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RESEARCH ARTICLE

SUSTAINABLE STUDY ABOUT THE MOTORCYCLE PARKING IN THE RECTORAT BUILDING AREA, BOGOR AGRICULTURAL UNIVERSITY.

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Abstract

Parking area is a region or area that utilizes space as a parking lot and parking control through the entrance. The circulation path is the place, which is used for the movement of vehicles in and out of the parking area. Standard parking space requirements vary for each type of place of activity. Different types, services and tariffs, including availability of parking spaces, vehicle ownership levels, and income levels. The condition of the motorcycle parking space in the Rectorate area of the Bogor Agricultural Institute provides space in meeting the needs of parking space in each parking zone. But the parking settings are not in the right position so it looks irregular. Means to cause the safety and comfort of the users of the parking lot in the campus of Bogor Agricultural University becomes reduced. The result of analysis and discussion got the capacity of motorcycle parking space equal to 465 SRP of its SRP is 615, it mean still fulfill.

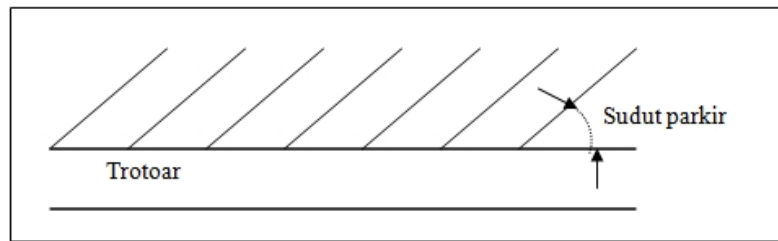
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Introduction:-

Bogor Agricultural University is an institution of higher education of agriculture historically formed from middle and high educational institutions of agriculture and veterinary science early 20th century (Agus, 2002; Bureau of Bogor Agricultural University, 2017). Parking space capacity makes guidelines on land use arrangements for parking for users (Departement of Transportation, 1996; Agus, 2002; Farisal, 2011). Motorcycle parking time turns into irregular parking. According to his place, motorcycle parking in the area of Bogor Agricultural University campus area is parking outside the road (Riski A.S, 2017; Hobbs, 1995, Syaiful *et al*, 2017). Motorcycle parking on the campus of Institut Pertanian Bogor is opened when academic activity starts at 06.00 WIBB until 17.00 WIBB lasts for 5 working days. The parking system at the Bogor Agricultural University implements a ticketing system, whereby every motorbike vehicle that will come out can show the ticket. This system is known as integrated parking supervision (Syaiful, 2005; Syaiful, 2017; Syaiful *et al*, 2017). In the calculation of parking is considered the need for parking spaces and parking indices for the location of the study (Departement of Transportation, 1996; Ministry of Public Works 1997; Departement of Transportation, 1992). Calculating traffic in the off-street parking lot also requires special attention (Munawar A., 2004; Oppenlender *et al*, 1976; Departement of Transportation, 1995). The accumulation and volume of parking is affected by fluctuations in the number of vehicles parking (EST, 2013; Setiawan, R., 2008; Syaiful, S.T., M.T., 2016). While the parking capacity is the ability of parking lot in accommodating vehicles within the designated parking area (Ofyar., Z.T, 1998).

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Source Towards orderly transportation and traffic, Ministry of Transportation, 1995

Figure 1:-The parking space is angled
Location and place of study can be seen in Figure 2 below;



Figure 2:-Research Locations and Map of Green Campus IPB

Research Methodology:-

In this research, firstly done by using problem identification and collecting data in secondary first, new primary data in field done. After enough data then the process of data processing and then the existing data in the analysis to obtain the possibility of valid data and further discussion of the results. After that then draw some conclusions that can support from the results of this study. This method is shown in the flowchart in Figure 3 below.

