, cleaning up the environment, helping neighbours building their house, helping neighbours throwing hajatan and farming rice, chilies, or peanuts, and pulling out straws after harvesting. After the Maguwoharjo Stadium area development finished, people's social activities declined and changed from social-oriented to economy-oriented matter. The factors causing orientation change from social matter to economy matter were the increased demand of basic needs, the less leisure time, and newcomers' attitude. This research finding is parallel with Giyarsih's (2014) research finding in the countryside of Yogyakarta City.

The strategy farmers used to earn more money is by taking side jobs in non-agricultural sector. This is also the case of Informant 7, whose job is to sell young coconut ice in the north of Maguwoharjo: "I started selling ice in 2011, a couple of years after getting married. At first, I was selling it near to my house in RT03/RW 34 Pedukuhan Malangrejo, but the customers were not so many. Later on, in the beginning of 2012, I started selling ice at the north entrance of Maguwoharjo and the customers are a lot. My daily income can be 150,000 IDR to 250,000 IDR".

The same statement was collected from Informant 8, who owns an auto-repair shop: "I started to set up an auto-repair shop in 2014, almost the same period of Maguwoharjo Stadium area development got started. At first, I set up a motorbike-repair shop by renting a kiosk in Jetis Market facing to the street in the north of Maguwoharjo Stadium area. The customers became more and more. Later on, I employed mechanics for repairing motorbikes and cars. Since the number of customers was gradually increasing and by considering the need of more space for parking lots, finally I set up an auto-repair shop at home, which is located not far from the previous kiosk. The income is not certain, more or less from 300,000 IDR to 500,000 IDR a day".

The result of the in-depth interviews showed that there were people becoming carpenters and labourers with an average daily income between 75,000 IDR to 100,000 IDR. There were also those working as daily workers with an income of 45,000 IDR to 60,000 IDR a day. Some homemakers also got side jobs working as house cleaners, launders, and babysitters with a monthly income ranging from 300,000 IDR to 750,000 IDR. This research finding is compliant with the research conducted by Setiadi et al. (1997).

CONCLUSIONS AND SUGGESTIONS

A. Conclusions

Based on the study findings and discussions, the conclusions are as follows:

1. Based on the people's opinion, the presence of Maguwoharjo Stadium area can create a better socio-economic livelihood. Some of the interviewees assumed that the development of the area could affect the sale value of land, improve the infrastructure, and somehow provide more jobs and business opportunities. On the other hand, some people thought that the development did not give any added value, and was more likely to have a negative impact for people there, such as the increased number of crimes, depravity, environmental damage, and noise.

- 2. The development of Maguwoharjo Stadium affected how the land was used, particularly in the neighbouring area and the area leading to the stadium with widespread patterns. The difference of land use was of 568,620.06 m² from 2007 to 2016.
- 3. The socio-economic livelihood of people living near to Maguwoharjo Stadium area changed between 2005 and 2016. The changes consisted in the manner in which residents make a living and the changes of their building structures. First, there were more and diverse jobs in non-agricultural activities. This strategy resulted in the increased income and better home building constructions. The way in which the social livelihood changed is seen in how the social orientation became economic orientation and in how people's attitude changed from more social to more selfish and money-oriented. There was also a the lower income from the agricultural sector, and an increased income coming from non-agricultural sector, a lower number of people working in the agricultural sector and, by the contrary, an increased number of people working in the non-agricultural sector.

B. Suggestions

- 1. The local government and central government are supposed to make regulations for land use as the land taking over happens too fast.
- 2. There is a need of immediate actions from government and people to prevent and deal with the negative impacts occurred in the Maguwoharjo Stadium area.
- 3. The government and community organizations need to make entrepreneurship workshops for young people and homemakers to develop skills in order to adapt to the development of the Maguwoharjo Stadium area.
- 4. This study needs to be continued with a focus on the impacts of the stadium on the local people because Maguwoharjo Stadium area is to develop more while there is less and less agricultural land.

REFERENCES

- ASWAN, H., EMIANTI, D. S. (1994), Dampak Pembangunan Industri terhadap Kehidupan Budaya Masyarakat Setempat di Jawa Timur [The Impact of Industrial Development on the Cultural Life of Local Communities in East Java], Departemen Pendidikan dan Kebudayaan, Jakarta.
- DARDAK, S. (2005), Pemanfaatan Lahan Berbasis Rencana Tata Ruang Sebagai Upaya Perwujudan dan Ruang Hidup yang Nyaman, Produktif, dan Berkelanjutan [Land Use Based on Spatial Planning as an Effort to Create a Comfortable, Productive and Sustainable Living Space], National Seminar "Save Our Land" for The Better Environment, 10 December 2005, Fakultas Pertanian Institut Pertanian Bogor, Bogor.
- FITRAWAN, U. (2014), Pengaruh Perkembangan Fisik Kota Terhadap Perubahan Lingkungan Fisikal dan Sosial Ekonomi di Wilayah Peri Urban Kota Makasar (Unpublished Thesis) [Effects of Physical Development of Cities on Changes in Physical and Socio-Economic Environment in the Peri-Urban Region of Makassar], Universitas Gadjah Mada, Yogyakarta.

