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Analyzing Social Capital Factor for Agrotourism Development: A Case Study of Tambakbaya Village, Banten Province

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ABSTRACT

Research on social capital in tourism development has been widely conducted using various approaches. This study examines the social capital of the Tambakbaya Village community to support the development of Sukabungah Agrotourism. Using a survey method, data was collected over three months (December 2023–February 2024) from community members directly and indirectly involved in agrotourism activities. Confirmatory Factor Analysis (CFA) was conducted using IBM SPSS Version 26. The findings reveal that proactive action is the most significant factor influencing social capital in the community. To strengthen social capital, Sukabungah Agrotourism management should enhance community engagement, build trust among stakeholders, expand social networks, and improve compliance through formal socialization and social media, with support from the local government.

Introduction

Social capital is a crucial element in tourism development, as it can mobilize and strengthen modern communities [1]. The strength of social capital in a region positively influences the economy and welfare [2]. Strong social capital fosters collaboration, support, and resource access [3,4]. Research on social capital in tourism development has been extensively conducted [5–10]. Social capital can illustrate the social life of individuals involved and facilitate effective collaboration to achieve common goals, with either positive or negative effects [11–13]. Social capital is a feature of elements of social organizations such as networks, trust, norms, and networks that can enhance the efficiency of society by implementing coordinated aims [1,14]. The most studied elements of social capital include trust, social norms, proactive action, and social networks [15–17]. First, trust is an attitude of mutual trust in society that enables members to unite and contribute to improving social capital [18].

Coleman and Putnam are two individuals who defined trust as a key component of social capital because human interaction and societal functioning rely on trust; it serves as the foundation for both formal and non-formal institutions, decision-making processes, and social, political, and community relations [19,20]. Second, social norms play a crucial role in controlling the forms of behavior that emerge within the community [21]. Social norms foster community and coordination, positively impacting tourism development [22–24]. Third, proactive actions represent the strong desire of group members not only to participate but also to find ways to engage in community activities constantly [25]. Proactive action enhances community engagement in tourism development [26]. Fourth, social networks reflect the collaboration and coordination of individuals or groups based on active social ties [27]. When a community forms strong network ties, various resources can be shared, thus increasing opportunities to benefit from these networks [10]. Social networks influence residents' involvement in tourism development [28].

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Social networks also help identify and acquire tourism development resources [14]. Sukabungah Agrotourism, an agricultural educational tourism site in the Lebak Regency, has the potential to become a beacon of sustainable development. This agrotourism site is collectively managed by the Farmers Group Association (G*abungan Kelompok Tani* or Gapoktan) Sukabungah. The management of Sukabungah Agrotourism requires strong social capital. Gapoktan is a combination of several farmer groups engaged in agribusiness activities based on the principles of collaboration and partnership, thereby increasing production and income for its members and other farmers [29]. Many agrotourism ventures are unsustainable because of the low social capital of the individuals involved [30]. To develop sukabungah agrotourism, social capital is crucial to encourage the involvement of the Tambakbaya Village community, directly and indirectly.

Previous researchers have conducted studies on tourism development based on social capital without distinguishing the types of community involvement around the tourism destination area [5–10,20]. Local communities can participate directly in developing sustainable tourism through brainstorming, labor, skills, and financial participation, ensuring community involvement from the planning stage to the effective implementation of development [31]. In another study, communities directly involved in tourism development showed a more positive attitude because they could actively participate [20]. However, this study did not specify who the directly involved community was. Therefore, this research aims to analyze the factors of social capital of the community directly and indirectly involved in the development of sukabungah agrotourism in Tambakbaya Village, Cibadak District, Lebak Regency, and Banten Province, emphasizing the crucial role of their involvement in the success of the project.

Materials and Methods

Study Area

This study was conducted in Tambakbaya Village, Cibadak District, Lebak Regency, Banten Province (Figure 1). The location was purposively selected because Agrowisata Sukabungah represents agrotourism that is managed collaboratively and is still ongoing. The data were placed for 3 months from December 2023 to February 2024.

