# **Comparative Analysis of Transaction Costs of Seaweed Farmers**

Budiman<sup>1\*</sup> Ahmad Erani Yustika<sup>2</sup> Multifiah<sup>2</sup> Iswan Noor<sup>2</sup>

- 1. Study Program of Agribusiness Fishery, Agricultural Polytechnic State of Pangkep, South Sulawesi Indonesia.
- 2. Economics and Business Faculty, University of Brawijaya, M.T. Haryono 165, Malang, East Java, Indonesia. \*E-mail of the corresponding author: budimanharuna@yahoo.com

# Abstract

This research aims to compare transaction costs farmers contract the formal and informal financial institutions in business farmer of cultivating seaweed in Takalar Regency of South Sulawesi. Design of research using survey method with random sampling data collection via questionnaires and in-depth interviews to the respondents. The Unit of analysis is 30 informal institutions contract farmers of *Eucheuma Cottoni* seaweed and 30 formal farmer. Methods of analysis used is the average ratio analysis (test the difference 2 average).

This research resulted in three (3) findings i.e.; (1) there are 13 (thirteen) components of transaction costs seaweed growers. The component market transaction cost consisting of cost of intermediaries to buy seeds, fee sales contract, the cost of financing the management of the intermediary and the difference between the sales price. Production managerial transaction cost components, consisting of the cost of planting seeds, transport costs of purchasing seeds, transportation costs of financing institutions, the cost of eating and drinking and celebrate the seed belt (*appanaung ri jenne*) while the political component of the transaction cost consisting of credit interest, administrative costs, costs of documents, cost of postage labels. The results of comparative transaction costs transaction costs shows farmer informal institutions contract is larger than the formal institution of contract farmers.

Key words: Seaweed Farmers, institutional, transaction costs, access to financing and welfare.

#### 1. Introduction

Indonesia is the country with the world's largest archipelago, consists of 17,508 islands with coastlines around 95,181 square kilometers, the fourth longest in the world after Canada (265.523, 2 Km), United States (133.312, 0 miles) and Russia (110.310 0 Km) (BPS Indonesia, 2009).

There are 16 counties being the development of seaweed. Takalar Regency is a centre for the development of seaweed cultivation in South Sulawesi. This is one of the reasons researchers choose the location research in the Takalar Regency (DKP, 2012).

Based on World Bank data, it turns out the household/community of Indonesia more choose informal financial institutions to borrow than formal institution such as bank. Based on World Bank data there are 25 percent choose to borrow at informal financial institutions, like friends, family and moneylenders. While only 17 percent who choose the formal institutions or banking for financial services (financial inclusion).

The results of research conducted by Turkey and Kong (2010) in China, found that about

two-thirds or more than 67% of agricultural households borrow from friends or relatives, and the rest is borrowed on microfinance institutions and the rural credit cooperatives. This condition applies on a farmer cultivating seaweed in the location of research. Limited access is utilized by the informal financial institutions that are close to the farmers to offer financing to farmers, so that not a few others farmers made the informal financial institutions as an option to get access to capital. But farmers 'accessibility on an informal and formal financial institutions implies transaction costs farmer cultivating seaweed farmers.

Some theoretical studies and empiric explained that the transaction costs affect welfare. As done by Winter, et al. (2005) his research using transaction cost approach in a way to compare the distinction between farmers who contract with a non contract farmers. The results of his research shows that farmers who contract with the multinational, their income and their welfare better than the non contract. Further research of Bhattarai, et al. (2002) shows that the increase in the cost of the transaction will be followed by a decrease in the real income of the farmers. The cost is very high, no affect market input and output market, Matungul, et al. (2006). Other studies have demonstrated an increase in transaction costs can be lower or reduced income farmers among them Javier, et al. (2012), Adejobi, et al. (2006), Fernando S, et al. (2010), Eduardo Araral (2013), Lefevre, et al. (2013), Krishnana M, et al. (2010).

Institutions affect the performance of the economy and the market, because it basically deals with how human beings interact with each other and how they compose their world (North, Pressman, 2000). Therefore, it can be concluded that the existence of the institutional emphasis from economic aspect is "how institutional able to reduce transaction costs".