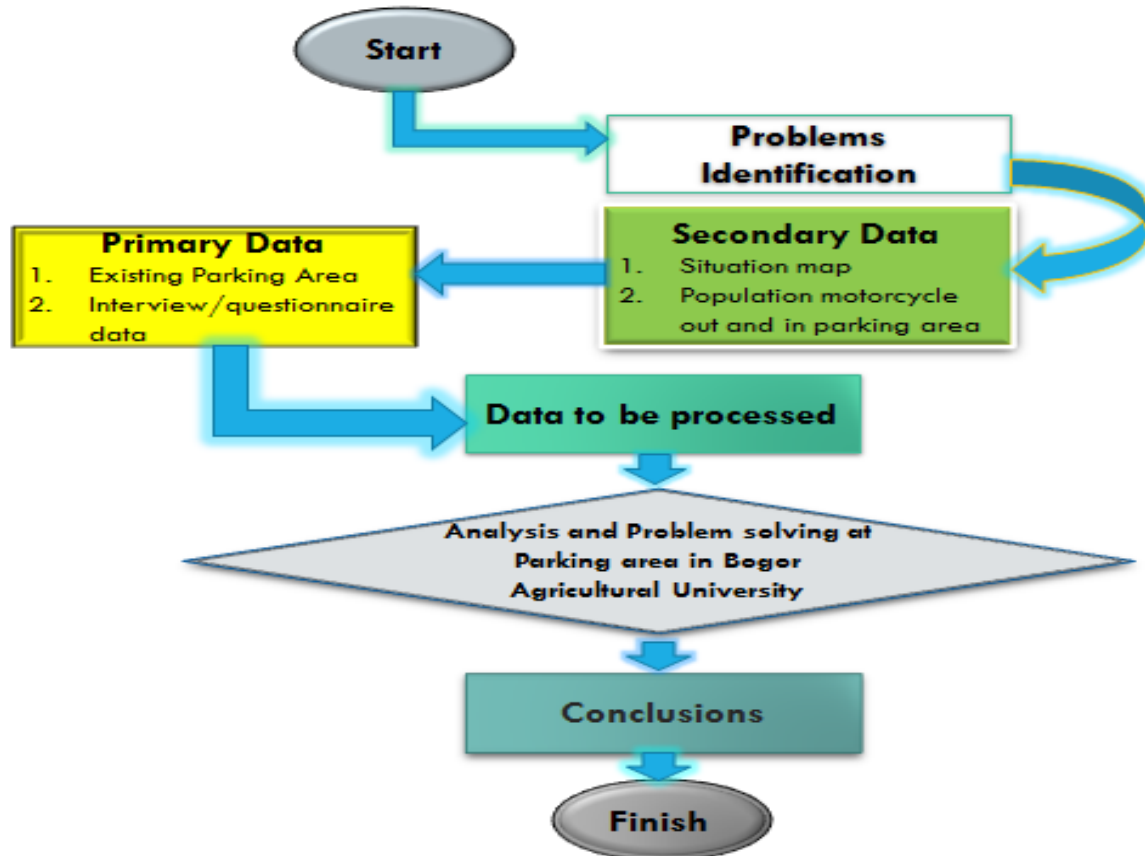


Figure 3:-Flow chart of the study

Discussion and analysis of data:-

1. Number of incoming transactions. Parking Accumulation and Motorcycles capacity in the Bogor Agricultural University area can be seen from long distance vehicle entrance motorcycle parking every day data obtained. Assuming that vehicles entering the area are considered as parking.
2. Maximum number of motorcycles out of study area.

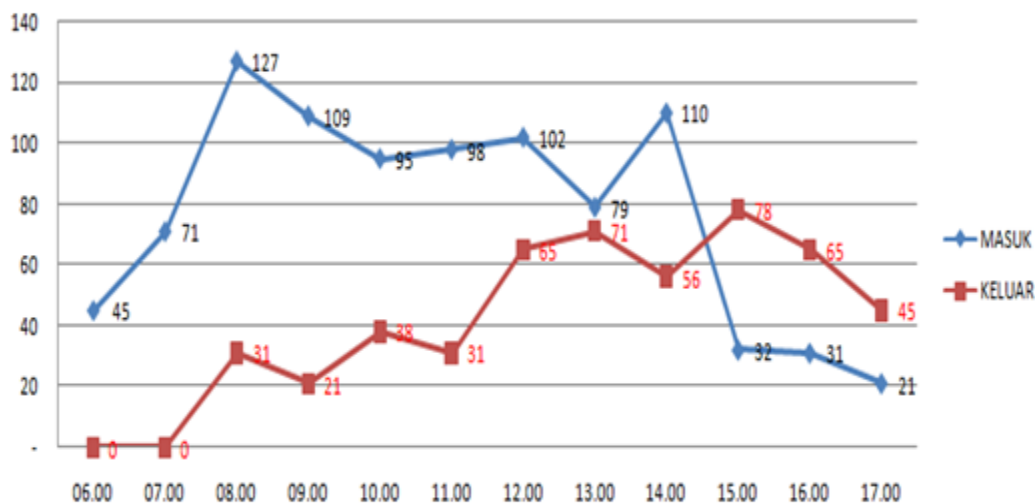


Figure 4:- Graph of Motorcycle Parking Entry May 8, 2017

Figure 4. It can be seen that on Monday, May 08, 2017, the maximum number of motorcycles entering the parking area occurred at 07.00-08.00 BBWI for 127 vehicles. While the maximum time the vehicle exit the parking occurred at 15.00- 16.00 BBWI, of 78 vehicles.