- GIYARSIH, S. R. (2014), The Role of Yogyakarta and Surakarta Cities in the Intensity of the Regional Transformation of Two Villages Located in the Yogyakarta-Surakarta Corridor, Romanian Review of Regional Studies. Vol. X, No. 1, pp. 15-22.
- HARINI, R. (2012), Kajian Spasial Valuasi Ekonomi Lahan Pertanian Terkonversi dan Dampaknya Terhadap Produksi Pangan di Kabupaten Sleman (Unpublished Dissertation) [Spatial Study of Economic Valuation of Converted Agricultural Land and Its Impact on Food Production in Sleman], Fakultas Geografi UGM, Yogyakarta.
- McGEE, T. G. (1990), *The Future of the Asian City: the Emergence of Desakota Regions*, Proceedings of the International Seminar and Workshop on the South East Asian City of the Future, 21-25 January 1990, Jakarta.
- MOLEONG, L. J. (2013), *Metodologi Penelitian Kualitatif* [Qulitative Research Methodology], Remaja Rosdakarya, 31st edition, Bandung.
- PERATURAN DAERAH KABUPATEN SLEMAN NOMOR 12 Tahun 2012 tentang Rencana Tata Ruang Wilayah Kabupaten Sleman Tahun 2011-2031 (2012) [Regional Regulation No. 12/2012 of Sleman Regency concerning the Spatial Planning for Sleman Regency for the period 2011-2031].
- PRASENA, A., SHRESTHA, P. (2013), Assessing the Effects of Land Use Change on Runoff in Bedog Sub Watershed Yogyakarta, Indonesian Journal of Geography, Vol. 45, No. 1, June, pp. 48-61.
- RACHMAWATI, R. (2004), Peran Kampus sebagai Pemicu Urbanisasi Spasial di Pinggiran Kota Yogyakarta [The Role of Campus as a Trigger for Spatial Urbanization in the Suburbs of Yogyakarta], Majalah Geografi Indonesia, Vol. 18, No. 1, March, pp. 14-28.
- SARWADI, A., GIYARSIH, S. R., PRAMONO, R. W. (2013), Penguatan Kapabilitas Masyarakat Pinggiran Kota, Studi Kasus Kecamatan Kasihan, Kabupaten Bantul Daerah Istimewa Yogyakarta [Strengthening the Capability of Suburban Communities, Case Study of Kasihan, Bantul Regency of Yogyakarta Special Region], Pusat Studi Perencanaan Pembangunan Regional UGM, Yogyakarta.
- SOFYAN, M. (2007), Persepsi Masyarakat Penambang Pasir dan Batu Terhadap Kondisi Lingkungan dan Tata Kelola Penambangan di Kelurahan Watusampu Kecamatan Palu Barat Kota Palu Propinsi Sulawesi Tengah (Unpublished Thesis) [The Perception of Sand and Stone Mining Community Towards Environmental Conditions and Mining Management in Watusampu Sub-District, West Palu District, Palu City, Central Sulawesi Province], Universitas Gadjah Mada, Yogyakarta.
- SUBROTO, Y. W., SETYADI. (1997), Proses Transformasi Spasial dan Sosio Kultural Desa-Desa di Daerah Pinggiran Kota (Urban Fringe) di Indonesia (Studi Kasus Yogyakarta). Laporan Penelitian Ilmu Pengetahuan Dasar (Unpublished Report) [The Process of Spatial and Socio-Cultural Transformation of Villages in the Suburbs (Urban Fringe) of Indonesia (Case Study on Yogyakarta). Basic Science Research Report], Pusat Studi Lingkungan Universitas Gadjah Mada, Yogyakarta.
- SUDARAJAT (2013), Tinjauan Spasial Komitmen Petani Mempertahankan Kepemilikan Lahan Sawah dan Pemanfaatannya Untuk Lahan Pertanian di Kabupaten Sleman dan Kabupaten Bantul (Unpublished Dissertation) [A Spatial Overview of the Farmers' Commitments to Maintain Ownership of Rice Field and Their Utilization for Agricultural Land in Sleman and Bantul Regencies], Fakultas Geografi UGM, Yogyakarta.
- SUGIYONO (2013), *Memahami Penelitian Kualitatif* [Understanding Qualitative Research], Alfabeta, Bandung.
- YUNUS, H. S. (2010), *Metode Penelitian Wilayah Kontemporer* [Contemporary Regional Research Methods], Pustaka Pelajar, Yogyakarta.

*** (2016), Persepsi Stakeholders Terhadap Gejala Urban Sprawl di Pinggiran Kota Yogyakarta (Kasus di Sekitar Kampus UMY) (Unpublished Report) [Stakeholders' Perception of Urban Sprawl Symptoms in the Suburbs of Yogyakarta City (Study Case around the Campus of Muhammadiyah University of Yogyakarta)], Sekolah Pascasarjana UGM, Yogyakarta.