Similarly, Williamson (1998) says, trust in the companies can occur informally (not through written contractual agreements) but based on nearness relationship so as to reduce transaction costs. Further, New Institutional Economics as a theoretically reject the standard neoclassical assumptions that individuals have perfect

information and have an unlimited amount of rationality, and that transactions carried out tend to be cheap and fast. NIE assume that individual has the information is incomplete and has the mental capacity is limited, and therefore, they felt the uncertainty on Genesis and the results were not unexpected, and bore the transaction costs when wanted/looking for information. Among the *new institutionalist* the performance of a market economy is determined by formal and informal institutions and organizational models that facilitate the private transactions and cooperative behavior.

Another difference between the neoclassical with economic institutional lies in the existence of other costs than the cost of production. Neoclassical economics assumed that the costs will only emerge due to the production process and is not required at any cost to achieve equilibrium because neither consumers nor producers have perfect information about the market, while the institutional economics considers that there are other costs that appear in addition to the cost of production, i.e. cost due to imperfect information (the information inequality), known as a transaction fee.

According to Williamson (1998), the existence of a problem which is important and emerging surface caused because not always the contract was created with the full requirements, it is also coupled with the presence of opportunism that makes transaction costs there will always appear. However different in standard theories (neoclassical), where a contract is usually assumed in conditions of complete (complete contract) that can be made without *cost (costlessly)*.

#### 2. Literatur Review

#### 2.1. Institutional Economic Theory as a Paradigm

Institutional or institution in the sense of economy is defined as the rule of human life, the organization, trust and norms (North, 1990). The rules of life, organizations, or this norm, may be the hereditary material of the generation (historically) the community, so that the institutional economics gave a high appreciation portion of historical understanding as a source of inspiration for the idea.

NIE itself mainly was conceived and developed by Ronald Coase, Douglass North and Oliver e. Williamson. Coase as outlined above is the founders the transaction cost theory by neoclassical economists ignored. While North sought to integrate the theory of rational choice of neoclassical economists with social action theory of modern sociology. While Williamson was more focused on the issues of transaction costs (Vadenberg, 2002).

This research use the NIE as a theory. NIE is a combination of various disciplines of Economics, law, organization theory, political science, sociology and anthropology are used to understand the economic, social and institutional politics. Regarding the institutional rules, written and unwritten norms and habits that are designed to reduce the uncertainty and take control of their surroundings. Institutional consists of: (1) the rules and governance which govern contractual; (2) constitution, laws and rules that govern the policy, government, finance and the wider community; (3) the unwritten rules of behavior, norms and beliefs. Order of the Organization concerning the different forms of management that supports production and exchange. The order can be either (i) the market, enterprises, and various combinations of shapes that made economic actors to facilitate the transaction, (ii) contractual agreements that provide the framework for the implementation of the activity, or (iii) the nature of the (iii) sifat perilaku yang mendasari tatanan yang dipilih (Menard and Mary, 2005).

#### **2.2.** The Formal and Informal Institutions

Institutional literature explained that there are common differences between a common formal and informal institutions (Bromley, 1989; North, 1990, Buitelaar, 2007). Formal institution can be understood as an institution that has the character of legality, and the formal rules of a formal contract. Informal institutions include conventions, customs (habits) and social norms that are not formal, in other words that don't have institutional legal power, but can affect our actions.

#### 2.3. The Transaction Cost Theory

Analysis of the transaction cost theory allow loosening assumptions of neoclassical theory of perfect information. Transaction cost approach recognizes the many business exchanges typified imperfect or asymmetric. Incompleteness of information and uncertainty refers to the situation where all the parties conduct transactions face the same level of information but is not complete. Asymmetric information arises when the information available to all parties and personal information only.

Arrow defines transaction costs as the cost to run an economic system (Benham and Benham, 2010; Buitelaar, 2007). Barzel defines transaction costs as the costs associated with the transfer, capture, and protecting the rights (Benham and Benham, 2010).

