

## **PERCEPTIONS AND EFFECTS THE ECONOMIC OF MOUNT KELUD TOURISM SITE DEVELOPMENT POST-ERUPTION TO THE LOCAL FARMERS**

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### **Abstract**

Tourism has proven itself to be able to support the economic growth through opportunity for investment, occupation, work, business which accumulated in the prosperity of the people. Since re-open, the effect of the development of Mount Kelud tourism post-eruption aren't clearly identifiable. Given that reason, the goals of this research are to: 1). Identify the locals farmers' perception about the development of Mount Kelud tourism post-eruption which include its process and development. 2). Identify the effects of post-eruption Mount Kelud tourism development to the local farmers which include occupation-changes, working hours, per-family income, land price, price of the daily needs, local product values. The research conclude that; 1) local farmers' perception in Sugihwaras village to the development of the post-eruption Mount Kelud tourism are generally positive and they mostly agree with the tourism site's existence. 2) from the economic aspect, the post-eruption Mount Kelud tourism site has significant effects to the rise of land selling price and type of jobs/occupation and the income of the local farmers who work on the tourism site. But it doesn't significantly affected the working hours, the price of daily needs and other local products.

**Keywords:** tourism site development, social-economic condition, post-eruption.

### **BACKGROUND**

Tourism has been proven to encourage economic growth through investment opportunities, job opportunities, business opportunities and ultimately can improve the welfare of the community. The opportunity to strive not only in the form of development of tourism facilities and infrastructure but also opportunities in the field of small handicrafts such as handicrafts. But lately there is a new paradigm in the field of tourism that we are glorious because it can improve the welfare of the community through job opportunities in all lines proved to cause disastrous to social life, culture and environment. The welfare that we enjoy economically is not followed by the improvement of social life, culture, and environmental conservation. Many social problems we encounter in society after we develop tourism. Likewise on cultural and environmental issues. The development of tourism sector in various parts of the world has impacted on various dimensions of human life, not only affecting the socioeconomic dimension alone, but also touching the social-cultural dimension and even the physical environment. The impact on these dimensions is not only positive but also has a negative impact (Widyastuti, AR, 2010) Tourism activities concerning aspects of development, business, and policies that have been implemented by the government and the rapid development in the field of tourism needs to be followed by arrangements in accordance with the aspirations of the Indonesian nation. As with tourism activities, the

management of many tourism areas built in various areas need to be secured so that there is no imbalance to the surrounding community, so as to realize the existence of harmony and balance. (RI Law No.9 of 1990)..East Java has many areas with stunning natural beauty, one of which is Mount Kelud located approximately 35 km from the city of Kediri, precisely in the Village Sugihwaras, District Ngancar, which belongs to the District Kediri. At Mount Kelud eruption that occurred at the beginning of 2014, it is likely to have an impact on the damage and changes in the existing natural conditions in the surrounding area resulting in decreasing quality of life of the community in the surrounding villages both from economic and social aspects. To help overcome the conditions that occurred after the eruption, and on the encouragement of people who want to see the condition of Mount Kelud after the eruption, the Government of Kediri Regency has reopened the tourism object of Mount Kelud which during eruption has closed.Re-opened Kelud Kelud tourism object after the eruption, of course also have a positive impact both positive and negative on local communities who work in agriculture. Therefore, the extent to which positive impacts and negative impacts of post-eruption development of Mount Kelud tourism need to be studied in depth through a study to anticipate negative impacts and develop positive impacts. Thus it can be expected that the development of Mount Kelud tourism object after the eruption is not only beneficial for the increase of local income, but also beneficial to the local community, especially the farmers who live in the surrounding areas who just got the accident affected by Mount Kelud eruption. Based on the background of this research is important to do where. The purpose of this research is; 1). Identify local / local farmers' perceptions of post-eruption development of Mount Kelud tourism that includes the process and model of its development. 2). Identify the impact of post-eruption Mount Kelud tourism development on the economic condition of local / local farmers which includes; Livelihood changes, labor outpourings, household income, land prices, basic commodity prices, and added value of local products, as well as other economic changes.According to Marpaung (2002), tourism is a temporary transit of human beings with the goal of getting out of routine jobs, out of his residence. Or if according to the Institute of Tourism in Britain (now Tourism Society in Britain) in 1976 in his book Pendit, S.N. (2002), tourism is the temporary departure of temporary persons to the destination outside their place of residence and day-to-day work for an activity while in these destinations, including departure for various purposes, such as daily excursions / excursions / excursions. From the definition it can be concluded that a journey can be considered as a tour if it meets several requirements: The trip is done for a while and does not aim to settle, done from one place to another place for sightseeing / recreation, the person who travel is not earning a living In the place he visits and solely as a consumer of the place, and travel can be done alone or group without any coercion from any party. According to the development, tourism aims to provide benefits for both tourists and local residents. Tourism can provide a standard living to local residents through the economic benefits gained from tourist destinations. This is done through the maintenance of culture, history and level of economic development and a tourist destination will make a unique experience for tourists.

