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The Model of Farmers' Independence in Processing and Marketing Agricultural Products

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Abstract---*This study aims to discover the model of farmers' independence in processing and marketing agricultural products in Subak-Abian Tri Guna Karya, Kintamani District, Bangli Regency. This study used quantitative and qualitative data. The data were collected through structured interviews, observation, and documentation. The data was then analyzed using descriptive analysis techniques and statistical analysis with PLS (Partial Least Square). From the data, we discovered that the model of farmers' independence in processing and marketing their agricultural products is by increasing emotional independence in driving agribusiness through developing quality human resources by increasing specific individual skills (life of skill) and strengthening individual capacity (individual capacity building) in order to strengthen institutional capacity (institutional development capacity building) based on the Subak-Abian Institution.*
Keywords---*farmer independence model, marketing agricultural products, processing agricultural products.*

Introduction

The agricultural sector is an important sector for Indonesia because most of the population works in this sector. To realize independence in the food sector, cooperation is needed by all parties, including the government, stakeholders, and the farming community itself which directly manages their business. (Nursida et al., 2023). Readiness in facing the era of globalization requires farmers' independence in competing to ensure product quality and farming sustainability. Independence is a force that is able to encourage farmers to give consideration, analyze and make decisions, and build networks (Sumardjo, 2019). The simple concept of farmer independence is the desire and ability

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of farmers to cultivate their land properly and correctly according to the rules and be able to utilize the resources they have optimally without any coercion from various parties with the aim of achieving their prosperity.

Independence is part of a maturity continuum that develops from individual dependence to independence and culminates in interrelational or interdependence (Cahyati & Kusumah, 2020). Independence will enable a person to improve his or her quality which includes aspects of the quality of life, work, creativity, and thought (Hubeis, 2000). The weak independence of farmers allows farmers to experience losses in farming (Kusumadinata et al., 2021). Therefore, to realize the independence of farmers in their farming resilience, this is done through an empowerment process (Djuliansah et al., 2020). The low level of farmer independence is one of the factors inhibiting farmers' success in processing and marketing agricultural products. As can be found from the results of previous research conducted by Managanta, et al, they found that the low independence of farmers was caused by low support from institutions, especially in the aspects of marketing, capital, processing, and technical guidance (Managanta et al., 2019). Other research results show that the level of farmer independence in managing community forests in Ranggang Village is still low, this is due to the low ability and dynamism of farmers (Ruhimat, 2014).

Internal factors that have a real influence on the level of farmer independence are the level of formal education, business experience, and motivation to try agroforestry. Meanwhile, external factors that have a real influence on the level of farmer independence are the availability of information and support from formal and non-formal institutions. The relationship between the level of farmer independence in terms of capital, production processes, and marketing results on increasing farmer income shows a negative direction and there is no statistically significant relationship with increasing income (Hayun, 2017). Then, another study concluded that the important factors to consider to increase the independence of farmers in Sukaharja Village, Bogor Regency in making decisions for the success of farming are actively seeking information related to farming and interaction with extension workers (Malta, 2016). Independence will be difficult to realize due to poor infrastructure, high transportation costs, low product quality, inadequate access to information, and low capital, causing low bargaining power for farmers (Deressa et al., 2009).

There are 77 farmers who are members of the Subak Abian Tri Guna Karya Group, Kintamani District, Bangli Regency, whose activities include processing and marketing coffee agricultural products. It is necessary to carry out an analysis regarding the level of farmer independence, so that the independence of the Subak Abian Tri Guna Karya farmers, Kintamani District, Bangli Regency can be used as a model for other farmers who have businesses processing and marketing similar coffee agricultural products.

Methods

The population in this study were all farmers belonging to the Subak Abian Tri Guna Karya group, totaling 77 people. The sampling method is simple random sampling where the entire population is a homogeneous group. Samples were taken using the Slovin formula. From a population of 77, the sample obtained was 43 people. Data sources used in this research include 1) primary data, namely data sources that directly provide data to data collectors (Sugiyono, 2020). Primary data sources were obtained directly from respondents in the form of interviews and distributing questionnaires to group members. 2) secondary data is data obtained indirectly from the field (Sugiyono, 2020). Secondary data in this research is data that has been processed by other parties, such as journals, articles, reading books, and research reports. The type of data used, namely quantitative data, is data in the form of numbers. Qualitative data is data in the form of words, schemes, and images (Sugiyono, 2020). The data collection technique in this research is triangulation (a combination of observation, interviews, and documentation), the results of the research are understanding meaning, understanding uniqueness, constructing phenomena, and finding hypotheses (Sugiyono, 2020).