Transaction cost theory, also known as the organizational theory by Cordella and Simon break down into the costs of activities consisting of: first production cost and the second transaction cost and opportunity cost of infrastructure costs (internal costs) and the costs of coordination (external costs) (Shah, 2007). For Williamson, transaction costs caused by human factor and environmental factor. Human factors mainly because of inherent limitations in human form as a limited cognition and information (Bounded Rationality) and desire more

profiteers in the wrong way (opportunist) (Grounhaug, 1991) while environmental factors is the complexity of the environmental conditions as well as a variety of uncertainties that arise in the Community (Shah, 2007).

Opportunism is another basic building of the transaction cost theory is regarded as a form of human nature (Chen, et al. 2002). Opportunist interpreted by Willimson as a "self-interest seeking with guile", including: distortion and hiding of information, shrewd actions, Machiavellian intentions (Aubert, at al. 1996). Opportunistic nature basically has been Adam Smith observed two centuries ago, where Adam Smith considered that people tend to behave according to its own interests (Gronhaug, 1991). Further addition to become the foundation of theory of transaction costs, opportunistic explanatory theory also became an agency, that any parties involved in the relationship are motivated by self-interest opportunistic behavior and also economic (Lou and Donthu, 2007).

Furubotn and Richter (2000) divides the cost of the transaction into three types, based on the type of transaction that are; Market transaction cost is the cost incurred for goods/services get to market. As for market-related transaction cost in the form of; (a) preparation of the contract cost (the cost of the search/procurement information); (b) the costs of making a contract (cost bargaining/negotiating and decision making; (c) monitoring and enforcement of contract cost (the cost of supervision and enforcement).

Next, managerial transaction cost, costs related to create order form; operational costs, the cost of IT, public relation, the cost information. Political transaction cost in the form of the rules/institutional (public goods) market and transactions so that entrepreneurs could take place properly. Transaction costs are included in the political transaction cost such as; the cost of manufacture, maintenance costs, government regulations, legislation, education and defence, law administration.

#### **2.4.** The Theory of Contracts in Transaction Costs

The signing of the contract agreement determined by several factors such as the extent of the transaction costs, information and assumptions of behavior (bounded rationality or opportunism). Opportunistic behavior described as behavior that seeks to achieve the desire by all means even with illegal ways though. The existence of imperfections of information and possibility of opportunistic behavior, then the relations between economic actors organized in a contract could lead to the occurrence of adverse selection (hiding information) and Moral Hazard (the abusive authority).

Mallor, at al. (2004) revealed that a contract law is the implementation of a promise or a set of promises. When a set of appointments have been in the status of the contract, a person who is aggrieved by a breach of contract can ask the Government (courts) to force the parties to comply with the violated the contract. If all requirements have been met, the contract will be fulfilled, this was followed by the written requirements of the parties involved in the contract. If one of these requirements is not met, then the contract is not the case. Theoretically what outlined the Mallor implicitly indicate "equality" from parties involved in the contract.

Based on the description of Mallor, et al. (2004) that a contract will be created if satisfy the requirements: negotiation, agreement (offer and acceptance), voluntary, consideration, capacity and legality. If all these requirements are met, then the beginning of the contract, which was then followed by the written requirements of the parties involved in the contract. If one of these requirements is not met, the contract is not the case. Theoretically, the Mallor outlined as implicitly, indicate un equality from parties involved in the contract.

#### 3. Data and Sampling Method

The research was held in Takalar District of the coastal area of South Sulawesi province. The population in this research is the seaweed farmers accessing sources of financing from formal financial institutions in the villages of Laikang and Laguruda villages, totalling 60 farmers. Seaweed farmers accessing financing from informal financial institutions in the villages of Laikang and Laguruda amounted to 120 farmers. This study sampled farmers with methods of random sampling. How to determine the number of samples is carried out by simple random sampling technique method of random number table (random numbers) based on the number of respondents. Retrieval results can be seen in Table 1.