Although at the same time, there are values that are carried as well as in the development of tourism. Therefore, the development of tourism should be able to enlarge the benefits and minimize the problems that exist (Marpaung and Bahar, 2002). Tourism has a multiplied impact, both positive and negative, for people and the environment. Broadly speaking, the impact of tourism can be classified into: environmental impacts, economic impacts and socio-cultural impacts, In order to develop tourism, environmental, economic and socio-cultural impact issues need to be identified and understood by all parties involved so as to take the necessary policy steps to minimize negative impacts and optimize the positive impact of these efforts. (Anonymous, 2005)

According to Soelaiman W.A. (2009), formally, experts distinguish the economic impacts that occur because of tourism activities, consisting of Direct Effects, Indirect Effects and Induced Effects. Meanwhile, Indirect Effects and Induced Effects are sometimes referred to as Secondary Effects which accompany Direct Effect as Primary Effect. The total impact of

the tourism economy is the total number of impacts that occur either directly, indirectly or induced, each of which can be measured as gross output or sales, income, employment and value added. In real terms, tourism activities provide benefits to sales, profits, employment, income tax and income in an area. The most immediate impacts occur within the sub-sectors of primary tourism, -houses, restaurants, transportation, entertainment and retail trade. In the second level, in the secondary sub-sector, it affects most sectors of the economy. The economic impacts of tourism derived from the existence of tourism by Marapung and Bahar, (2002) affect the work, income and expenditure of surrounding communities, as well as improve economic structures and spur the small business for the population.

## **METHODS**

The location of the research is purposively determined by Sugihwaras Village, Ngancar Subdistrict, Kediri Regency with the consideration that this village is a village where Kelud tourism object is located and directly affected by the development of Kelud tourism post eruption. Respondents in this study consisted of local farmers who have other jobs or work in the Kelud tourist area. Other work has a direct relationship with the development of Kelud tourism post eruption. Such as: motorcycle taxi drivers, food and beverage traders, employee attractions, fruit traders, and others

In this study the respondents were taken the head of the family. Determination of respondents was done using Non Random Sampling method. For respondents who work in the area of tourism, the number of respondents is proportionally determined as much as 20 percent of each type of work available where the number of samples obtained 42 people. Besides as a comparison there are samples taken from farmers whose work is not related or directly related to the object of tourism because these farmers do not work in the area of tourism. For this farmer was taken a sample of 23 farmers who done intentionally. So in this study the total number of samples is 65 people

In this study the primary data were collected by interview method with respondents with the help of questionnaires and diaries. Secondary data were collected from the relevant agencies. In this study, the development of Kelud post eruption tourism is the development of tourism conducted after the eruption on February 13, 2014. To support the purpose of this study also collected data before the eruption. Collected data then performed tabulation and analysis descriptively and statistically by using different test (Test Z) and test of Sign

## **RESULTS AND DISCUSSION**

### **Respondent characteristic.**

In this study the respondents consisted of heads of households who had jobs as farmers or butruh tani who lived in the village of Sugihwaras, who were directly or indirectly affected by the development of Kelud Kelurahan tourism after the eruption. The characteristic is age mostly between 30 - 50 years old, most of family member is 4 - 6 people, long stay in Sugihwaras village mostly 30 - 50 years old, most education is elementary school, average land area 0,325 hectare, and from Javanese, many planted crops are pineapple, sugar cane and vegetables such as eggplant, lombok, tomato and bean.

### **Perception of Local Farmers Against Economic Development of Kelud Post-Eruption Tourism.**

With the development of Mount Kelud post eruption as a tourist attraction raises some perception to local farmers in the village of Sugihwaras. Such perceptions include the process or socialization, existence and model of its development. From interviews with respondents, most of them (88.09%) stated in general the process or socialization that has been implemented by the Regional Government of Kediri Regency in developing the Kelud post-

eruption tourism to the people of Sugihwaras village can be said good because the socialization is done by involving the village and community Local as well as through the mass media ie newspapers and local radio.

