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### Development Of Coconut Agroindustry Business Institutions In Konawe District, Southeast Sulawesi Province

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Abstract: This research aims to analyze the institutional system of coconut agro-industry businesses in Konawe Islands Regency, Southeast Sulawesi Province. The scope of this research is the institutional processing business, namely institutional form, raw material requirements, institutional structure, capital, decision making, data collection techniques through interviews, FGD and expert questionnaires (ISM). Based on the research results, it shows that: The key elements of the palaku coconut processing business development system in Konawe Islands Regency are coconut farmers and consumers of processed coconut products. The key elements needed by players in the coconut processing business development system are easy access and guaranteed marketing of processed products, the need for rehabilitation, intensification and extensification of coconut plants. Sustainability of institutional development of coconut processing businesses requires assistance from universities (PTN-PTS) whose role is to connect between parties which have been an obstacle for farmers and coconut processors.

Keywords: Development, Agroindustry, coconut.

#### INTRODUCTION

Progress in coconut agribusiness plays an important role in increasing efficiency while increasing farmers' salaries. Currently, coconut plays an important role in the economy as a provider of potential business opportunities. Modern unrefined ingredients and direct utilization. However, most coconut cultivation is not directly related to processing businesses, downstream industries, as well as industry, administration and finance. Therefore, coconut agribusiness is not successful in increasing added value ideally and relatively, so that it has a big impact on increasing the salaries of coconut farmers. Handling coconut cultivation is still traditional and capital is limited, and the quality of the products produced is still low. Until now, not much has changed so that multipurpose coconut products generally do not have added value. The overall industrial commodity portion is very open to all coconut commodities. Specifically, products such as oil cake, shell charcoal and coconut fiber (Damanik, 2007).

The progress of coconut in Indonesia can be summarized into four, namely: (1) in home nurseries, (2) monoculture framework, (3) polyculture framework, and (4) flowing swamp land (Nasution and Rachmat 2016). Coconut cultivation is dominated by small farms on land which are not very large and whose efficiency is lower than large plantations (Crazy 2021). The area of community coconut plantations, which constitutes 98% of the area of community coconut

plantations, is described, among other things, by: (1) narrow land ownership area, with a normal area of 0.5-2.0 ha/breeder family; (2) generally developed in a monoculture design; (3) low efficiency, normally 0.62-1.67 lots of copra/ha/year; (4) the level of board cultivation and treatment of irritation and disease is low so that many plants are harmed or degraded; (5) cultivation commodities that are still limited are granulated coconut and copra; (6) acceptance of proposed innovations is still low because farmers' capital capacity is weak; and (7) farming wages per unit area of land are low and fluctuating so that they are unable to support the economy of coconut farming families (Nasution and Rachmat 2016).

Coconut is a plant local to tropical districts, specifically regions situated along the equator. In these tropical regions, coconut plants develop generally and are developed by most ranchers. In Indonesia, it is found in practically all territories, from level waterfront regions to rather high mountain regions. In thickly populated regions, for instance in Java and Bali, coconut plants are for the most part established on dry land or dry land, while in meagerly populated regions, for instance in immigration regions, coconut plants are generally established on huge areas of land with a monoculture example of coconut ranches. (Warisno, 2003).

Coconut plants have high monetary worth and fill well in tropical regions with temperatures around 27° C and can be tracked down in both the swamps and good countries. This coconut tree can develop and prove to be fruitful well in swamp regions with a height of 0 - 450 m above ocean level. In the high countries with a height of between 450 - 1000 m above ocean level, albeit this tree can develop, the fruiting time is more slow, creation is less and the oil content is low (Amin and Sarmidi, 2009).