Type of Contract	Population	Sample	Sampling Method	
Farmers Formal Financing	60	30	Random Sampling	
Institutions Contract				
Farmers Informal	120	30	Random Sampling	
Financing Institutions				
Contract				

Table 1. Population and Sample Random Sampling Method

Source: Data processed by 2013

#### 4. Result and Analysis

Research of transaction costs on the business activities of farmers cultivating seaweed identified a number of 13 (thirteen) component of transaction costs there are:

<b>Components of Transaction Costs</b>				
Market Transaction Cost	Managerial Transaction Cost	Political Transaction Cost		
<ol> <li>Cost of intermediaries to buy seeds</li> <li>Fee sales contract</li> <li>The costs of obtaining financing intermediaries</li> <li>The difference between the sales price.</li> </ol>	<ol> <li>Transport costs of planting seeds</li> <li>Transport costs of purchasing seeds</li> <li>Transportation costs of financing institutions</li> <li>Eating and drinking</li> <li>Costs celebrate the planting of seedlings</li> </ol>	<ol> <li>Credit interest</li> <li>Administrative costs</li> <li>Costs of documents</li> <li>Cost of postage labels</li> </ol>		
Source: Data processed by 2014				

#### Table 2. The Research Component Of Transaction Costs Seaweed Farmer

Source: Data processed by 2014

#### 4.1. The Test Result 2 Different

From the average results of the average (mean) transaction costs of informal institutions contract farmers amounted to Rp 3.250.900,-whereas the formal institution of contract farmers amounted to Rp 465.980,-. This calculation shows that in a very real transaction costs incurred by farmers ' informal institutions contract is higher than the formal institution of contract farmers. The high transaction costs of informal contract farmers occur in this type of transaction costs the market (Market Transaction Cost) (see table 3).

	Farmers Formal	Farmers Informal	Uji <i>t</i>
Variable	Financing	Financing	
	Institutions	Institutions Contract	
	Contract		
	(n = 30)	(n = 30)	Formal Farmers
			vs Informal
Transaction Cost	465.980	3.250.900	6,181*
<ul> <li>Market Transaction Cost</li> </ul>	74.917	3.046.400	6,999*
- Managerial Transaction Cost	294.610	204.450	2,221 *
- Political Transaction Cost	96.450	0	80,799*

Table 3. Transaction costs of Formal financial institutions Contract Farmers vs.Informal

Source: Data processed by 2014

Keterangan:

\*). Real error ( $\alpha$ ) 5%, t-tabel: t( $\alpha$ ,df): t(0,05,58)= 1.67

Based on the Table 3, average (mean) for transaction costs or market (Market Transaction Cost) informal contract with farmers had average about Rp 3.046.400, far greater than the average (mean) of a formal contract that only farmers amounted to Rp 74.917,-. These results indicate a market transaction costs occurred the very real differences between an informal contract with farmers farmers formal contract. For this type of transaction costs or production management, production management,

Transaction Cost calculation results obtained from the average (mean) in informal contract farmers amounted to Rp 204.450,-whereas a formal contract farmers amounted to Rp 294.610,-. This result shows the transaction costs are borne by the farmers ' production management, informal contract lower than the costs borne by the farmers of the formal contract.

The results of calculation of transaction cost politics or Political Transaction Cost obtained average (mean) of Rp 96.450,-for a formal contract farmers, but an informal contract for farmers there was no transaction cost politics issued farmers. The results showed differences Ujit-t is very real (see table 3).

#### 4.2. Discussion of Research Results

Based on the results of t-test used to calculate transaction cost theory Furubotn & Richter (2000), which divided the three transaction costs consist of transaction costs the market (market transaction cost), transaction cost production management (production management, transaction cost) and the transaction cost political transaction cost). The third type of transaction costs is obtained the results that the transaction costs of informal

contract farmers are greater than the transaction costs of formal contract farmers. These results indicated the existence of very real differences between the transaction costs of informal contracts with farmers formal contract. The differences in transaction costs which is evident due to the magnitude of the market transaction costs transaction costs transaction costs of formal institutions contract farmers than the transaction costs of formal institutions contract farmers.

Differences in the magnitude of transaction costs that are borne by farmers due to the existence of the contract financing rules differences applicable to the formal and informal institutions (agreement in the contract). The gap in transaction fees each agency implies an informal contract farmers are positioning them on the condition that weakens. In addition, the magnitude of transaction costs which must be borne by farmers can suck up the potential acceptance of seaweed production sales results and will have an impact on the economic conditions of farmers.