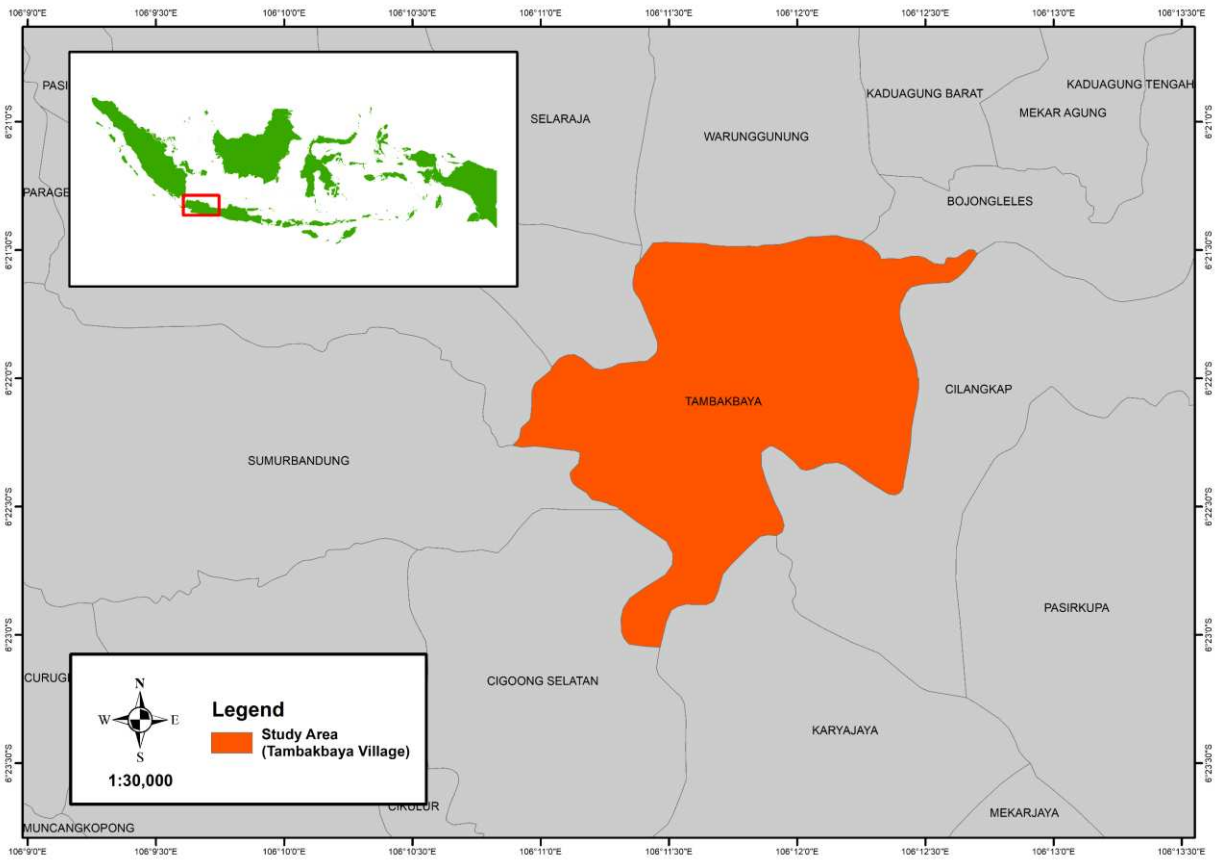

Figure 1. Research unit maps.

Data Collection Methods

Data were collected using a census method through interviews guided by a questionnaire. All members of the population were surveyed. The respondents were communities that were both directly and indirectly involved. The separation of these two classifications of respondents is based on the tourism supply chain. Respondents from the directly involved community comprised 65 respondents, including Sukabungah Agrotourism managers, restaurants, homestays, souvenir sellers, and local tour guides. Meanwhile, the indirectly involved community comprised 140 respondents who were not directly engaged in the tourism industry Sukabungah Agrotourism, but played a role in supporting tourism activities, such as rice farmers in the Sukabungah Agrotourism area and food suppliers. The total number of respondents in this study was 205. The questionnaire was developed based on a literature review and was modified according to the research objectives. The questionnaire consisted of 27 questions related to elements of social capital (trust, social norms, proactive actions, and social networks). It utilizes the Likert scale, one of the most fundamental and frequently applied psychometric tools in educational and social research [32]. Likert scales are essential for segmenting populations and analyzing perceptions in social research [33]. Respondents' answers were assessed using a Likert scale, which consisted of Strongly Agree (SA=5), Agree (A=4), Neutral (N=3), Disagree (D=2), and Strongly Disagree (SD=1) are called responses.