Data analysis techniques are the process of systematically searching and compiling data obtained from interviews, field notes, and documentation, by organizing the data and making conclusions so that it is easily understood by oneself and others (Sugiyono, 2020). Descriptive statistics is a description of data using numerical and graphical methods to recognize patterns in a group of data, summarize the information in the data, and present the information in the desired form (Kuncoro, 2009). The statistical analysis technique with PLS (Partial Least Square) is a strong analytical method measured on a certain scale, and with a small sample size and can also be used to confirm theories (Ghozali, 2016). The reasons for using PLS in this research are as follows: 1) PLS is a general method for estimating path models using latent variables with several indicators. 2) PLS handles reflective and formative models, even constructs with single items (indicators) (Hair et al., 2012, as cited in Ghozali, 2016). In this research, the structural model analyzed fulfills the recursive model and all research variable indicators. 3) PLS is an analysis method that can be applied to all data scales, does not require many assumptions and the sample size does not have to be large. The recommended sample size ranges from 30-100 cases (Ghozali, 2016). The unit of analysis

is the *subak* farmer members, totaling 43 people, thus fulfilling the use of this PLS analysis. A qualitative method with a descriptive analysis approach, namely collecting facts through observation, literature, and media writing, then explaining it thoroughly according to the problem and steps to solve it. (Suherman & Sirajuddin, 2018).

Results and Discussion

Respondents characteristics

Based on the results of distributing questionnaires to respondents, the average age of respondents aged between 15-65 years was 38 people (88.3%), and those aged over 65 years were 5 people (11.7%). Most of the respondents were in the age range of 15-65 years (88.3%). Based on gender, all respondents, namely 43 people, were male (100%). Judging from the level of education, 11 respondents had an elementary school education, or 25.58%, 12 people had a junior high school education, or 27.91%, 17 people had a high school/vocational degree, or 39.53%, 3 people had a bachelor's degree or 6 98%. So in this case the majority of respondents had a high school education of 39.53%. The respondent's characteristics of farmer behavior assessed by individual farmers in applying their skills had a score of 4.29, which means individual farmers have very good skills. Judging from individual farming knowledge, it has a score of 3.39, which means that farmers' knowledge is below their skills. The skills mastered are very good because they learn directly from the environment. Meanwhile, they have limited knowledge about modern agriculture.

The model of farmer independence in processing and marketing agricultural products in Subak Abian Tri Guna Karya, Kintamani District, Bangli Regency

Statistical testing to determine the model of independence of participating farmers in processing and marketing agricultural products can be seen below:

a. SEM Test
   1) Evaluation of measurement model or outer model
   a) Convergent validity

   Testing the model design in this research used Partial Least Squares Path Modeling (PLS-SEM) analysis with the freeware application SmartPLS version 2.0 M3 (Ringle et al., 2015). In the PLS model, convergent validity can be said to be valid if the loading value is 0.5 to 0.6 (Imam, 2018). The convergent validity test of reflexive indicators can be seen from the loading factor value for each construct, where the recommended loading factor value must be greater than 0.7 for confirmatory research, and the factory loading value is between 0.6-0.7 for research that is explorative is still acceptable. An indicator is considered valid if it has an outer loading value of > 0.7 and a t-statistic of > 2.64.

Table 1
Assessing outer loading values

Variable	Indicator/Item	Outer Loading
X1	X1.1	0.611486
X1	X1.2	0.887179
X1	X1.3	0.840752
X2	X2.1	0.733841
X2	X2.2	0.840121
X2	X2.3	0.825624
X3	X3.1	0.0671142
X3	X3.2	0.686360
X3	X3.3	0.916776
X3	X3.4	0.677103
Y	Y1	0.739569
Y	Y2	0.850468
Y	Y3	0.553301

Table 2
Assessing outer loading values and t-statistics after elimination

Variable	Indicator/Item	Outer Loading	t-statistic
X1	X1.2	0.912723	39.086726
X1	X1.3	0.904033	29.369515
X2	X2.1	0.755844	13.161684
X2	X2.2	0.822645	25.262063
X2	X2.3	0.827178	22.249434
X3	X3.3	1.000000	
Y	Y1	0.808813	12.733839
Y	Y2	0.913636	24.839820

