Operational Characterization of Habal-Habal in Selected Municipalities of North Cotabato

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Abstract: Informal public transportation becomes popular in the Philippines because of its accessibility, faster and flexibility but is unregulated and has no policy for its operation. This study aimed to characterize habal-habal (the most common informal public transport in the province) service operation in Cotabato Province and aims to investigate the service type, route and schedules, fares, organizations/associations, service area and existing regulation policy. These informations will give a better understanding on the characteristics of this informal transport mode, and could serve as bases for future policies that will improve the habal-habal operation in the province. Most of the service area of habal habal are remotely located baranggays and the terminals are located at capital baranggay of each municipality and along the national highway. Habal habal becomes the main mode of transport for these baranggays since majority of these baranggays that has no other mode choice for public transport.

Keywords: Transport, habal habal, informal public transport

1. INTRODUCTION

Informal public transport is a common scene, both in urban and rural areas, here in the Philippines. This informal public transportation becomes popular because of accessibility, faster and flexibility but they often operate with no policies and regulation thus poses issues on accountability and safety.

Cotabato Province in Region XII is located at the South Central Mindanao composed of 17 municipalities and one city with a total of 543 baranggays with more than 1.3 Million residents in 2015. The province is an agricultural area producing various agricultural products such as plantation crops, fruit crops, rice and corns, high value commercial crops and vegetables.

The major mode of public transportation are busses, vans, jeepneys and *multicab* (a small version of jeepney) and are available only in baranggays and municipalities along the national highways. While within a municipality, smaller modes of public transportation usually used are *tricycle* (a motorcycle attached to a cab, sometimes called *trisikad* or *pedicab*) and *habal-habal* (a motorcycle with an extension at the back to carry more passengers, sometimes called *skylab*). Habal-habal is the most common informal public transportation in the province used to convey both passengers and goods from baranggays.

Most services, like hospitals and economic centers (where restaurants, recreation centers, market, department stores and grocery stores are located), are located at capital baranggay of each municipality. Residents from remote baranggays travel to this places to purchase goods and sell their products at the same time, usually during market days. They also have to travel to the capital baranggay to avail other services such as hospitalization and education among others. Habal-habal is the most common mode of transportation used by these residents since many of the road going to remote baranggays are either not accessible to jeepneys or multicabs, too narrow, muddy or hilly, or the demand is too low for the jeepneys or multicab to operate in the area. These habal habal becomes the most accessible and faster mode of transportation in these baranggays.



Figure 1. Habal habal as public transport traveling in paved (left) and rough (b) roads.

Habal-habal operation is extensive in all municipalities in the province since numerous baranggays are located in remote areas. These habal-habal are informal public transport and unregulated, thus poses many issues in the community – absence of policies on their operation and safety of both passenger and driver are examples of these issues. Hence, study of the operational characteristics of this informal mode of transport is a primary step to address such issues.

This study aimed to characterize the habal-habal service operation in North Cotabato Province. It aims to investigate the service type, route and schedules, fares, organizations/associations, service area and existing regulation policy at the local level (if there is). These informations help us better understand the characteristics of this informal transport mode and could serve as bases for future policies that will improve the habal-habal operation in the province.

2. Related Literature

Formal mode of transportation, such as bussess and jeepneys, are often used for long distance trips while informal modes like tricycle and motorcycle taxis are used for short distance trips (Guillen et. Al, 2013). The availability of transport mode in rural areas are limited since it is perceived as economically viable (Nelson, 2016). The emergence of habal-habal is due to infrastructure gap in term of developed roads and the lack of alternative modes (Guillen & Ishida, 2004). Though informal, motorcycle taxis are accepted by the community bacause of its service cost and flexibility (Nelson, 2016; Tuffour et al., 2014).

Motorcycle taxis provides employment, specially for the young and uneducated, in countries where unemployment rate is high (Tuffour, Y. A., & Nkrumah, K. , 2014; Ogunrinola, I. O., 2011). These commercial motorcycles can be a source of income for the unskilled, semi-skilled and the socially marginalized and improving economy in rural communities (Karema, F. M., 2015).

High accident and fatality rates can be reduced by providing effective safety education and improvement in the enforcement of all safety measures through policies and guidelines (Ogunrinola, I. O., 2011).