Data Analysis

Responses collected from respondents through the questionnaire were tabulated for factor analysis. Confirmatory factor analysis (CFA) was used to analyze factors forming social capital [1]. CFA is commonly used in social research. Several researchers have previously conducted similar research [34–37]. CFA was used to determine the factors that form the social capital of the Tambakbaya Village community in the development of Sukabungah Agrotourism. In this research, CFA was conducted using IBM-SPSS (International Business Machines - Statistical Package for the Social Sciences) Statistics Version 26 using Dimension Reduction analysis by previous researchers [38]. The steps of the CFA output analysis were as follows: (1) Kaiser-Meyer-Olkin (KMO) and Bartlett's test. This test compares the observed correlation level with the partial correlation level. The value produced by the KMO Measure of Sampling Adequacy should be greater than 0.50 to ensure that the factor analysis can be processed. Bartlett's Test of sphericity was used to test the relationship between variables that serve as indicators of a factor. Bartlett's test of sphericity aims to show that the variables in question are not correlated with each other in the population; (2) an anti-image correlation test. This test is useful for showing the calculation of the anti-image correlation test and displaying a set of numbers forming a diagonal with the symbol "a".

This symbol represents the measure of sampling adequacy (MSA) for each tested indicator. If the MSA value of an indicator or variable is less than 0.5, factor analysis is repeated without including variables / indicators that have values below 0.5; (3) Total variance explains the test to analyze the amount of variation associated with each factor. This analysis shows the percentage of the total variance explained by the formed factors. The threshold value for the factor-forming eigenvalues is 1; if the value is less than 1, there are no factor-forming variables; (4) Rotated component rotation is used in the factor analysis because unrotated component matrices generally do not provide sufficient information to classify or categorize variables into new components. The rotation method used is the varimax method, which is an orthogonal rotation method (maintaining a 90-degree angle between the axis) that simplifies the columns of the component matrix [39]. To conduct a confirmatory factor analysis of social capital within the Tambakbaya Village community, this study tested four variables: trust, social norms, proactive actions, and social networks (Table 1).

Table 1. The variables and indicators of social capital studied.

Variables	Indicator
Trust	Trust in fellow Tambakbaya Village community
	Trust in the community members involved in Sukabungah Agrotourism
	Trust in the management of Sukabungah Agrotourism
	Trust in the Tambakbaya Village Government
	Trust in the Head of Tambakbaya Village
	Trust in NGOs
	Trust in religious leaders
	Trust in community leaders
Social norms	Compliance with the regulations issued by Tambakbaya Village
	Compliance with the religious norms prevailing in Tambakbaya Village
	Compliance with the prevailing legal norms

Variables	Indicator
	Compliance with the traditional norms in Tambakbaya Village
Proactive action	Willingness to share information with fellow Tambakbaya Village community
	Willingness to share information with the community involved in Sukabungah Agrotourism
	Willingness to share knowledge with fellow Tambakbaya Village community
	Willingness to share knowledge with the community involved in Sukabungah Agrotourism activities
	Willingness to participate in Sukabungah Agrotourism activities
	Willingness to participate in decision-making related to the development of Sukabungah Agrotourism
	Willingness to seek information about agrotourism development
Social Networks	Collaboration with the management of Sukabungah Agrotourism
	Collaboration with fellow Tambakbaya Village community
	Collaboration with the community involved in Sukabungah Agrotourism
	Collaboration with the Department of Culture and Tourism
	Collaboration with the Tambakbaya Village Government
	Collaboration with the Village Agricultural Extension Officer
	Collaboration with the Agricultural Field Officer
	Collaboration with visitors

Results

Characteristic of Respondents

Respondents' characteristics encompassed several dimensions. By gender, respondents are female (47.31%) and male (52.69%). In terms of age distribution, respondents were aged 15–29 years (18.54%), aged 30–44 years (38.04%), aged 45–60 years (36.59%), and over 60 years (6.83%). The respondents were formal ungraduated (1.95%), ungraduated elementary school (8.78%), primary school (32.68%), ungraduated junior high school (2.93%), junior high school (27.32%), graduate senior high school (21.95%), diploma (0.98%), and bachelor's degree (3.41%). In terms of occupation, respondents were engaged in various types of work, such as agricultural laborers (15.12%), traders (44.88%), farmers (24.88%), employees (5.36%), and the management of Sukabungah Agrotourism (9.76%). Finally, in terms of origin, respondents were native residents (77.07%) and settlers (22.93%).

Confirmatory Factor Analysis for Directly Involved Community

The KMO for the directly involved community showed a KMO value of 0.714 > 0.5, indicating that the adequacy of the research data is acceptable, and overall, there is a sufficient correlation among the indicators to proceed with further analysis. Additionally, Bartlett's test value of 1,305.45, with a significance of less than 0.05, indicated that the correlation among variables was strong enough to perform factor analysis. Therefore, the next CFA test, the MSA, can be conducted. The results of KMO and Bartlett's test for directly involved communities are presented in Table 2 below.