Based on Table 1 and Table 2 above, it can be seen that the outer loading value is > 0.7 and the t-statistic > 2.64, so the test results meet the criteria for the convergent validity test.

b) Discriminant validity
The way to test discriminant validity with reflexive indicators is by looking at the cross-loading value for each variable which must be > 0.70. Another way that can be used to test discriminant validity is to compare the square root of the AVE for each construct with the correlation value between the constructs in the model. Good discriminant validity is indicated by the square root of the AVE for each construct being greater than the correlation between constructs in the model. It is recommended that the AVE value be greater than 0.50 (Fornell & Larcker, 1981 as cited in Yuininingsih et al.).

Table 3
Testing discriminant validity

			Correlation			
Variable	AVE	□AVE	X_1	X_2	X_3	Y
X1	0.825170	0.908	1.000000			
X2	0.644090	0.802	0.398331	1.000000		
X3	1.000000	1	0.564658	0.767612	1.000000	
Y	0.744454	0.862	0.321292	0.430734	0.453909	1.000000

Table 3 above shows that the AVE root value is higher than the latent variable correlation coefficient. This means that the AVE root discriminant validity test shows that all the variables used in this research are said to be good/valid.

c) Composite Reliability and Cronbach's Alpha.
Testing the reliability of a construct with reflexive indicators can be done in two ways, namely Composite Reliability and Cronbach's Alpha. Using Cronbach's Alpha to test construct reliability will give a lower value (underestimate) so it is more advisable to use Composite Reliability in testing the reliability of a construct. The rule of thumb for construct reliability testing with reflexive indicators can be seen in Table 4.

Table 4
Construct reliability test rule of thumb

Parameter		Rule Of Thumb
Composite Reliability	*a.*	> 0,70 for confirmatory research
	b.	0,60 – 0,70 can still be accepted for exploratory research
Cronbach's Alpha	*a.*	> 0,70 for confirmatory research
	b.	0,60 can still be accepted as exploratory research

Source: Ghozali (2016)

Table 5
Composite reliability and Cronbach's Alpha values

Variable	Composite Reliability	Cronbach's Alpha
X1	0.904210	0.788232
X2	0.844240	0.724879
X3	1.000000	1.000000
Y	0.853047	0.666570

Source: Results of Respondent Data Analysis

Based on Table 5 above, the four latent variables show Composite Reliability values above 0.70. Because each indicator has a value above 0.07, it can be concluded that these indicators are declared reliable. Meanwhile, Cronbach's Alpha for variable Y has a value of 0.666570 if rounded to 0.70. This shows that the indicator is also declared reliable.

2) Evaluation of structural models or Inner Model
   a) R-Square and Goodness of Fit evaluation

Table 6
R-Square and goodness of fit evaluation results

Variable	R-Square
(X_2)	0.591
(Y)	0.186

Goodness of Fit calculation:

$Q^2 = 1-(1-R_1^2)$
$Q^2 = 1-(1-0,591)\ (1-186)$
$Q^2 = 1-(0,409)\ (0,814)$
$Q^2 = 1-0,333$
$Q^2 = 0,667$

Based on the data in Table 6 above, (X2) has an R-square of 0.591, which means that (X1) and (X3) are able to explain (X2) by 59.1%. Meanwhile, variable Y has an R-square value of 0.186, which means that (X2) is able to explain (y) by 1.86%. Evaluation of the structural model by looking at Goodness of Fit showed that the Q2 value was 0.667 (Q2>0). The results of this evaluation provide evidence that the structural model has a good goodness of fit model, this means that 66.7% of the information contained in the data can be explained by the model while the remaining 33.3% is explained by other variables that are not yet in the model.

b) Evaluation of indicator coefficients
   Evaluation of indicator coefficients is used to determine the magnitude of the contribution of each indicator from the variables (X1), (X2), and (X3) to the variables formed and their level of significance. Evaluation of Indicator Coefficients with Variables (X1) is seen in Table 7.