Coconut is an essential item that has a social, monetary and social job in individuals' lives. The advantages of coconut don't just lie in its tissue which can be handled into coconut milk, copra and coconut oil, yet all pieces of the coconut plant have benefits that can be figured out how to expand the additional worth of the actual coconut. A few coconut subsidiary items range from fiber which can be made into brushes, sleeping cushions, vehicle seats, ropes and geotextiles. Then the shells are utilized for handiworks and other handled structures, for example, coconut charcoal briquettes, initiated carbon, then, at that point, coconut meat which can be handled into copra, coconut oil, dried ground coconut, coconut milk. and afterward coconut water which can be handled into nata de coco, vinegar and new beverages. These qualities give extremely key monetary open doors in fostering these items (Lia et al., 2014).

The advancement of coconut-based items progressively shows promising possibilities. This is on the grounds that many pieces of the coconut contain results. A few coconut handling agro-businesses produce a few pieces of the coconut, for example, coconut meat, coconut

water, coconut husks, coconut shells, even coconut stems and sticks (Wulandari, 2009). A large part of the capability of coconut has not been taken advantage of because of different snags, particularly innovation, capital and inconsistent market retention. Aside from being a wellspring of vegetable oil, coconut plants likewise turn out revenue for cultivating families, as a wellspring of unfamiliar trade for the country, as a supplier of business valuable open doors, as a trigger and driver for the development of new monetary focuses, as well as a driver for the development and improvement of downstream ventures in light of coconut oil and different items. Indonesia (Rahman, 2011).

Coconut natural product is the main piece of the coconut plant since it has high monetary and dietary benefit. Old coconut natural product comprises of four principal parts, to be specific 35% husk, 12% shell, 28% mash and 25 percent coconut water. Aside from being delectable to eat straightforwardly, coconut meat (particularly youthful coconuts) can be handled further. This is on the grounds that rural items for the most part have a short-lived nature, so farming items should be quickly promoted in new structure or can be handled into rack stable food (Shantybio, 2006).

Youthful coconut organic product is an exceptional tropical plant item on the grounds that other than the tissue part of the natural product can be polished off straightforwardly, the water part of the organic product can likewise be tanked straightforwardly without handling. This uniqueness is upheld by the actual properties and structure of coconut meat and water, so this item is exceptionally well known with shoppers, the two kids and grown-ups (Barlina, 2007).

One work to increment efficiency which affects expanding ranchers' pay is by overseeing cultivating data sources, for example, work, pay, schooling, land region and support in rancher bunches ideally and successfully through the advancement of a coordinated coconut agro-industry. The improvement of an incorporated coconut agro-industry will give two advantages immediately, specifically first and foremost it is beneficial according to an agribusiness point of view and also it will assist with saving nature. Other than that, for neighborhood states and networks it will be a wellspring of extra pay (Allorerung and Mahmud. 2003).

As indicated by Amin and Sarmidi (2009), coconuts are the most monetarily significant part, since coconuts can add to coconut items into different sorts of handled items, for example, coconut oil, coconut sugar, and the white and hard tissue of coconuts can be taken and dried to turn into an item. An item that has a genuinely high selling esteem and is an exchanging product is called copra. Copra is new coconut tissue which can be dried in different ways, in particular,

utilizing daylight and smoking. Copra handling incorporates the method involved with vanishing water from coconut tissue, which is the underlying water content of the coconut tissue. Coconuts are the most monetarily significant part, since coconuts can add to coconut items into different sorts of handled items, for example, coconut oil, coconut sugar, and the white and hard tissue of coconuts can be taken and dried to turn into an item that has adequate selling esteem. high and has turned into an exchanging product called copra. Copra is new coconut tissue which can be dried in different ways, in particular, utilizing daylight and smoking. Copra handling incorporates the method involved with dissipating water from coconut tissue, where the underlying dampness content of new coconut tissue which comes to half is decreased to a dampness content of 57% through a drying cycle.