3. Data Gathering

Preliminary data were gathered through face-to-face interview with the drivers and operators at the habal habal terminal stations (see Fig. 2). Purposive sampling was used, respondents were drivers/operators interviewed on site. There are total of 31 terminals located, 105 routes identified and 41 habal habal organizations/associations were interviewed. Municipal traffic management units were interview for any existing local policies and organizations of habal-habal were determined using interview on site. Maps were generated and distances were estimated using QGIS.

4. Preliminary Results

Six municipalities were considered as pilot areas for the study. These municipalities were purposively selected since they are along the national highway and are adjacent to Kidapawan City, which is the capital of the province. Kidapawan City and Makilala are along the Davao-Cotabato national highway while Makilala, Mlang and Tulunan are along the Matalam-Tacurong and Makilala-Tacurong national highway (Fig. 2). Magpet and Antipas were included since some of the baranggays from these two municipalities are being served by those habal habal found in Poblacion, Kidapawan City.



Figure 2. Province of North Cotabato map.

4.1 Service Type

Most of the habal habal have an extension attached to the rear part or the motorcycle to cary more passengers but there are also some that has no extensions. Habal habal can either be shared for three to six passengers, or can be hired privately known as "*pakyaw*" basis. Those who shared the trip will have to pay individual fares but for *pakyaw* basis, the passenger must pay an agreed amount larger than the regular fare of an individual passenger, usually covers the equivalent total fare for three passengers.



Figure 3. Habal habal terminal located at capital baranggay (Poblacion, Kidapawan City).



Figure 4. Habal habal terminal along the national highway (Bagontapay, Mlang).

Habal habal terminals are either located within the public terminal of baranggay poblacion or just along the national highway. Others have no designated terminals, they have just parked in a common place where they wait for passengers.

4.2 Route and Schedules

Route of habal habal is usually from the baranggay of origin to terminals along national highway or terminals at baranggay Poblacion of each municipality. There are 105 routes

identified and 67.62% of these routes has no other option for public transportation, while the remaining routes have the option of tricylce or jeepney but jeepney are usually scheduled only to travel twice a week.

Table 1. Frequency of available options on mode of public transportation.					
Other mode of public transport	Frequency	Percentage			
none	71	67.62			
tricycle	16	15.24			
jeep	4	3.81			
jeep (scheduled 2xweek)	11	10.48			
tricycle, jeep (scheduled 2xweek)	2	1.90			
tricycle, jeep, van	1	0.95			
Total	105	100			

The schedule of operation is very flexible, no definite schedule of trips. But usually the operation starts around five to six o'clock in the morning and ends around five to six o'clock in the afternoon. At any time, whenever there is a passenger, either shared or *Pakyaw* trip, the habal habal is on for a trip. Special trips can be arranged conviniently with the operators and they can easily be contacted since they are just living within the neighborhood.

4.3 Fares

Fares for habal habal differ with respect to distance and road conditions. The fare for shared trips ranges from a minimum fare per passenger of PhP10 to PhP 100 for the most remote destination. While for *pakyaw* trips, the fare is in the descrition of the operator or as agreed by the organization, depending on the distance and road condition. Most often the price is regulated by habal habal organizations or associations.

4.4 Service Area

The service area of habal habal operators are often within the baranggay where the operator resides. Habal habal offers the most convinient mode of transport from the most remote baranggays to the terminals along the national highway or terminals located at baranggay poblacion. These remote baranggays are often no other public transport mode choice. Baranggays adjacent to the national highway have tricycle or jeepney as options for public transportation.

Habal- habal organizations has a designated service area, usually each organization is serving two to five baranggays. These baranggays could either be within a certain municipality, or within two adjacent municipalities.



municipalities.

4.5 Habal habal Organizations/Associations

There are total of 41 organizations/associations that were identified and interviewed, with an average of 20 active members. Active members are those habal habal drivers who regularly travel in thier assigned route, while non active members are those drivers included in members list but travels only as needed, meaning this is not their primary source of income.