Table 7
Evaluation of indicator coefficients with variables (X_1)

Variable	Indicator/Item	Original Sample	Standard Error	t-statistic
(X_1)	X1.2	0.912723	0.023351	39.086726
(X_1)	X1.3	0.904033	0.030781	29.369515

Table 7 shows that the 2 indicators used to measure (X1), have a very real influence in forming the variable (X1) at the 1% level with a t-statistic value > 2.64. The physical capital indicator which has the dominant factor is (X1.2) with the largest contribution to the influence of the indicator coefficient in forming (X1) of 0.913 with a t-statistic value > 2.64.

Table 8
Evaluation of indicator coefficients with variables (X_2)

Variable	Indicator/Item	*Original Sample*	*Standard Error*	*t-statistic*
(X_2)	X2.1	0.755844	0.057428	13.161684
(X_2)	X2.2	0.822645	0.032564	25.262063
(X_2)	X2.3	0.827178	0.037177	22.249434

The test results show that the 3 indicators used to measure the variable (X2) each have a very real influence in forming the variable (X2) at the 1% level with a t-statistic value > 2.64. The dominant indicator (X2) is (X2.3) with a large contribution from the influence of the highest indicator coefficient at a value of 0.827 with a t-statistic > 2.64.

Table 9
Evaluation of indicator coefficients with variables (X_3)

Variable	Indicator/Item	Original Sample	Standard Error	t-statistic
(X_3)	X3.3	1.000000		

Table 9 shows that the indicator variable used to measure (X3), has an original sample value of 1.0, meaning that variable X3 has an influence of only 1.0%.

Table 10
Evaluation of indicator coefficients with variables (Y)

Variable	Indicator/Item	Original Sample	Standard Error	t-statistic
(Y)	Y1	0.808813	0.063517	13.161684
(Y)	Y2	0.913636	0.036781	25.262063

The test results show that of the 2 indicators used to measure (Y), each has a very real influence in forming (Y) at the 1% level with a t-statistic value > 2.64. The most dominant indicator (Y) is (Y2) with the largest contribution to the influence of the indicator coefficient in forming the variable (Y) of 0.914 with a t-statistic value > 2.64.

c) Evaluation of structural path coefficients
Structural path coefficient testing was carried out to answer the research hypothesis and also to determine the magnitude of the influence of each variable.

Table 11
Structural path coefficient

Relationship between Variable	Path Coefficient	t-statistic	Information
X1 -> X2	-0.051540	0.674875	Negative and Insignificant
X2 -> Y	0.430734	5.835256	Positive and Significant
X3 -> X2	0.796715	10.956728	Positive and Significant

Source: Results of Respondent Data Analysis

Based on Table 11 above, a structural regression relationship equation model can be built between exogenous constructs and endogenous constructs, as follows:

(a) $X2 = -0{,}052\ X_1 + 0{,}797\ X_3$
(b) $Y = 0{,}431\ X_2$

3) Inner model evaluation
   a) Structural model testing
      This test is used to evaluate the relationship between latent constructs. Based on the PLS 3.0 output, an image is obtained as in Figure 1 below.

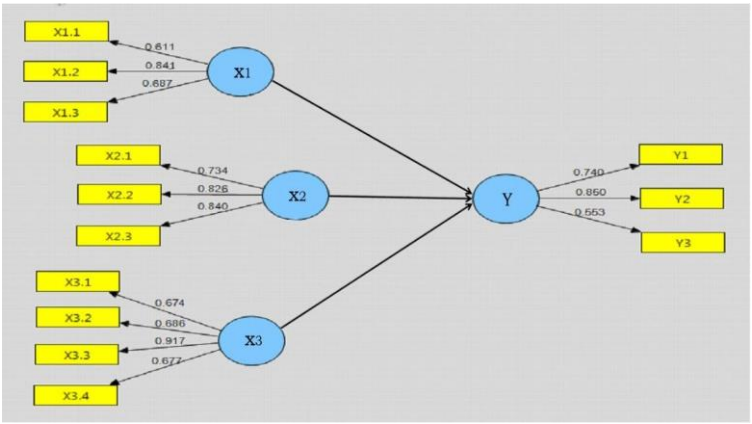

Figure 1. Model Structural

Based on the results of the structural test of the model above, it show that individual farmer characteristics, capacity strengthening, and development capital have a positive effect on farmer independence.

b) Hypothesis testing
   In assessing the model with PLS, it can be seen from the R-Square for each dependent latent variable. Changes in the R-Square value can be used to assess the influence of certain independent latent variables on whether the dependent latent variable has a substantive influence. This research shows that strengthening capacity as a group influences the level of farmer independence with a value of 0.591037. The independence model of the Subak-Abian Tri Guna Karya Group, Kintamani District, Bangli Regency, whose activities are engaged in the processing and marketing of agricultural products, is seen from economic independence, intellectual independence, and emotional independence which can be shown in Table 12 below.