Table 2. KMO and Bartlett's test for directly involved community.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.714
Bartlett's Test of Sphericity	Approx. Chi-Square	1,305.456
	Df	325
	Sig.	.000

The MSA test is conducted to measure the relationship between indicators, with the MSA value approaching 1 indicating a strong relationship (Table 3). The MSA value below 0.5 indicates that the relationship between that variable and others is not strong enough, thus preventing further factor analysis. Variables or indicators with the MSA value below 0.5 can be removed, and then the KMO and Bartlett's test can be performed again. The result of the MSA test for directly involved communities shows that all variables have values greater than 0.5.

The results of the total variance explained test for the directly involved community indicated that component 1 was the largest component with a variance explained value of 32.562% (Table 4). Component 6 was the smallest component, with a variance explained value of 5.137%. The total variance explained was the accumulation of all the variances explained for each component. If the cumulative percentage is greater than 60%, it can be concluded that the results of the factor analysis calculation are satisfactory. The total variance explained by the value for the directly involved communities was 72.954%.

Table 3. The MSA test for directly involved community.

Variable	Indicator	Anti-image matrices
Trust	Trust in fellow Tambakbaya Village community.	.783[a]
	Trust in the community members involved in Sukabungah Agrotourism.	.770[a]
	Trust in the management of Sukabungah Agrotourism.	.816[a]
	Trust in the Tambakbaya Village Government.	.725[a]
	Trust in the Head of Tambakbaya Village.	.699[a]
	Trust in religious leaders.	.649[a]
	Trust in community leaders.	.830[a]
Social norms	Compliance with the regulations issued by Tambakbaya Village.	.864[a]
	Compliance with the religious norms prevailing in Tambakbaya Village.	.811[a]
	Compliance with the prevailing legal norms.	.711[a]
	Compliance with the traditional norms in Tambakbaya Village.	.772[a]
Proactive actions	Willingness to share information with fellow Tambakbaya Village community.	.597[a]
	Willingness to share information with the community involved in Sukabungah Agrotourism.	.560[a]
	Willingness to share knowledge with fellow Tambakbaya Village community.	.549[a]
	Willingness to share knowledge with the community involved in Sukabungah Agrotourism activities.	.552[a]
	Willingness to participate in Sukabungah Agrotourism activities.	.804[a]
	Willingness to participate in decision-making related to the development of Sukabungah Agrotourism.	.573[a]
	Willingness to seek information about agrotourism development.	.539[a]
Social networks	Collaboration with the management of Sukabungah Agrotourism.	.806[a]
	Collaboration with fellow Tambakbaya Village community.	.811[a]
	Collaboration with the community involved in Sukabungah Agrotourism.	.832[a]
	Collaboration with the Department of Culture and Tourism.	.871[a]
	Collaboration with the Tambakbaya Village Government.	.716[a]
	Collaboration with the village agricultural extension officer.	.710[a]
	Collaboration with the agricultural field officer.	.765[a]
	Collaboration with visitors.	.906[a]

[a.] Measures of Sampling Adequacy (MSA).

Table 4. Total variance explained for directly involved community.

Total variance explained									
Component	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	8.466	32.562	32.562	8.466	32.562	32.562	3.995	15.364	15.364
2	2.957	11.374	43.936	2.957	11.374	43.936	3.74	14.383	29.747
3	2.516	9.675	53.611	2.516	9.675	53.611	3.702	14.238	43.985
4	2.181	8.39	62.001	2.181	8.39	62.001	3.243	12.474	56.459
5	1.512	5.816	67.817	1.512	5.816	67.817	2.283	8.781	65.241
6	1.336	5.137	72.954	1.336	5.137	72.954	2.006	7.714	72.954

Extraction method: principal component analysis.

The total variance explained test aims to determine which indicators should be included in which components through rotated component matrices using the varimax method. The rotated component matrices test results for the directly involved community revealed 24 indicators with loading factor values greater than 0.5. Meanwhile, two additional indicators with loading factor values less than 0.5 are Trust in fellow Tambakbaya Village community (0.459) and Trust in religious leaders (0.447). The output of the rotated component matrix for directly involved community is listed in Table 5.

Table 5. Rotated component matrix for directly involved community.