Results of this study are consistent with the findings of the Birthal, et al. 2005 that transaction costs for dairy cattle business contract system only amounted to 1.76 percent as compared to non contract system which reaches towards the cost of the total percent 20,11.

Further strengthen the opinions expressed by the Winter, et al. 2005 research analysis using transaction cost approach in a way to compare the distinction between farmers who contract with a non contract farmers. The results of his research shows, farmers who participate in contracts with multinationals: income and the welfare better than the non contract. Previous related research influence farmer contracts (contract farming) presented by Simmons, et al. (2005) found that the contract poultry, seeds of maize and rice seeds in Indonesia positively affect welfare, reduction of the contract's third absolute poverty. The same result by Warming and Key, (2002) in his research found that farmers increase its revenues significantly by participating in the program contract farming compared to farmers who do not participate. Discussion of the results of research related 3 (three) type of transaction costs, namely: (1) market transaction cost; (2) production management, transaction cost; and (3) political transaction cost elaborated based on transaction cost components that were found at the site of the research.

The cost of market transaction in this study found that there are several cost components are: the cost of intermediaries to buy seedlings (bpbb), fee sales contract (fekop), intermediary financing arrangements (bppp), and the difference between the sales price (shp). The results of data analysis by using two different test average retrieved values t-tesr for each component of the market transaction cost is presented in Table 4.

Table 4. Transaction Cost Farmers Market Contract Informat Vs. Format Institutions				
	Farmers Formal	Farmers Informal	Uji t	
Variable	Financing	Financing		
	Institutions Contract	Institutions Contract		
	(n = 30)	(n = 30)	Formal vs	
			Informal	
Market Transaction Cost	74.917	3.046.400	6,999*	
1. Cost of intermediaries to buy seeds	27.083	45.000	0,983	
2. Fee sales contract	0	96.609	5,143*	
3. The costs of obtaining financing intermediaries	47.833	0	2,935*	
4. The difference between the sales price.(shp)	0	2.387.500	6,960*	

	Table 4. Transaction Cos	t Farmers Market	Contract Informal	vs. Formal Institutions
--	--------------------------	------------------	-------------------	-------------------------

Source: Data processed by 2014

\*). Real error ( $\alpha$ ) 5%, t-tabel: t( $\alpha$ ,df): t(0,05,58)= 1.67

Based on Table 4, it appears there is a difference between farmers informal contract with farmers formal contract marked value t calculate (6.999) is greater than the value of the t table. Differences in the cost of transaction market (Market Transaction Cost) farmers with very real informal contract is larger than the formal institution of contract farmers. The magnitude of the market's transaction costs incurred because of the marketing contract farmers to informal institutions. On informal contracts applicable agreement: *first*, the result of production of dried seaweed should farmers market to informal institutions (Gatherer) and low prices from market prices so that the price difference going on sale/SHP (price margins).*Second*, the prevailing practice of cutting the amount of production of dried seaweed by collecting an amount of 1 (one) kilogram of per sack which is the fee the sales contract (fekop) informal institutions (Gatherer). *Third*, the existence of intermediary costs at a time when farmers buy seeds of seaweed, which is about Rp 20.000,-per 100 kg of seed. Component of transaction costs the market (Market Transaction Cost) on a farmer cultivating seaweed in coastal of research location.

The power of informal institutions owned in determining price because a large part of farmers are in the hands of perpetrators of informal institutions and farmers tied to the treaty which must be obeyed (enforcement of contracts). Otherwise the applicable contract between farmer with formal institutions (BRI) only creates the market transaction cost are low because farmers are free to sell its turf results without any cuts as it happens on an informal institution and the contract price is the market price so that farmers do not pay for fee sales contract (fekop) and there is no difference in the sales price (SHP) which farmers formal institution get.

Formal institutions contract raises transaction costs in the amount of the contract, compared with relatively few informal institutions. These results suggest that transaction costs are determined by the kind of contract that became the choice of the farmer. Then the transaction cost microprocessor consists of several cost components namely: transport costs for planting seedlings, the cost of transport to buy seedlings (trpb), transportation costs to the institutions financing/bank (cikre), the cost of eating/drinking plug seedlings (pasbit), Appanaung rijenne celebrate the charges made the early growing season. The results of data analysis by using two different test average retrieved values test-t for each component of the production management, transaction costs are presented in Table 5.