Table 12
Farmers' independence

No	Sub characteristic variables	Score range	category	n	%
1	Economics	1-1,8	Very not independent	1	2,32
	Average score = 4,08				
		1,8 – 2,6	Not independent	3	6,98
		2,6 – 3,4	Medium	4	9,32
		3,4 – 4,2	Independent	32	74,40
		>4,2 - 5	Very independent	3	6,98
2	Intellectual	1-1,8	Very not independent	0	0,00
	Average score = 4,35				
		1,8 – 2,6	Not independent	2	4,65
		2,6 – 3,4	Medium	1	2,32
		3,4 – 4,2	Independent	2	4,65
		>4,2 - 5	Very independent	38	88,38
3	Emotional	1 - 1,8	Very not independent	3	6,98
	Average score = 3,75				
		1,8 – 2,6	Not independent	2	4,65
		2,6 – 3,4	Medium	5	11,64
		3,4 – 4,2	Independent	4	9,32
		>4,2 - 5	Very independent	29	67,41

Based on Table 12, farmer independence can be seen from economic independence with an average score of 4.08 in the independent category, intellectual independence with an average score of 4.35 in the very independent category, and emotional independence with an average score of 3.75 in the category independent. Based on the score results obtained above, it shows that intellectually the independence of farmers who join the Subak-Abian Tri Guna Karya group is classified as very independent. The aim of the community empowerment process that is part of the Subak-Abian Tri Guna Karya group is farmer independence.

Table 12 shows that farmers' independence from an economic perspective is included in the independent category. This can be seen from the house they own, the amount of savings, and vehicles, and there are even farmers who are used to recreation outside the area and some have even traveled abroad. Good economic independence of farmers is followed by intellectual independence which is very independent, in terms of intellectual independence farmers are able to make various decisions on their own such as what to do after the coffee harvest, where to sell it, in what form to sell the coffee, with the intellectual independence of farmers can also manage their business capital well, excellent intellectual capital can be used to support farmers in processing and marketing their agricultural products. With farmers' good economic independence, farmers can send their children to a higher level of education, so that they can support their intellectual independence. Emotional independence in the good category shows that farmers' emotional independence is very well-honed. When farmers are economically independent and established, with high intellectual wisdom, their emotions can be controlled, so that farmers' prosperity can be achieved (Liao et al., 2021; Liu, 2021; Han et al., 2021; Lezoche et al., 2020).

Three things that need to be considered in farmer independence are 1) independence from an economic perspective, usually demonstrated by having sufficient savings; 2) having the ability to learn independently; and 3) the ability to make the right decisions. If you pay attention to Table 12 above, it shows that the farmers who are members of the Subak Abian Tri Guna Karya Group, Kintamani District, Bangli Regency are economically in the independent category, and the farmers already have sufficient savings due to the sale of high-value coffee and have good houses. Intellectual independence or often also called learning independence, shows that farmers with good economic conditions, who have sufficient savings in the form of money which is said to be in their comfort zone will have a better willingness to continually update themselves by increasing their knowledge and skills with the hope of income from the processing and marketing of the coffee they get will increase. It is hoped that farmers will continue to hone their entrepreneurial spirits in the field of coffee processing and marketing. If good economic capital is combined with a desire to learn more, of course, farmers can earn more income than before. The habit of farmers being in their comfort zone is usually accompanied by good decision-making, farmers depend on other people, whether they depend on leaders, Kelian Subak, or existing coffee traders. So, to increase farmers' independence, what can be done is to use economic savings to update themselves through education. Telling farmers to study further is of course impossible, but farmers must learn through non-formal education in the family or through extension (Sehnem & Oliveira, 2017; Xiao et al., 2014; Zeng et al., 2022; Udayana, 2017).

