

# Gayo Coffee Agro-Tourism Model Based On Institutional Coordination At Takengon

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## Abstract

The research objective is to predict the factors that support the success of agro-tourism development based on institutional coordination in Takengon. The population is coffee farmers in Takengon who have coffee plantations. Then the sampling model used accidental sampling, the sample selected was 95 coffee farmers. Model analitic in this study uses a Structural Equation Modeling (SEM) approach based on Smart PLS. The results indicate that attraction has a direct effect on institutional coordination and agro-tourism development; aware that tourism has a direct influence on institutional coordination and agro-tourism development; institutional coordination has a direct impact on agro-tourism development; indirectly, institutions have a significant effect in mediating attraction to agro-tourism growth; Indirectly, the institution does not influence negotiating tourism awareness on the development of agro-tourism.

**Keywords:** Attraction, Tourism Awareness, Institutional Coordination, Agrowsiata

## 1. INTRODUCTION

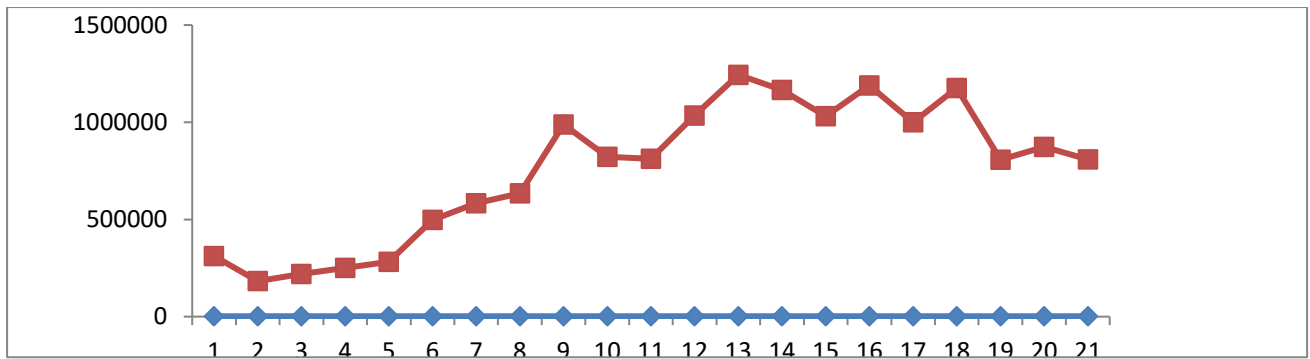
The industrial revolution 4.0 caused the coffee market in the international world to be so tight. Today's coffee products have undergone a lot of product diversification, such as roasted coffee, instant coffee, coffee mix, coffee beer, and ice coffee [1]. Indonesia itself is the fourth largest country, especially coffee producers. Here are the five largest coffee exporting countries in the world.

Table 1. Largest Coffee Producing Countries in 2021

Countries	Brazil	Vietnam	Colombia	Indonesia	Ethiopia
Export (Ton)	3702	1758	852	612	450

Source: Kopi Pedia (2021)

Can be seen that Indonesia's total exports are still far behind other ASEAN countries such as Vietnam. Based on data from BPS, Indonesian exports from 2000-to 2021 also experienced sharp fluctuations. The following is a list of Indonesian coffee exports for the last 21 years.



Sumber: www.bps.go.id (2022)

**Figure 1. Indonesian Coffee Exports 2000-2021**

Based on the graph above, from 2018-to 2021, Indonesia's exports decreased. This is due to many factors that cause Indonesian coffee exports. Currently, the domestic coffee industry continues to experience a very rapid increase. Gayo coffee is one of the leading commodities originating from the Gayo highlands in Takengon. The city of Takengon is located at an altitude of 1500 to 2000 m above sea level and has coffee plantations of approximately 48,300 ha located in Central Aceh Regency. Takengon Arabica coffee is the best quality coffee globally that beats all coffee originating from Brazil. The very global quality of coffee is also supported by the potential scenery of coffee plantations and mountains and cold weather, making it very important to develop international tourism based on local wisdom. So that Takengon has an excellent opportunity to become a world destination through the management of agro-tourism development based on local knowledge based on Arabica coffee.