Financing	
Institutions	
Contract	
(n = 30)	Formal vs
	Informal
204.450	2,221*
55.500	2,340*
4.166	3,338*
0	11,843*
141.450	1,470
3.333	1,301
	ŕ
	Contract (n = 30) 204.450 55.500 4.166 0 141.450

Table 5. Transaction Cost	ts of Managerial Farmers	Contract Informal	vs Formal Institutions

Source: Data processed by SPSS, 2014

Note: \*) real error ( $\alpha$ ) 5%, t-tabel: t( $\alpha$ ,df): t(0,05,58)=1.67

Results of Table 5 shows there is a difference between farmers informal contract with farmers formal contract marked value t calculate (2,221) is greater than the value of the t table. Calculation of transaction costs production management (production management, Transaction Cost) and the components that comprise the cost of transport for planting seedlings (btapa), the cost of transport to buy seedlings (trpb), transportation costs to the institutions financing (cikre), the cost of eating/drinking plug seedlings (pasbit), and celebrate the Appanaung Rijenne. The calculation results transaction costs production management (production management, Transaction Cost) contract farmers greater formal institutions of informal institutions contract on farmers, the condition is triggered by a component of the cost of transportation to the Agency financing or cost to the bank to pay the monthly mortgage repayments. While informal institutions contract farmers no costs incurred to meet informal institutions (Gatherer) because the gatherer is close to the farmers and not tied to time to payback that has borrowed

Type of transaction costs production management (production management, transaction cost) there are sufficient to contribute the business activities of farmers cultivating seaweed farmers also are on the kind of food and beverage expenses for labor put the seeds (pasbit). The magnitude of transaction costs plug seedlings (local term; *massikko agara*) because the process of seed pairs limited workforce and require several days to tie up the seeds. So the more time/day used the farmer then the greater the cost of eating and drinking also issued farmers.

In addition there are also transport costs when buying seeds and seaweed planting seeds in the land. This happens because the activity of buying and planting seeds seaweed using boats and fuel oil as its operational costs. Informal contracts on farmers part of using the services of an intermediary when buying seeds while the formal contract farmers do not use an intermediary but direct buy seeds provide so just removing the cost of fuel oil as transport fare of seeds.

For political transaction cost has cost components namely: mortgage interest cost (interest), administrative expenses (SKU) and document cost fare purchase postage labels. Analysis results by using two different test average retrieved values test-t for each component of the transaction cost politics presented in Table 6.

Table 0. Fontical Transaction Cost of Formar and Informat Institutions Contract Farmers				
	Farmers Formal	Farmers Informal	Uji t	
Variable	Financing	Financing		
	Institutions	Institutions		
	Contract	Contract		
	(n = 30)	(n = 30)	Formal vs	
			Informal	
Political Transaction Cost	96.450	0	75,354*	
- Credit interest	51.300	0	460,432*	
- Administration cost	17.000	0	15,258*	
- Cost of document	6.500	0	-	
- Cost of postage	21.650	0	73,700*	

Table 6. Political Transaction Cost of Formal and Informal Institutions Contract Farmers

Source: Data processed by SPSS, 2014

Note:

\*) real error ( $\alpha$ ) 5%, t-tabel: t( $\alpha$ ,df): t(0,05,58)= 1.67

Based on the obtained results of Table 6 for Political Transaction Cost there are 4 (four) components of the transaction cost politics, namely, mortgage interest, administrative costs (SKU), the cost of documents and cost of postage labels for formal contract farmers. The t-test results in Table 5.19 shows there is a difference between Farmers formal contract with farmers informal contract marked value t calculate (75.354) is greater than the value of the t table. On Political Transaction Cost, contract in formal institution very real bigger than on the informal institutions contract farmers. The reasons are; (1) farmers who do business activities of farmers cultivating seaweed with a source of cost from informal institutions free from loan interest; (2) no process formal administration or unwritten contract; (3) and there is no guarantee. On the other hand farmers who do a farmer cultivating seaweed through formal institutions help with the cost of administrative requirements applicable in the form of affidavits attempt (SKU) of the Government apparatus namely, the village chief, presented a document that is a copy of the ID card, KK, marriages, registration Card, photo, as well as providing three (3) postage labels and to any obligation to pay interest on credit.