Rotated component matrix[a]							
Variable	Indicator	Component					
		1	2	3	4	5	6
Trust	Trust in fellow Tambakbaya Village community.		0.459				
	Trust in the community members involved in Sukabungah Agrotourism.		0.670				
	Trust in the management of Sukabungah Agrotourism.		0.703				
	Trust in the Tambakbaya Village Government.		0.890				
	Trust in the Head of Tambakbaya Village		0.854				
	Trust in religious leaders.		0.447				
	Trust in community leaders.		0.617				
Social norms	Compliance with the regulations issued by Tambakbaya Village.				0.789		
	Compliance with the religious norms prevailing in Tambakbaya Village.				0.827		
	Compliance with the prevailing legal norms.				0.824		
	Compliance with the traditional norms in Tambakbaya Village.				0.740		
Proactive actions	Willingness to share information with fellow Tambakbaya Village community.	0.862					
	Willingness to share information with the community involved in Sukabungah Agrotourism.	0.830					
	Willingness to share knowledge with fellow Tambakbaya Village community.	0.827					
	Willingness to share knowledge with the community involved in Sukabungah Agrotourism activities.	0.850					
	Willingness to participate in Sukabungah Agrotourism activities.	0.706					
	Willingness to participate in decision-making related to the development of Sukabungah Agrotourism.						0.819
	Willingness to seek information about agrotourism development.						0.896
Social networks	Collaboration with the management of Sukabungah Agrotourism.					0.752	
	Collaboration with fellow Tambakbaya Village community.					0.641	
	Collaboration with the community involved in Sukabungah Agrotourism.					0.763	
	Collaboration with the Department of Culture and Tourism.			0.805			
	Collaboration with the Tambakbaya Village Government.			0.748			
	Collaboration with the village agricultural extension officer.			0.901			
	Collaboration with the agricultural field officer.			0.904			
	Collaboration with visitors.			0.562			

Extraction method: principal component analysis; rotation method: varimax with kaiser normalization; [a.] rotation converged in 6 iterations.

Interpretation of Confirmatory Factor Analysis (CFA) Results for Social Capital of Directly Involved Community

The results of the confirmatory factor analysis indicate that six factors constitute the social capital of the directly involved community. These factors include proactive actions, trust, social networks (linking social capital), social norms, social networks (linking and bridging social capital), and decision-making process and information. The findings of this analysis are presented in table 6 below.

Table 6. Factor forming social capital elements in directly involved community.

Factor	Factor name	Eigenvalue	Persentase of variance	Indicators	Loading factor
1	Proactive Actions	8.46	32.56	Willingness to share information with fellow Tambakbaya Village community.	0.862
				Willingness to share information with the community involved in Sukabungah Agrotourism.	0.830
				Willingness to share knowledge with fellow Tambakbaya Village community.	0.827
				Willingness to participate in Sukabungah Agrotourism activities.	0.850
				Willingness to participate in Sukabungah Agrotourism.	0.706
2	Trust	2.95	11.37	Trust in the community members involved in Sukabungah Agrotourism.	0.670
				Trust in the management of Sukabungah Agrotourism.	0.703
				Trust in the Tambakbaya Village Government.	0.890
				Trust in the Head of Tambakbaya Village.	0.854
				Trust in community leaders.	0.617
3	Social network (linking)	2.51	9.67	Collaboration with the Department of Culture and Tourism of Lebak Regency.	0.805
				Collaboration with the Tambakbaya Village Government.	0.748
				Collaboration with the village agricultural extension officer.	0.901
				Collaboration with the agricultural field officer.	0.904
				Collaboration with visitors.	0.562
4	Social norms	2.18	8.39	Compliance with the regulations issued by Tambakbaya Village.	0.789
				Compliance with the religious norms prevailing in Tambakbaya Village.	0.827
				Compliance with the prevailing legal norms.	0.824
				Compliance with the traditional norms in Tambakbaya Village.	0.740
5	Social networks (bridging and bonding)	1.51	5.81	Collaboration with the management of Sukabungah Agrotourism.	0.752
				Collaboration with fellow Tambakbaya Village community.	0.641
				Collaboration with the community involved in Sukabungah Agrotourism.	0.763
6	Decision-making and information	1.33	5.13	Willingness to participate in decision-making related to the development of Sukabungah Agrotourism.	0.819
				Willingness to seek information about agrotourism development.	0.896

Confirmatory Factor Analysis of Indirectly Involved Community

The output of the KMO MSA test showed a value greater than 0.5, specifically 0.863. This indicates that the adequacy of the research data is acceptable and that there is a correlation between the variables. Furthermore, the significance value was 0.000, less than 0.05, indicating a sufficient correlation between the variables to proceed with the factor analysis. This aligns with the requirement that the KMO MSA value be > 0.5 and that the significance value be below 0.05. Table 7 presents the results of the KMO and Bartlett tests.