Takengon Arabica coffee has won awards as the World's Best coffee several times, beating all world coffee producers such as Brazil. The very global quality of coffee is also supported by the potential scenery of coffee plantations and mountains and cold weather, making it very important to develop international tourism based on local wisdom based on Arabica Coffee, Gayo Land culture, mountainous atmosphere, plantations, and a temperature of 13 degrees Celsius and an altitude between 1500 until 2000 above sea level, making Takengon a world destination, through the management of agro-tourism development based on local wisdom. The problems that have been faced in the development of agro-tourism include the unknown factors that support the success of developing agro-tourism based on local knowledge in Takengon. The next problem is that there is no integrated concept of management and institutional coordination between sections, between agencies, between the center and regions, so the great potential in Takengon is challenging to develop.

The development of coffee agrotourism is expected to increase the number of tourists, both local and from abroad, to come and enjoy Takengon Arabica coffee. It is hoped that this coffee agrotourism will be able to provide education to everyone who comes to Takengon. However, the development of coffee agro-tourism has not been expected by farmers, the private sector, and the government. The main problem in this research is that the factors that support the success of developing agro-tourism based on local wisdom in Takengon are not yet known.

## 2. Literature Review and Hypothesis

### Coffee Agrotourism Development

The concept of coffee agrotourism embraces all business actors and coffee farmers in one area consisting of coffee plantations, coffee processing, coffee markets, and coffee drinking places [2]. Furthermore, agro-tourism does not only offer recreation but can also improve education for visitors and reduce the flow of urbanization by becoming independent and advancing the local economy, especially farmers [3].

### Institutional Coordination

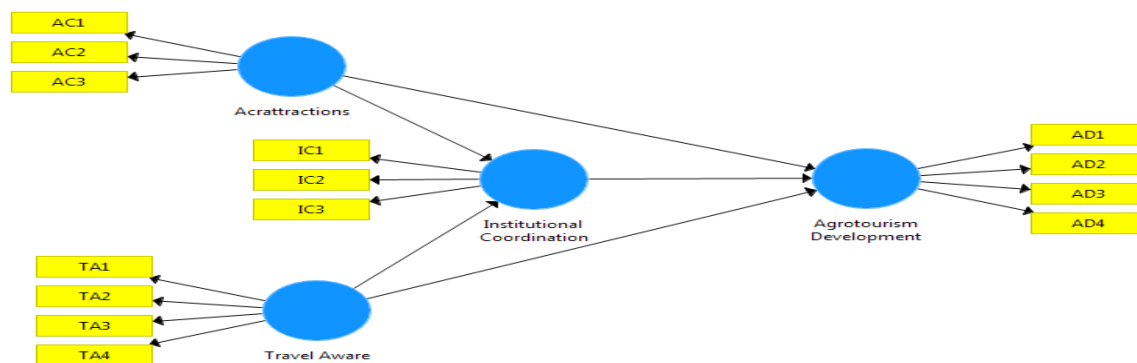
The need for coffee agroforestry planning does require not only the role of the government but also the private sector and the community [4]. Institutional coordination in the development of coffee agro-tourism cannot be done individually but must be integrated between one part and another [5]. Farmer groups, the agriculture office, and the tourism office at the district and city and provincial levels must have the same view and policy to support coffee agro-tourism.

### Attraction

Attractions or performances introducing coffee to the broader community are needed to increase tourist motivation [6]. This attraction can be done like art in an area and even organizing world sports such as marathon running and soccer competitions between world clubs [7] where the district or province facilitates this attraction. Then after the activity, the tourists get souvenirs, especially coffee typical of the area [8]. Hence, it impacts increasing the interest of tourists to come and enjoy coffee in a room or district and province in a country [9].

### Travel Aware

Coffee agrotourism will not succeed ideally if it is not supported by public awareness [10]. This tourism awareness is in the form of an attitude as a host in behaving towards tourists who come to the area [11]. Understanding tourism in coffee agro-tourists can be done by fostering workshops concerning the application of tourism awareness and increasing visitor interest [12][13]. Awareness of tourism in the area can be seen from the active participation of the community in tourism development [14].