#### 5. Conclusions

The business activities of farmers cultivating seaweed having transaction costs such as market transaction cost consisting of seedlings cost intermediary purchases sales contract, fee, price, cost of sales intermediaries providing financing. For production management, transaction cost comprise the cost of transport for planting seeds, seedlings, buy transport costs transportation costs to the institution's financing, the cost of eating/drinking plug seedlings, celebrate the cost *Appanaung ri jenne*. The political component of the transaction cost consists of the cost of credit repayments, administrative costs, costs of documents and the cost of buying postage labels.

Results of the comparison showed that the transaction costs of seaweed farmers contracts of informal financial institutions larger than on a formal contract farmers. These conditions indicate that (a) the formal contract farmers have an efficient institutional of the informal institutions. The institution is said to be efficient if the transaction costs are low, there is the certainty of rules of the game (certainty) and the relationship between the principal and the agent for (equal relationship). (b) the proportion of the cost of most transactions is determined by the market transaction cost then followed by production management, transaction cost and political transaction cost.

#### REFERENCES

- Adeyemo R, Agbonlahor. 2007. An Empirical Analysis of Microcredit Repayment in Southwestern Nigeria. *Humanity & Social Sciences Journal* 2 (1): 63-74.
- Adejobi A.O. dan Amaza. 2006. Enhancing the Access of Rural Households to Output Markets for Increased Farm Incomes. *International Association of Agricultural Economists* Conference Goald Coast, Australia, August 12-18.
- Araral E. 2013. A transaction cost approach to climate adaptation: Insights from Coase, Ostrom and Williamson and evidence from the 400-year old zangjeras. *Environmentalscience& policy 25 (201 3)147–156*
- Aubert, B.A., Rivard, E., and Patry, M. 1996. Research A Transaction Cost Approach To Outsourcing Behavior: Some Emperical Evidence. Information & Management. 30,pp.51-64

Badan Pusat Statistik (BPS). 2009. Statistics of Marine and Coastal Resources, Jakarta.

Birthal, P.S., P.K. Joshi, and A. Gulati. 2005. Vertical coordination in high value commodities; implications for the smallholders. MTID Discussion Paper No. 85. *Washington, DC: IFPRI*.