The MSA test measures the relationship between indicators, with the MSA value approaching 1 indicating a strong relationship. The MSA value below 0.5 indicates that the relationship between that variable and others is not strong enough, thus preventing further factor analysis. Variables or indicators with the MSA value below 0.5 can be removed, and then the KMO and Bartlett's test can be performed again. The result of the MSA test for directly involved community can be seen in table 8 below.

Table 7. Kaiser-Meyer-Olkin (KMO) and Bartlett's test for indirectly involved communities.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.863
Bartlett's Test of Sphericity	Approx. Chi-Square	4316.133
	df	351
	Sig.	.000

Table 8. The MSA test for indirectly involved community.

Anti-image Matrices		
Variable	Indicator	Anti-image correlation
Trust	Trust in fellow Tambakbaya Village community.	.945[a]
	Trust in the community members involved in Sukabungah Agrotourism.	.842[a]
	Trust in the management of Sukabungah Agrotourism.	.835[a]
	Trust in the Tambakbaya Village Government.	.788[a]
	Trust in the Head of Tambakbaya Village.	.781[a]
	Trust in NGOs.	.912[a]
	Trust in religious leaders.	.778[a]
	Trust in community leaders.	.913[a]
Social norms	Compliance with the regulations issued by Tambakbaya Village.	.910[a]
	Compliance with the religious norms prevailing in Tambakbaya Village.	.770[a]
	Compliance with the prevailing legal norms.	.797[a]
	Compliance with the traditional norms in Tambakbaya Village.	.933[a]
Proactive actions	Willingness to share information with fellow Tambakbaya Village community.	.872[a]
	Willingness to share information with the community involved in Sukabungah Agrotourism.	.889[a]
	Willingness to share knowledge with fellow Tambakbaya Village community.	.847[a]
	Willingness to share knowledge with the community involved in Sukabungah Agrotourism activities.	.907[a]
	Willingness to participate in Sukabungah Agrotourism activities.	.884[a]
	Willingness to participate in decision-making related to the development of Sukabungah Agrotourism.	.807[a]
	Willingness to seek information about agrotourism development.	.892[a]
Social networks	Collaboration with the management of Sukabungah Agrotourism.	.879[a]
	Collaboration with fellow Tambakbaya Village community.	.936[a]
	Collaboration with the community involved in Sukabungah Agrotourism.	.862[a]
	Collaboration with the Department of Culture and Tourism.	.886[a]
	Collaboration with the Tambakbaya Village Government.	.928[a]
	Collaboration with the village agricultural extension officer.	.858[a]
	Collaboration with the agricultural field officer.	.833[a]
	Collaboration with visitors.	.787[a]

[a.] Measures of Sampling Adequacy (MSA).

The following analysis was performed using the total variance explained test. The findings of the total variance explained analysis for the indirectly involved community show that component 1 is the largest component, with a variance explained value of 40.844%. Component 6 was the smallest component, with a variance explained value of 3.819%. The total variance explained was the accumulation of all the variances explained for each component. If the cumulative percentage is greater than 60%, it can be concluded that the results of the factor analysis are categorized as very good. The Total variance explained for the indirectly involved community was 75.716%. The output of the total variance explained indirectly involved community is shown in table 9.

The rotated component matrix analysis for the indirectly involved community indicated 26 indicators with loading factor values > 0.5. However, one indicator with a loading factor value of less than 0.5 is cooperation with fellow Tambakbaya Village community (0.337). Therefore, it is known that 24 indicators fill six factors or components in the *Rotated Component Matrix*[a], forming six social capital forming factors for the indirectly involved community in the development of Sukabungah Agrotourism (Table 10).

Table 9. Total variance explained indirectly involved community.

Total variance explained									
Component	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	11.028	40.844	40.844	11.028	40.844	40.844	5.473	20.269	20.269
2	2.697	9.988	50.832	2.697	9.988	50.832	3.861	14.302	34.571
3	2.312	8.563	59.395	2.312	8.563	59.395	3.789	14.033	48.603
4	2.11	7.816	67.211	2.11	7.816	67.211	3.644	13.497	62.1
5	1.265	4.686	71.897	1.265	4.686	71.897	1.942	7.191	69.292
6	1.031	3.819	75.716	1.031	3.819	75.716	1.734	6.424	75.716

Extraction method: principal component analysis.