**Figure 2. Conceptual Framework**

### Method

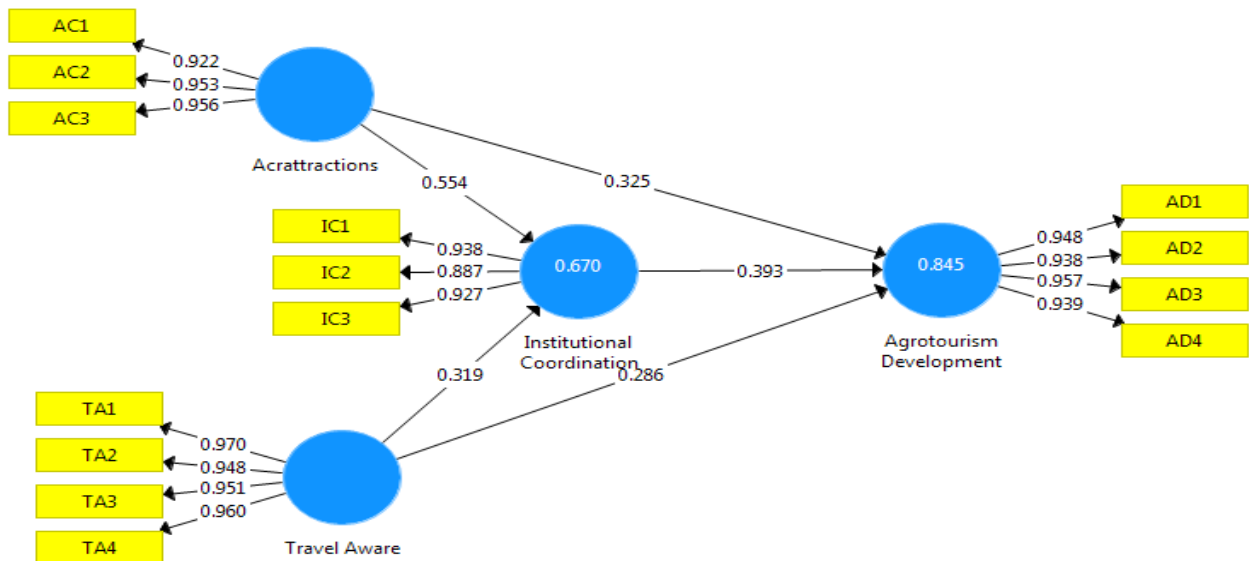
This research approach is quantitative with Structural Equation Modeling (SEM) and Path Analysis on revisit intention. The research approach can reach short, medium, and long-term predictions. The population and sample in this study were 95 coffee farmer respondents who were selected by accidental sampling. The research data used primary data obtained from distributing questionnaires to the research sample targets. This research was conducted with a strong basis of data collection, both in the initial observation process looking for phenomena and in the ongoing research process. Data analysis using SEM is as follows:

Persamaan I : $Y_1 = PY_1X_1 + PY_1X_2 + \epsilon_1$ Persamaan II : $Y_2 = PY_2X_1 + PY_2X_2 + \epsilon_2$
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- X1= Attraction
- X2= Tourism Awareness (Exogenous)
- Y1= Brand Image (Intervening)
- Y2= Visitor Interest (Endogenous)

P = Path Regression Coefficient  
 € = Number of variants ( $\epsilon = 1 - R^2$ )

### 3. Result and Discussion



**Figure 3. Outer Output Model**

All indicators in the model are above 0.7. The Attraction variable consists of 3 hands where all of the factor loading values are  $< 0.7$ . The tourism awareness variable consists of 4 indicators where all of the factor loading values are  $< 0.7$ . The institutional coordination variable consists of 3 hands where the total factor loading value is  $< 0.7$ .

**Table 3. Reliability Composite**

Variable	Reliability	AVE
Attraction	0,961	0,891
Travel Aware	0,971	0,894
Institutional Coordination	0,941	0,842
Agrotourism Development	0,978	0,917

The test results are excellent and reliable because the reliability value is above 0.7, and it fulfills the requirements to be analyzed using the SEM model.

**Table 4. Determinant Coefficient**

Variable	R Square	Adjusted R Square
Institutional Coordination	0,670	0,661
Agrotourism Development	0,845	0,838

The value above indicates the existence of a model that meets the requirements because the R Square value is above 50%.

#### Predictive Relevance (Q2)

The results of the Q2 value are 0.946, it is concluded that Attraction, tourism awareness, institutional coordination and agro-tourism development have variations as a contributor to agro-tourism development 94.6%, the rest are not included in the model.

**Effect Size (F2)**

**Table 5. Effect Tabel 6. Size (F2) test**

	Koordinasi Kelembagaan	Pengembangan Agrowisata
Attraction	0,554	0,543
Travel Aware	0,319	0,412
Institutional Coordination		0,393

Table 5 shows that attraction has a powerful influence on institutional coordination and agro-tourism development, tourism awareness has a weak effect on institutional coordination, and agro-tourism development and institutional coordination have an impact on agro-tourism development.