The perception of local farmers to the existence of Mount Kelud tourism area after eruption, it is known that most respondents (78.57%) stated strongly agree while the rest agreed. This is because with the development or the existence of the tourism object will be able to promote the economy of local villagers, either directly or indirectly, that is the opening of job opportunities and business opportunities such as employees of tourism objects, motorcycle taxi drivers, selling food and beverages, fruits etc

About the development model, the perception of local farmers who work in the area of tourism most (85.71%) states good and the rest states very well. This is because the development model of Mount Kelud tourism that performs the physical construction of the facilities and infrastructure of tourism, eg roads, bridges and other beneficial impact for the people of Sugihwaras village because the people of Sugihwaras village can use the infrastructure. About the implementation of development in the use of labor, almost all of the labor used or involved in tourism activities using the labor of the local village of Sugihwaras village, such as employees of tourist attractions, and the train driver of the tour. Likewise for motorcycle taxi drivers and people who sell in the tourism area all come from the village Sugihwaras. Outsiders of the village are prohibited to sell in the tourist area and any changes in policies related to the attractions of Mount Kelud all parties related or interested in these attractions are always invited to negotiate, this is what makes the perception of farmers and villagers Sugihwaras against the implementation of the development of the tour Generally good or excellent.

#### **Impact of Tourism Development of Kelud Post-Eruption on Local Workers of Farmers.**

Mount Kelud tourism development post eruption seems to have an impact on the type of work or livelihood of respondents in the village of Sugihwaras especially those directly related to the development of Kelud tourism object. With the development of tourism object of Kelud Mountain, there are some job opportunities that directly related to tourism object such as motorcycle taxi driver, parking attendant, stall businessman and others. It is utilized by some villagers of Sugihwaras to participate in the work so that it will change the type of work that can be seen in detail in table 1 below.

Table 1. Type of Work of Respondents Working in the Object area Tours Before and After The Development Of Mountain Tours Kelud Post Eruption 2014 /2015

Nb.	Type of Occupation Respondents		Total of Persons	Percentage (%)
	Before Eruption	Post-Eruption		
1	Farmers and employees of tourism objects	Farmers, employees of tourist attractions	4	9,52
2	Employee attractions and screen printing	Farmers and tourist employees	1	2,38
3	Farmers	Farmers and Trade Fruits	1	2,38
4	Farmers and farm laborers	Farmers and motorcycle drivers	4	9,52
5	Farmers and motorcycle drivers	Farmers and motorcycle taxis drivers	9	21,43
6	Farm laborers and motor cycle taxi drivers	Farmers, motorcycle taxis and merchants	8	19,05
7	Farm workers and motor cycle taxi	Laborers and motorcycle taxi	1	2,38
8	Farmers, farm workers and trade	Farmers workers and trade	1	2,38

Nb.	Type of Occupation Respondents		Total of Persons	Percentage (%)
	Before Eruption	Post-Eruption		
9	Farmers and peasants Farmers	Farm workers and trade	5	11,90
10	Farmers and tourist drivers	Farmers and tourist drivers	1	2,38
11	Farmers and peasants	Farmers and trade	5	11,90
12	Farmers and trading	Farmers and trade	1	2,38
13	Farm workers and trade	Farm workers and trade	1	2,38
		Total	42	100

Source; Interviews with respondents

From table 1 above it appears that most respondents (57.14%) who work in the area of tourism objects or their work is directly related to the development of Kelud Kelur tourism experience changes in the types of work between before and after post-eruption tourism development, The development of post-eruption tourism becomes more diverse. When viewed from the overall type of work owned by the respondents, there is a significant difference in the type of work of respondents between before and after the development of post-eruption tourism. Sign test results get a value of  $0.000 < 0.05$  which means significant at test level 5%. So here it is clear that the development of Mount Kelud tourism post eruption impacted significantly to changes in the type of livelihood of respondents

As for local farmers whose types of work are unrelated or unemployed in the Kelud tourist area, it seems that with the post-eruption of Mount Kelud tourism, it does not affect the change of work type where among the 23 respondents whose types of work are not related to the tourism object of Kelud Mountain , Only 1 person experienced a change in the type of work that was originally farmers, after development became farmers and village officials.

### **The Impact of Economic Development of Kelud Post-Eruption Tourism On the Curious Family Working Hours of Respondents.**

The development of Kelud post-eruption tourism in the village of Sugihwaras allegedly impacted on the outpouring of working hours of farming families working in the area of tourism for a living. So in detail the working hours of the respondent's family before and after the development of Mount Kelud tourism post eruption can be viewed in table 2 below.