Table 10. Rotated component matrix for the indirectly involved community.

Rotated component matrix[a]							
Variable	Indicators	Component					
		1	2	3	4	5	6
Trust	Trust in fellow Tambakbaya Village community.		0.710				
	Trust in the community members involved in Sukabungah Agrotourism.		0.791				
	Trust in the management of Sukabungah Agrotourism.		0.804				
	Trust in the Tambakbaya Village Government.						0.780
	Trust in the Head of Tambakbaya Village.						0.787
	Trust in NGOs.		0.632				
	Trust in religious leaders.					0.749	
	Trust in community leaders.					0.631	
Social norms	Compliance with the regulations issued by Tambakbaya Village.				0.840		
	Compliance with the religious norms prevailing in Tambakbaya Village.				0.912		
	Compliance with the prevailing legal norms.				0.917		
	Compliance with the traditional norms in Tambakbaya Village.				0.769		
Proactive actions	Willingness to share information with fellow Tambakbaya Village community.	0.717					
	Willingness to share information with those involved in Sukabungah Agrotourism.	0.710					
	Willingness to share knowledge with fellow Tambakbaya Village community.	0.723					
	Willingness to share knowledge with those involved in Sukabungah Agrotourism.	0.737					
	Willingness to participate in Sukabungah Agrotourism activities.	0.913					
	Willingness to participate in decision-making related to the development of Sukabungah Agrotourism.	0.901					
	Willingness to seek information about agrotourism development.	0.883					
Social networks	Collaboration with the management of Sukabungah Agrotourism.			0.501			
	Collaboration with fellow Tambakbaya Village community.						
	Collaboration with the community involved in Sukabungah Agrotourism.		0.520				
	Collaboration with the Department of Culture and Tourism.			0.706			
	Collaboration with the Tambakbaya Village Government.			0.670			
	Collaboration with the village agricultural extension officer.			0.849			
	Collaboration with the agricultural field officer.			0.867			
	Collaboration with visitors.			0.640			

Extraction method: principal component analysis; rotation method: varimax with kaiser normalization; [a]. rotation converged in 11 iterations.

Interpretation of Confirmatory Factor Analysis (CFA) Results for Social Capital of the Indirectly Involved Community

The confirmatory factor analysis results indicate that six factors form the social capital of the indirectly involved community. These factors include proactive action, trust, social networking (linking social capital), social norms, trust (local figures), and trust (local government). The findings are presented in Table 11 below.

Table 11. Factor forming social capital elements in indirectly involved community.

Factor	Factor name	Eigenvalue	Persentase of variance	Indicators	Loading factor
1	Proactive actions	11.02	40.84	Willingness to share information with fellow Tambakbaya Village community.	0.717
				Willingness to share information with those involved in Sukabungah Agrotourism.	0.710
				Willingness to share knowledge with fellow Tambakbaya Village community.	0.723
				Willingness to share knowledge with those involved in Sukabungah Agrotourism.	0.737
				Willingness to participate in Sukabungah Agrotourism activities.	0.931
				Willingness to participate in decision-making related to the development of Sukabungah Agrotourism.	0.901
				Willingness to seek information about agrotourism development.	0.883
2	Trust	2.69	9.98	Trust in fellow Tambakbaya Village community.	0.710
				Trust in the community members involved in Sukabungah Agrotourism.	0.791
				Trust in the management of Sukabungah Agrotourism.	0.804
3	Social Networks (linking)	2.31	8.56	Collaboration with the management of Sukabungah Agrotourism.	0.501
				Collaboration with the Department of Culture and Tourism.	0.706
				Collaboration with the Tambakbaya Village Government.	0.670
				Collaboration with the village agricultural extension officer.	0.849
				Collaboration with the agricultural field officer.	0.867
				Collaboration with visitors.	0.640
4	Social Norms	2.11	7.81	Compliance with the regulations issued by Tambakbaya Village.	0.840
				Compliance with the religious norms prevailing in Tambakbaya Village.	0.912
				Compliance with the prevailing legal norms.	0.917
				Compliance with the traditional norms in Tambakbaya Village.	0.769
5	Trust (local figure)	1.26	4.68	Trust in religious leaders.	0.749
				Trust in community leaders.	0.631
6	Trust (local government)	1.03	3.81	Trust in the Tambakbaya Village Government.	0.780
				Trust in the Head of Tambakbaya Village.	0.787

Discussion

The results of the CFA indicate that the four elements of social capital tested (Table 1) resulted in six new factors forming the social capital of the Tambakbaya Village community, both for those directly and indirectly involved. The factors forming social capital are related to the types of community involvement in the Sukabungah Agrotourism. The social capital of directly involved community members is formed by proactive actions, trust, social networks (linking), social norms, decision-making, and information. Meanwhile, the social capital of indirectly involved community members is formed by proactive actions, internal village trust, social networks, social norms, trust in local figures, and trust in local government. Although both groups of

respondents have different factors forming their social capital, they share proactive actions as the most decisive factor shaping the social capital of the Tambakbaya Village community in developing Sukabungah Agrotourism.