Based on the results of statistical analysis obtained regarding farmer independence. The intellectual independence of farmers gives the highest value, namely 0.850, followed by economic independence with a value of 0.740 and emotional independence of 0.553. Intellectual independence gives the highest value compared to economic independence and emotional independence. The independence of Subak-Abian farmers is influenced by individual capacity factors which are characterized by individual skills, farmer capacity strengthening factors which are characterized by strengthening individual capacity, and development capital factors which are characterized by Human Resources (HR) factors. If you want to make farmers independent, the first thing that must be done is to improve farmers' skills. Increasing farmers' skills can be done by carrying out more direct practices related to processing and marketing of agricultural products, through training efforts carried out by the government and by farmers. independently. This is in line with Hutomo's opinion, which defines community economic empowerment as covering four aspects, namely: strengthening ownership of production factors, strengthening control over distribution and marketing, strengthening the community to obtain adequate salaries/wages, and strengthening the community to obtain information, knowledge, and skills, which must be done both from the community side and from the policy side (Hutomo, 2000).

Considering that skills have the best characteristics in building farmer independence with the highest score of 0.841, it is necessary to continuously improve the skills of farmers in Subak-Abian Tri Guna Karya, Kintamani District, Bangli Regency through various courses, training in processing and marketing produce. coffee. However, to increase farmer independence, of course not only skills need to be improved, but attitudes and knowledge are also important to be encouraged so that farmer independence can be achieved. The agricultural labor factor can be seen from the number and quality of workers involved in coffee farming. Differences in education levels, differences in land ownership, attitudes, and skills of farmers, will greatly influence the level of farmers' ability to do better

farming. This can also affect the level of independence in farming. Independent farmers are farmers who have explorative behavior, are able to make decisions, and are confident and creative. Apart from that, they are also able to act critically, are not afraid to do something, have satisfaction in carrying out their activities, are able to accept reality and manipulate the environment, interact with peers, are goal-directed, and are able to control themselves (Monks, 1994). Farmer independence can also be achieved through capacity strengthening, individual farmers, strengthening individual capacity is more effective in building farmer independence than strengthening capacity as a group or systemically, this is because individual farmers who have good knowledge with excellent skills will be able to work effectively and efficiently so that organizational goals can be achieved.

Strengthening individual capacity has an impact on farmer independence, so it is necessary to improve skills through various training, and courses in processing and marketing coffee products continuously. Strengthening individual capacity will be more effective in building farmer independence if it is accompanied by strengthening group capacity and strengthening capacity through the system. Development capital influences the independence of farmers, and human capital has the highest impact compared to other development capital, if you want to make farmers independent HR capital plays a very important role, good natural capital adequate physical capital, good social capital good, farmer independence will be difficult to achieve if there are no human resources to manage it. With skilled human capital, good knowledge, creativity, and innovation, farmer independence in processing and marketing agricultural products can be achieved. Production factors influencing agricultural productivity are capital (land, money), labor, and technology. Therefore, the measure of farmer empowerment cannot be separated from the control of capital, both land and operational capital, which can be seen from its availability and adequacy. Likewise, labor can be seen from its quantity and quality (Ngadi, 2013). The main production capital for food farmers is land which can be in the form of own land, profit sharing, or rent. Expanding agricultural land ownership in Subak-Abian Tri Guna Karya, Kintamani District, Bangli Regency is no longer possible due to the limited availability of agricultural land as a result of land conversion, so the only way to maintain coffee production is to increase productivity on existing land by improving HR skills and adopting technology that continues to develop. The threat of reducing land area may actually continue to occur, as data from Bali Province shows, that land area per rice field decreased by 6.45 percent during 1997-2007. (Rai & Adnyana, 2011). In general, the process of building farmer independence in Subak-Abian Tri Guna Karya, Kintamani District, Bangli Regency has been carried out very well considering the important role of information technology in helping coffee farmers provide various necessary facilities for processing and marketing agricultural products. Programs aimed at increasing farmers' independence, especially to increase income by the government, are also increasingly being adapted to farmers' current conditions. Program providing capital assistance to farmers with low interest and long repayment terms. This program really helps farmers in increasing their income because through this program it is easier for most farmers to manage the coffee they produce. In the era of globalization, agricultural development cannot be separated from the influence of the rapid development of information and science. Information and knowledge can play a role in helping farmers directly by increasing access to a number of opportunities so that they are able to choose opportunities that suit the factual situation and conditions in the field. The development of information exchange networks between actors is an important aspect of realizing agricultural information and knowledge systems. Information and knowledge relevant to the agricultural sector, such as market price conditions, the latest technology, and capital, are really needed by farmers to increase the productivity of their land.