Table 2. Curious Family Working Hours of Respondents Per Month Before and After Economic Development of Mount Kelud Post Tourism Eruption in Sugihwaras Village Year 2014 - 2015.

Nb,	Curious Families Hours (Hours / Months)	Before Development		After Development	
		People	%	People	%
1	200 - 300	28	66,67	33	78,57
2	>300 - 400	8	19,05	7	16,67
3	>400 - 500	6	14,28	2	4,76
4	> 500 - 600	0	0	0	0
	Total	42	100	42	100

Source; Interviews with respondents

From table 2 above it is known that before the development of Mount Kelud tourism post eruption, respondents who have jobs in the tourist area the number of family work hours on average is 304.14 hours per month. After the development of post-eruption tourism, respondent family work hours decreased to 294,57 hours per month. Here it is seen that after the development of tourism post-eruption hours of work the average respondent decreased. From the statistical test (Z test) showed a not significant difference where the value of Z

1.538 is not significant at the 5% test level, which means that the number of respondents' family hours after the post-eruption tourism development is not significantly different from the working hours before the tourism development although there is a decrease. The decrease in working hours is due to the eruption, tourism visitors are decreasing in number, so not every day the farmers working the tourism objects work as both motorcycle taxi drivers and who work as food, beverage and fruit traders.

The decrease of working hours after the eruption caused by tourism visitors decreased in number, so it is not every day the farmers working the tourism objects work as both motorcycle taxi drivers and who work as food, beverage and fruit traders. Generally respondents work full time in the area of attractions on Saturdays and Sundays as well as holidays. On normal working days only part of the respondents who work in the area of tourism, while some are working in the fields. For respondents who do not have jobs in the area of Mount Kelud tourism object, the development of tourism object does not affect the hours kerjanya. This is because the location of Mount Kelud tourism somewhat away with the settlement, which is about 7 km and is limited by plantation and forest areas, Therefore for farmers in Sugihwaras village whose job is not related to tourism object, the development of post-eruption tourism object has no impact on the work hour.

### **The Impact of Tourism Economy Development of Kelud Mountain After the Eruption Respondents' Family Income.**

The existence of the development of Mount Kelud tourism post eruption, allegedly will have an impact on the amount of income families of respondents who in this case is a local farmer who has a job or work in the area of Mount Kelud tourism and live in Sugihwaras Village. So in detail the amount of income the average family of respondents before and after the development of tourism can be seen in table 3

From table 3 above it appears that the average income of respondents who work or have jobs in the area of tourism or directly related to the development of Mount Kelud tourism post eruption that comes from the agricultural sector after the eruption is smaller than before the eruption. This is because after the eruption many agricultural crops are damaged, especially for seasonal crops such as chili, eggplant, tomatoes, etc.

Statistical test results (Test Z) showed a significant difference between the income of respondents from agriculture before and after the eruption where the value of Z arithmetic of 3.053 significant at the 5% test level. Similarly, the average income of respondents coming from outside agriculture also becomes smaller or decreases after the eruption

The result of Z test shows that Z value of 4,748 is significant at 5% test level. Which means there is a significant difference in the average income of respondents coming from outside agriculture between before and after the eruption.. This is caused after the eruption, visitors who come to the tourist attraction is less than before the eruption, while people working in the tourist attraction increased, especially as a motorcycle taxi and food and beverage traders. Many respondents who previously worked in agriculture either as farmers or farm laborers, after the eruption they work in the tourism object as a motorcycle taxi or food and beverage traders to supplement their income. This is remembered after the eruption of many farmers who failed to harvest, especially vegetable farmers or seasonal crops. The data shows before the eruption, the number of motorcycle taxi drivers about 75 people, while after the eruption increased to 114 people registered. For food traders, drinks and fruit, before the eruption there are 70 people, after the eruption increased to 82 people.

Table 3. Average Family Income of Respondents Per Year Before and After the development of Mount Kelud tourism after the eruption in the village Sugihwaras Year 2014 / 2015

Nb.	Source of Income	Before Income Eruption (Rp)	After Income Eruption (Rp)
1.	Agriculture	16.338.095,-	11.769.047,-
2.	Non agriculture	21.680.952,-	11.440.952,-
Quantity :		35.961.904,-	23.210.000,-

Source: Interviews with respondents

When viewed from the total income of respondents after the eruption is lower or decreased when compared with before the eruption, that is from the average Rp 35.961.904, - to Rp 23.210.000, - per year .. Statistical test results (test Z) get A value of Z of 4.971 which showed significant results at the 5% test level. This shows that there is a significant difference in the average income of respondent families between before and after the eruption, where after eruption there is a decrease in income. The decrease of income is not due to the reopening of Kelud tourism object, but due to the damage of agricultural crops owned by some farmers due to eruption and the decrease of tourism visitors after the eruption. Considering the average of income above, it can be said is relatively small, this is because the respondents in this study the main job is farm laborers who do not have their own land or farmers whose land is narrow about 0.3 hectares.