The Konawe Islands Horticulture and Manor Administration expressed that coconut is as yet an unrivaled yield other than cashew, cloves and nutmeg, so it is utilized as a predominant product. As per Pariaman, et al (2015), the area of smallholder coconut estates has arrived at 3.7 million ha, so in Indonesia there is as yet potential for coconut to be created to accomplish the public authority's rural improvement objectives in supporting the country's financial unfamiliar trade. The coconut estate region in Konawe Islands Rule has an area of 4,543 ha with The creation limit is 1,308 tons and the quantity of coconut ranchers working is 2,167 families. Coconut is the primary yield on Wawonii Island, exactly in Konawe Regime. The islands are exceptionally inseparable from the moniker coconut island, and that signifies "top of the coconut", in this way individuals in the Konawe Islands have from old times established coconuts for ages and it has turned into a group's ranch crop, and generally Socially and socially, coconut plants assume a significant part for individuals of Konawe Islands Rule.

A seriously unexpected reality right now shows that cooking oil items (for example Bimoli, Filma, Tropical, Kunci Mas) rule the whole market in the Konawe Islands, specifically cooking oil created from palm oil by huge financial specialists, while individuals' coconut estates cover practically the whole land region of the island. Wawonii, will in general be dismissed and not handled. Most coconut ranchers sell their items in logs and just few local area individuals process coconuts into cooking oil for their own requirements and cycle coconuts into copra. In light of these realities, an answer is required with the goal that the local area, particularly coconut ranchers, have monetary strengthening in view of the assets they have had for ages.

In view of the foundation depiction over, this examination expects to break down the institutional arrangement of coconut agro-industry organizations in Konawe Regime, Islands, Southeast Sulawesi Area.

### RESEARCH METHOD

This research was carried out in Konawe Islands Regency, Southeast Sulawesi Province with the consideration that the research location was a center for coconut production and development which began with a survey and implementation of FGDs involving farmers, processors and related agencies. The scope of this research is the institutional processing business, namely institutional form, raw material requirements, institutional structure, capital, decision making, data collection techniques through interviews, FGDs and expert questionnaires (ISM).

The research method used in this research is Focus Group Discussion (FGD) to explore in depth the problems and actors of the coconut processing business institutional system and their respective needs. Apart from FGD, the Interpretive Structural Modeling (ISM) analysis technique was also used to determine the key elements and hierarchical structure of the problems and actors as well as the needs of each actor in the coconut agro-industry institutional system. Analysis using the ISM method is carried out by identifying research variables through needs analysis because it is the first step in research and determines research input. The inputs used are elements related to the institutional supply chain of the copra agro-industry. The elements used are elements of need, constraints, objectives and institutions involved. The elements and sub-elements studied were obtained from interviews with experts (Asri Rachmat Rosidi et al. 2017).

#### FINDINGS AND DUSCUSSION

# A. Institutional Development of the People's Coconut Processing Industry Through a Systems Approach

Problem solving method uses a systems approach through several process stages. These stages are system analysis, model engineering (system modeling), design implementation (system implementation design), system implementation and operation. Each stage is followed by an iterative evaluation and if it is not suitable then it must be repeated (iteratively) before continuing to the next stage. This process goes through several stages starting from defining needs, formulating problems, synthesizing alternative problem solutions, feasibility of alternatives, methods for selecting existing alternatives, optimal planning and system operationalization.

# 1. Analysis of the Needs of Actor Elements in the Coconut Processing Business Development System

### DEVELOPMENT OF COCONUT AGROINDUSTRY BUSINESS INSTITUTIONS IN KONAWE DISTRICT, SOUTHEAST SULAWESI PROVINCE

In connection with the stages of the system approach process in question, the results of this research found a number of actors involved in the coconut processing industry development system and their respective needs for the coconut processing industrial system. Apart from that, a number of problems were also found related to the development of the coconut processing industry in Konawe Islands Regency. For more details, it can be presented in Table 1.

The research results in Table 1 show that the number of actor elements involved both directly and indirectly in the coconut processing business development system are Coconut Farmers, Coconut Collecting Traders, Coconut Processing Industry Managers, Regional Government, Universities (PTN/PTS), Plantation Services, Department of Industry and Trade, Banking and Consumer Affairs. All elements of these actors each have their own needs for the coconut processing business development system. If we look further, it is found that several elements of the actors have the same needs, but there are also needs of elements of the actors that are at odds with each other, as can be seen from the need of industry managers for their products to have a high selling price, while consumers as the elements of the actors want the selling price of processed products to be cheap. In resolving the differences in needs between the actor elements, problem solving using a systems approach is needed.