**Table 6. Direct Effect Model**

Hypothesis	Sample (O)	(M)	(STDEV)	t Statistik	P Value	Conclusion
Attraction- Institutional Coordination	0,554	0,558	0,111	4,994	0,000	Signifikan
Tourism Awareness- Institutional Coordination	0,319	0,303	0,141	2,263	0,024	Signifikan
Attraction-Agritourism Development	0,325	0,328	0,100	3,245	0,001	Signifikan
Tourism Awareness- Agrotourism Development	0,286	0,280	0,150	1,905	0,0057	No Signifikan
Institutional coordination- Agrotourism Development	0,393	0,389	0,124	3,158	0,002	Signifikan

Based on the data analysis results, Attraction has a significant effect on institutional coordination. The results of previous studies, which state that attraction has a substantial impact on institutional coordination [15][16][17]. The indicate that the existence of Attraction activities that are carried out in a sustainable manner, such as the Raya coffee harvest held in Takengon, can give birth to good coordination. This can be seen in the increasing number of farmers who join farmer groups. Furthermore, this harvest event attended by the Regent and elements of the Muspida further strengthened relations with farmer groups. The Central Aceh government has prepared various policies in developing the coffee industry in Takengon.

The study results tourism awareness effect on institutional coordination. Which stated that tourism awareness had a substantial impact on institutional coordination [11][18][19]. Then the findings in this study indicate that so far, the people in Takengon have started to have good awareness and develop coffee cultivation. The farmers already have good communication knowledge, especially with the government or private parties in coffee cultivation activities [10]. Furthermore, to increase awareness of coffee farmers in Takengon, the government is expected to attend through a coaching program at the village level. So that all people can participate actively when there are visitors who come to Takengon by enjoying the natural beauty, the enjoyment of the coffee, and the friendliness of the people.

The results Attraction had a effect on coffee agro-tourism in Takengon, which states that the existence of Attraction activities will be able to increase tourism development programs [20][21][22]. Attraction activities in the coffee harvest activity involving the Central Aceh government can bring in local tourists. It is hoped that the Attraction activities will be further increased to the national level. They consider that the development of deep coffee agro-tourism is also carried out based on education so that the brand of Takengon as the best coffee producer in Indonesia will be lifted.

The results of tourism awareness does not affect agro-tourism development. The results of this study are not in line with the previous statement that tourism awareness will accelerate agro-tourism development programs [23][24][25]. The implications of the findings in this study prove that so far, the

understanding of farmers in Takengon is only about coffee. The coffee farmers do not yet have good communication skills, especially with existing tourists. Then the government's lack of guidance from villages, sub-districts, and districts has made public tourism awareness not so good. It is hoped that this tourism village development program should be initiated and implemented as soon as possible so that the development of coffee agrotourism in Takengon can be realized immediately

The results of data analysis show that institutional coordination has a significant effect on the development of coffee agroforestry in Takengon. This study supports the results of previous studies that good institutional coordination will be able to accelerate agro-tourism development programs [26][27][1]. The findings in this study indicate that institutional coordination is only carried out by one party, namely the village, sub-district, and district governments. So that coordination is not only for the government but also for the private sector. This effort is needed in accelerating the development of coffee agro-tourism by involving travel and universities. The roles of these two parties will significantly support the government's policy to create Tangeon as the leading coffee agro-tourism in Indonesia.

The results showed that institutional coordination indirectly had a significant role in mediating attraction towards the development of garowisata, that state that when an area is more active in carrying out Attraction activities in tourist destinations, it will impact institutional coordination and will have an impact on the development of agro-tourism. The researchers' findings were that so far, the Attraction activity is expected not only to be a harvest event but also to be like a sporting event such as a marathon running that hooks the minister of youth and sports or the minister of the creative economy. So that this attraction activity is national or even up to the international level, each participant will get a prize in the form of Takengon specialty coffee.

The results of data analysis indicate that indirect institutional coordination does not have a role in mediating tourism awareness towards agro-tourism development. The results of this study do not agree [28][29][30], which states that tourism awareness has effect on institutional coordination and agro-tourism development. The findings in this study are the awareness of coffee farmers in Takengon about how to cultivate coffee. The existing community cannot develop the concept of coffee agrotourism. The lack of knowledge of coffee agrotourism is due to the lack of guidance and socialization from related parties, namely the district government.

#### 4. Conclusion

The conclusion that researchers can get is that Attraction directly influences institutional coordination and the development of coffee agrotourism in Takengon. Then realize that tourism directly impacts institutional coordination but does not affect the outcome of agro-tourism. Lastly, institutional coordination indirectly has a significant influence in mediating attraction towards agro-tourism development. Meanwhile, institutional coordination does not reconcile tourism awareness toward agro-tourism development.

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