So with the development of Mount Kelud tourism post eruption, it seems to be able to help local farmers or small farmers in the village of Sugihwaras to be able to supplement their income is decreased due to the eruption by participating in work in the area of tourism, although the addition is not equivalent as before Eruption.. For respondents who do not have jobs in the area of Mount Kelud tourism, post-eruption tourism development does not affect their income. There is a decrease in their income after the eruption due to damage to some of the plants they planted due to exposure to sand and gravel from the eruption of Mount Kelud

### **Impact of Tourism Development of Kelud Mountain Post-Eruption on Other Economical Aspects**

From the results of interviews with respondents note that after the development of Mount Kelud tourism before With the development of Mount Kelud tourism seems also have an impact on other economic aspects ie, land prices, economic infrastructure, transportation and other land price eruptions to rise, both Solid ground or yard. The price of solid land before the development of the tour ranges from Rp.10.000.000, - per are (100 m<sup>2</sup>), to about Rp 30.000.000, -per acre after the development of tourism. The price of this land has not changed after the eruption. So there appears to be a sharp increase in land prices between before and after tourism development before eruption, but the eruption does not cause the price of land to change.

Mount Kelud tourism development also affects the condition of roads and bridges where the development of tourism, road conditions and bridges, to be better because there are improvements to roads and bridges in the village of Sugihwaras that lead to the tourist area of Mount Kelud. In addition, the development of Mount Kelud tourism traffic condition becomes more crowded especially on holidays, thus creating business opportunities such as food stalls, homesty, small shop / pracangan, seller of telephone credit and so on, where the number increases after the development of tourism. After the eruption, the situation has not changed much since the eruption did not damage the house and the buildings and infrastructure of the economy.

The result of interview with the respondent to get the development of Kelud mountain tourism does not affect the price of daily necessities such as rice, sugar, coffee, cooking oil and

so on, where the price of these goods decreases following market price in District Wates Kediri Regency. The influence on the price of local product products, the development of Kelud tourism, little effect on the price of fruits are durian, apokat and pineapple that increases when sold in tourist areas and purchased directly by the tourists who visit Mount Kelud. Whereas if the fruits are sold in the market or to the middleman, then the price is relatively fixed as the market price. The existence of Mount Kelud eruption, after several months also can be said does not affect the price of basic needs, where the price of basic necessities also keep abreast of market prices.

## **CONCLUSIONS**

From the description that has been presented in advance, the results of this study can be summarized as follows; The perception of local farmers in the village of Sugihwaras to the development of Mount Kelud tourism object after the eruption in terms of process or socialization in general is good, being from the aspect of its existence is generally very agree, as for the development model is generally good. This is because in managing these attractions involve many local villagers together with the Regional Government of Kediri Regency.

From the economic aspect, the impact of the development of Kelud post-eruption tourism to the farmers is;

1. Significant impacts on the types of livelihoods of local farmers working in tourism areas, where farmers' livelihoods are more diverse.
2. No significant impact on the outpouring of working hours of local farmers working in tourist areas.
3. Significant impact on farmer household income between before and after post-eruption tourism development but in this case farmer's income decreased after eruption.
4. No impact on the price of basic needs and prices of local products sold in the market.
5. The development of Kelud tourism object also affects the increase of land price in Sugihwaras village and the availability of economic facilities and infrastructures that occurred since before the eruption.

### **Suggestions**

From the things that have resulted from this research it can be suggested as follows:

1. Because the development of Mount Kelud tourism object after the eruption has many positive impacts, then the development needs to be continued by taking into account the economic, socio-cultural and environmental aspects.
2. Local community participation needs to be improved, whether in development,
3. Maintenance and in the management of tourism objects so that the purpose of development of tourism objects can be achieved especially in order to prosper the surrounding community.
4. After the eruption need to continue to be added or improving the facilities and infrastructure of tourist that is damaged in order to attract tourists to visit back to the tourist area that tends to fall after the eruption.
5. Needs capital support, especially for local farmers who tanamanya damaged by eruption so that can berusaha back to increase its income.



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