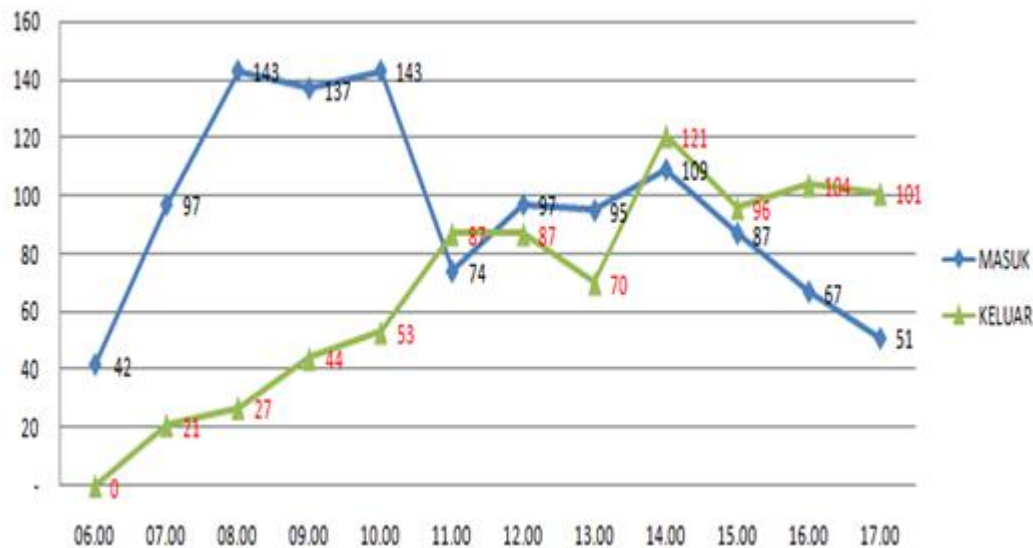


Figure 5:- Graph of Motorcycle Parking Entry 10 May 2017

Figure 5. It can be seen that on Wednesday, May 10, 2017 the maximum number of motorcycles entering the parking area occurred at 07.00 -08.00 BBWI of 143 vehicles. While the maximum time the vehicle exit the parking occurred at 14.00 - 15.00 BBWI, of 121 vehicles.

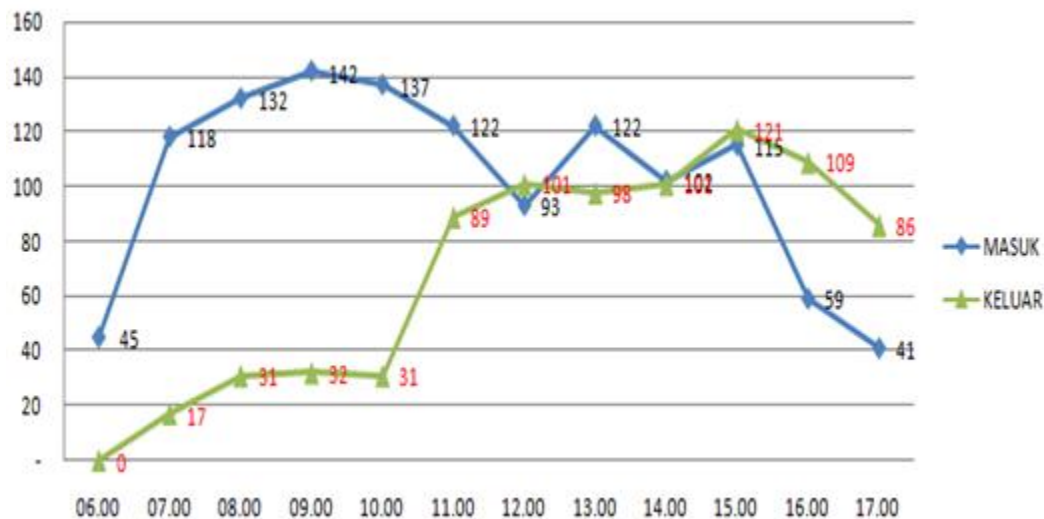


Figure 6:- Graph of Motorcycle Parking Entry 11 May 2017

From Figure 6. it is known that on Thursday, May 11, 2017, the maximum number of motorcycles entering the parking area occurred at 09.00 - 10.00 BBWI of 142 vehicles while the maximum time of vehicle exit parking occurred at 15.00 - 16.00 BBWI, amounting to 121 vehicles. From the results of parking analysis conducted on the area of motorcycle parking in the area of Rectorat Building Bogor Agricultural University, need the management of the best management, which means the need for additional officers to arrange parking space. It will be seen how many parking vehicles that have not been set in the parker. The available parking capacity is sufficient. The presence of supervision and arrangements made to optimize available parking space. As well as for the circulation path out and enter in the parking area.

Conclusion:-

Based on the data analysis of motorcycle parking space capacity of Bogor Agricultural University as follows:

1. Bogor Agricultural University rectorate building area becomes less orderly because there are still many motorcycles which are still parked in any place where certain time is at the peak of activity, causing unrestricted parking of motorcycle in Rectorate area.
2. From the state of the parking capacity eksamp parking of 645 SRP was able to meet the needs of parking space of 615 SRP.

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