Municipality	Organization Name	Members (Regular)	Total number of Organizations	Total no. of habal habal
Antipas	SMAS	15	1	15
Kidapawan	Org 1	14		
	Org 2	16		225
	Org 3	14		
	BODSA	15	12	
	Org 4	15		
	SMAKKK	21		
	KISUMADA	16		
	KIOJODOZA	14		
	KAMA	11		
	MNLF-BASODA	17		
	PITODA	34		
	KAOSA	38		
Magpet	BOMAKISDA	20	3	54
	KADSODA	10		
	MAPPES MODA	24		

Table 2. Habal Habal Organizations in six selected municipalities in North Cotabato

Makilala	KILIRIDA	33		
	KUINSODA	20		
	Org 5	11		
	SALIRIKADA	17		
	SKYMODA	16		256
	MASAVISA	17	11	
	SMODA	12		
	Luhayon Term	56		
	BSDA	12		
	Buhay Terminal	30		
	SAPSODA	32	-	
Mlang	NUBVISA	10	8	189
	Org 6	22		
	PUMASODA	15		
	BPMDOA	39		
	Org 7	20		169
	BALIDUWA	24		
	Org 8	27		
	New Luwaan term	32	-	
Tulunan	MASAVISA	17		
	Org 5	11	C	
	FCATUDA	23		116
	SIBSODA -1	20	- 6	110
	SIBSODA -2	18		
	LASODA	27	-	

The organization/association has members who are habal habal operators residing within their service area. The organization/association regulates the fare and monitors its member.

Kidapawan City has the largest number of habal habal organizations/associations among the six municipalities, with a total of 225 active members. The traffic management unit of the city is reviving the federation to consists all these organizations/associations for regulation and policy formulation.

In the case of Makilala, the LGU has no record of registration for these habal habal organizations/associations but terminals are located within the public market, the habal habal organizations/associations are just paying a rental for the space used as terminals.

5. Summary and Conclusion

Most of the service area of habal habal are remotely located baranggays and the terminals are located at Baranggay Poblacion of each municipality and along the national highway. Habal habal, even as an informal mode of transport, becomes the main mode of transport for these baranggays due to either no other mode choice or few jeepney and/or tricycle (usually scheduled) that is available in the area. From the terminals, these habal habals are traversing arterial roads wherein they are prohibited but is tolerated due to lack of public transportation available in the area to serve the community. The scarcity of public mode choice is due to road condition, which are either gravel or earth and is mountaineous and steeper terrains, and low demand for jeepneys to operate in the area. "*Pakyaw*" basis is also common, which is hiring the habal habal privately for an agreed payment.

The emergence of habal habal in North Cotabato Province is due to scarce options of public transportation going to remote baranggays. Habal habal is more accessible, fast and reliable but unregulated and no formal policy for its operation. It is also observed that safety standards for both drivers and passengers were not observed.

6. Recommendations

Regulatory policy on habal habal operations must be formulated in municipal or provincial level, to monitor the habal habal operation in the area. Policy on its operation and manufacture could also be considered to insure the safety of both drivers and passengers.

Choice modeling approach can be used to estimate the demand for habal habal. A more intensive data gathering for both the habal habal operators and commuters would be benificial for model generation.

Literature Cited

- Guillen, M. D., Ishida, H., & Okamoto, N. (2013). Is the use of informal public transport modes in developing countries habitual? An empirical study in Davao City, Philippines. *Transport Policy*, 26, 31-42.
- Guillen, M. D. V., & Ishida, H. (2004). Motorcycle-propelled public transport and local policy development: The case of "tricycles" and "habal-habal" in Davao City Philippines. *IATSS research*, 28(1), 56-66.
- Nelson, J. (2016). *Motorcycle Taxis in the Provision of Rural Public Transport Services; A Case Study of Selected Towns in the Volta Region of Ghana.*
- Tuffour, Y. A., & Nkrumah, K. (2014). Motorcycle taxis public transportation services within the Accra Metropolis. *American Journa of Civil Engineering*, 2(4).
- Ogunrinola, I. O. (2011). Informal self-employment and poverty alleviation: empirical evidence from motorcycle taxi riders in Nigeria. *International journal of economics and finance*, *3*(2).
- Karema, F. M. (2015). The Role of Commercial Motorcycles in the Rural Economy: A Case Study of Laikipia East Sub-Couty, Kenya (Doctoral dissertation, Department of Geography and Environmental Studies, University of Nairobi).