- Benham, A., and Benham, L. 2010. The Cost of Exchange. In The Elgar Companion to Transaction Cost Economics, Klein, P.G., and Sykula, M.E., (Eds). Edward Elgar: USA, pp. 107-119.
- Benham, A., and Benham, L. 2001. The Cost of Exchange. *Ronald Coase Institute Working papers*, Number 1. (<u>http://www.coase.org/workingpapers/wp</u>-1.pdf)
- Buitelaar, E. 2007. The Cost of Land Decisions Applying Transaction Cost Economics to Planning & Development. Singapore. Blackwell Publishing.
- Bhattarai M., Sakthivadivel R, dan HussainI. 2002. Irrigation impacts on income inequality and poverty alleviation: Policy issues and options for improved management of irrigation systems, *Working Paper 39. Colombo, Sri Langka: International Water Management Institute.*
- Chen, C.C., Peng,M. W. And Saparito, P.A. 2002. Individualism, Collectivism, and Opportunism: A Cultural Perspective on Transaction Cost Economics. *Journal of Management*, 28(4), Pp.567-583.
- DKP. 2012. Statistik Perikanan Budidaya Indonesia-DKP SulSel.
- Fernando, Saenz. 2010. A seasonal model of contracts between a monopsonistic processor and smallholder pepper producers in Costa Rica. *Agricultural Systems journal homepage: www.elsevier.com/locate/agsy*
- Furubotn, E.G and Richter, R. 2005. Institutions and Economic Theory The Contribution Of The New Institution Economics, Second Edition. The University of Michigan Press.USA.
- Grounhaug, K. 1991. A Transaction Cost Approach to Consume Dissatisfaction and Complaint Actions. *Journal* of Economic Psychology, Issue. 12,pp 165-183.
- Javier, E. dan Denice. 2012. Transaction Costs, Institutional Arrangements and Inequality Outcomes: Potato Marketing by Small Producers in Rural Peru. *Word Development* Vol.40, No.2, pp.329-341.
- Krishnana, M. dan Narayanakumarb R. 2010. Structure, Conduct and Performance of Value Chain in Seaweed Farming in. *Agricultural Economics Research Review* Vol. 23 (Conference Number) pp 505-514
- Lefèvre M. dan Tharakan J. 2013. Intermediaries, transport costs and interlinked transactions. *Center for Operations Research and Econometrics*.
- Luo, X and Donthu, N. 2007. The Role of Cyber-Intermediaries: A Framework Based on Transaction Cost Analysis, Agency, Relationship Marketing and Social Exchange Theories. *Journal of Business & Industrial Marketing* 22 (7),pp. 452-458.
- Manao, Hokinus, 2013. Financial Inclusion : *Delivering Financial services to the Poor*. A General Lecture at Universitas Brawijaya.Malang, February 19.
- Mallor, Jane P.A.James Bames, Thomas Bowers, Michael J. Philips and Arien W. Langvard. 2004. Bussiness Law and Regulatory Environment; Consep and Cases. Thenth Edition. Irwin McGraw-Hill.USA.
- Matungul, P.M., GF. Ortmann and M.C. Lyne. 2006. *Marketing Methods and Income Generation Amongst Small-Scale Farmers in Two Communal Areas of Kwazulu-Natal, South Africa*. School of Agricultural Sciences and Agribusiness University of Natal, Pietermaritzburg.
- Menard, Claude and Mary M. Shirley. 2005. Hand book New Institutional Ecomomics. Edited by University of Paris (Pantheon-Sorbone), France and Mary M. Shirley The Ronald Coase Institute Chevy Chase, MD, U.S.A.
- North, Douglass C. 1990. *Institution, institutional Change, and Economic Performance*. New York : Cambridge University Press. USA.
- Pressman, Steven. 2000. Lima puluh Pemikir Ekonomi Dunia. Tri Wibowo Budi Santoso (Penerjemah). PT. Rajagrafindo persada. Jakarta.
- Furubotn, E. dan Richter R.2000. Institution And Ecomomic Theory: The Contribution of The New Institutional Economics. The University of Michigan Press. Ann Arbon. USA
- Simmons, P., P. Winters, and I.Patrick. 2005. An Analysis of contract farming in east java, bali, and lombok, indonesia. *Agricultural Economics*.
- Shah, M. 2007. Analisis Transaction Cost. India: Sunrice Publiser.
- Turkey CG, Kong Rong. 2010. Informal lending amongst friends and relatives: Can microcredit compete in rural China?. *China Economic Review* 21 544-556
- Vandenberg, Paul. 2002. North's Institutionalism and the Prospect of Combining Theoretical Approaches. Journal of Economics. Vol.26.No.2.pp.217.
- Warning, M. and N, Key. 2002. The social performance and distributional consequences of contract farming: an equilibrium analysis of the arachide de bouche program in senegal. *World Development* 30 (2):255-263
- Williamson, O.E., 1998. Transaction Cost Economics; Haw it Work; Where it is Headed. De Economics.146, No.1.*Kluwer Academic Publiser*.
- ----- 2000. The New Institutional Economics; Taking stock, Looking Ahead. Journal of Economics Literaure 38.3:597.
- Winter, Paul., Phil Simmons., and Ian Patrick. 2005. Evaluation of a Hybrid Seed Contract between Smallholder and Multinational Company in East Java, Indonesia. *The Journal of development Studies*. Vol 42, No.1, January.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage: <u>http://www.iiste.org</u>

## CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

**Prospective authors of journals can find the submission instruction on the following page:** <u>http://www.iiste.org/journals/</u> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

# MORE RESOURCES

Book publication information: <u>http://www.iiste.org/book/</u>

### **IISTE Knowledge Sharing Partners**

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