The model of farmer independence in Subak-Abian Tri Guna Karya, Kintamani District, Bangli Regency in processing and marketing agricultural products then becomes an image as shown in Figure 2 below.:

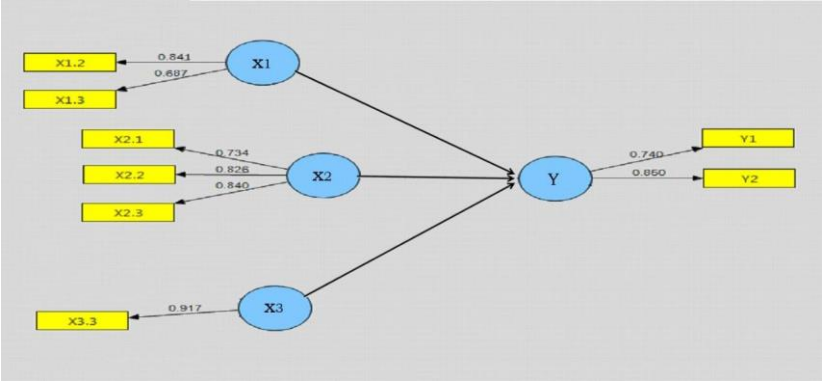

Figure 2. Farmer independence model through capacity strengthening

Based on the figure above, to build farmer independence the following methods can be taken: (1) improving farmer skills, (2) strengthening individual capacity, (3) strengthening development capital, both physical capital, human resource capital, and social capital so that eventually you will be able to grow your independence. Based on this explanation, in this research, the researcher provides input on the implications of the research results, so that they can be applied concretely in the field. The first path will go through what is called farmers' skills and attitudes, then there will be individual strengthening and group strengthening as well as strengthening the social system, after that it will be possible to grow farmers' independence, both economically, intellectually, and emotionally.

If you look at Figure 2, it shows that there are two factors that determine farmer independence. The first factor is intellectual independence through learning, with an average value of 0.850, while the second factor is economic independence with a value of 0.740. Coffee farmers in Subak-Abian Tri Guna Karya, Kintamani District, Bangli Regency, can be said to be independent if they have the intellectual ability to learn formally and informally about everything related to coffee cultivation and the processing and marketing of plantation products. Overall, if you look closely, it shows that the level of independence of coffee farmers in the Subak-Abian Tri Guna Karya Group, Kintamani District, Bangli Regency is relatively good (using class intervals). Based on the research results, it is known that among the factors of farmer independence that need to be improved are emotional independence, and intellectual independence also need to continue to be improved through formal and informal learning (Schipmann & Qaim, 2011; Higgins et al., 2017; Saravanadurai & Manimehalai, 2016).

Conclusion

Based on the results of the analysis and discussion, it can be concluded that the model of farmer independence in processing and marketing plantation products is by increasing emotional independence in driving agribusiness through developing quality human resources by increasing specific individual skills (life of skills) and strengthening individual capacity (individual capacity building) in order to strengthen institutional capacity (institutional development capacity building) based on the Subak-Abian Institution.

The implication of this research is that it is hoped that there will be strong efforts from the Bali Provincial government to build schools that are specific to the sustainability of coffee farming from processing to marketing plantation products. So that the natural wealth which is very good and has potential in the development of coffee plants can be more focused on its management. This is what is called the Power of Focus. The next step is to build farmers' attitudes, by inviting coffee farmers to conduct comparative studies to places that have coffee products that are accepted by the world market. Like Gayo coffee, another important thing that needs to be considered is human resources, because human resources are a factor in determining independence. In the future, what can be done to maintain the sustainability of coffee cultivation, processing, and marketing is to send farmers' children to study programs related to coffee. This is the most effective way to maintain the continuity of natural resources which are already very rich. Remember that Catur Village has world-recognized coffee *nuftah* plasma and this potential will last a long time if managed by quality human resources. HR investment requires a long time, therefore the government should help provide scholarships for young people in Catur Village to study programs related to modern coffee processing, such as industrial engineering, coffee machines, packaging, etc.

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