Previous studies have stated that trust is the most decisive factor in forming social capital [8,10,17,20,40]. Interestingly, this study shows a different result, where proactive actions are the most decisive factor in forming social capital. This difference arises because each research location has unique social and cultural characteristics. Proactive actions become the most important factor in forming social capital due to the community's low willingness to act proactively. The community will participate in Sukabungah Agrotourism activities if the management invites them and provides compensation. This condition negatively impacts the management of Agrotourism as the community tends to be apathetic and opportunistic, while tourism development requires proactive actions. Proactive community actions can develop tourism by quickly adapting, anticipating trends, collaborating effectively, and innovating [25]. Proactive community actions are shown by active and creative attitudes, enabling successful tourism development [41]. Examples of proactive actions by both directly and indirectly involved community members include attending management meetings of Sukabungah Agrotourism, sharing information and knowledge with peers and those involved in agrotourism, providing parking spaces, and willingness to become local guides.

The next factor forming social capital is trust. Trust is a fundamental basis for interaction because trust can influence how individuals interact and behave, playing a crucial role in various aspects of social life [42]. Trust within a community facilitates participation, collaboration, and social networking in tourism development [8,10,20,43,44]. This study identifies several factors related to trust, such as trust in local figures and trust in local government (Table 11). Conceptually, this trust reflects the community's confidence in local figures and government, forming social capital. The trust of the Tambakbaya Village community is evident in their habits of sharing information, mutual assistance, and cooperation in various activities.

Social capital is also formed by social norms, which regulate the behavior of the community and related parties, consisting of village government regulations, religious norms, legal norms, and customary norms. Norms are essential in controlling and demonstrating societal attitudes and behaviors [45]. The Tambakbaya Village community adheres to these social norms, such as not disposing of waste into the Ciujung River, as certain areas are prone to flooding if the river overflows, and refraining from criminal acts that could disrupt public order and safety. Maintaining security and comfort of tourist destinations is crucial because security and comfort are vital conditions in the tourism industry [46]. Community behavior at tourist destinations is a factor that can diminish tourists' sense of security [47]. Peace and security in Switzerland attract tourists, supporting the economic growth of the tourism industry by creating a positive perception that encourages more visitors, thereby boosting the local economy [48].

Furthermore, the social capital of the Tambakbaya Village community is formed by social networks. This indicates that the community actively collaborates with parties related to developing Sukabungah Agrotourism. Social networks are crucial to social capital because strong social networks enhance community participation. According to Suryandhani and Prayitno [11], the stronger the community's social networks, the more successful the development of tourist villages; the success of building social capital in the Mas-Mas Tourist Village lies in the community's ability to engage in social networks [49]. Therefore, social networks facilitate communication, build trust, and share information among stakeholders and local communities, enhancing promotional efforts and fostering collaboration, ultimately leading to the growth of tourist attractions in tourism development [10,49].

Conclusion

The results of the CFA indicate that each analyzed variable is correlated with other variables, thereby justifying the use of factor analysis. Proactive action is the primary factor shaping the social capital of both directly and indirectly involved communities. Several relevant implications for strengthening the social capital of the Tambakbaya Village community in the development of Sukabungah Agrotourism include engaging community members in the development process to foster a sense of ownership and involvement, building trust among all stakeholders by providing clear and accurate information about activities and decisions, expanding social networks both within and beyond the village to increase access to resources and information, and enhancing community adherence to social norms by conducting socialization through formal meetings and social media by local governments. Specifically, for indirectly involved communities, engagement strategies should be facilitated by local leaders and village officials, while for those directly

involved, Sukabungah Agrotourism management should offer opportunities to participate in decision-making, which will enhance their sense of empowerment and commitment to the development outcomes.

Author Contributions

SN: Conceptualization, Methodology, Software, Investigation, Writing - Review & Editing; **EKSHM:** Writing - Review & Editing, Supervision; **ER:** Writing - Review & Editing.

Conflicts of Interest

There are no conflicts to declare.

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