#### Table 1.

Business Actors involved in the Coconut Processing System and their respective needs.

No	Elements of the People's Coconut	System Element Needs for People's Coconut Industry Actors	Community Coconut Industry Actor System
	Industry Actor System		Element Code
1	Coconut Farming	Ease and guaranteed marketing of coconut products	KBTH-01
	(PTN KLP)	The selling price of the produce in the form of coconut logs is	KBTH-02
	(11111111)	reasonable	NDTIT 02
		Cultivated coconut production is high	KBTH-03
		The quality of the coconut produced is good	KBTH-04
		There are facilities for access to capital and assistance with	KBTH-05
		equipment and business management	
		Achieving an economically viable standard of living	KBTH-06
2	Coconut Collector	High profit margin	KBTH-07
	Traders (PDG KLP)	Easy marketing access	KBTH-08
	,	Sufficient business capital	KBTH-09
		There is ease in collecting coconut products	KBTH-10
3	Coconut Processing	Continuous availability of raw materials	KBTH-11
	Industry Manager	High quality raw materials	KBTH-12
	(IDT-KĹP)	Low prices for raw materials	KBTH-13
	,	Production target achieved	KBTH-14
		The quality of the processed products produced is of high quality	KBTH-15
		The resulting profit margin is high	KBTH-16
		Smooth credit returns	KBTH-17
4	Regional Government	Job opportunities open	KBTH-18
	(PEMDA)	Regional income increases	KBTH-19
	,	Does not cause problematic waste	KBTH-20
5	Higher Education	Development of processed coconut products based on the results	KBTH-21
	(PTN-PTS)	of science and technology studies	
	,	Work procedures in accordance with applicable regulations	KBTH-22
6	Plantation Service	Coconut productivity per area is high	KBTH-23
	(DISBUN)	Coconut production is easily absorbed by the market	KBTH-24
		Coconut farmers are skilled in managing coconut plantations	KBTH-25
		There is intensification, extensification and rehabilitation of coconut	KBTH-26
		plants	
7	Department of	Procedures and quality standards for processed coconut products	KBTH-27
	Industry and Trade	are met	
	(PERINDAG)	There is continuity and stability in prices for processed coconut	KBTH-28
		products	
8	Banking (BANK)	There is a guarantee of smooth credit repayment	KBTH-29
		The number of customers in banking increased	KBTH-30
9	Consumer (CONS)	Cheap prices for processed coconut products	KBTH-31
		Guaranteed quantity and quality of coconut products	KBTH-32
		There is verification and diversity of processed coconut products	KBTH-33

# 2. Interpretative Structural Modeling (ISM) Analysis of Actor Elements in the Coconut Processing Business Development System

The results of ISM's analysis of the elements of the coconut processing business development system in the Konawe Islands Regency show that the actors who are the main key elements are Coconut Farmers and Consumers, followed by Universities as the second key element and Coconut Processors and the Plantation Service as the third key element. This provides guidance to policy actors when they want to develop a coconut processing business, it is important to pay special attention according to the sequence level of the key elements of the actor. One of them is that farmers are the main factor that

must be played, especially as suppliers of raw materials. For greater clarity, the results of the ISM analysis of the elements of the coconut processing business development system are presented in Table 2 below.

 Table 2.

 Results of ISM analysis of Actor Elements of the Coconut Agroindustry Development System

									1		
Factor			Sub-eler	nents of coo	onut agro-ir	ndustry develo	pment actors				
Sub-	b- PTN- PD		IDT- PEMDA		PTN-	DISBUN	PERIN-	BANK	KONS	DP	R
elements	KLP	KLP	KLP	FEINIDA	PTS	DISBUN	DAG	DAINK	KONS		
PTN-KLP	1	1	1	1	1	1	1	1	1	9	1
PDG-KLP	1	1	0	0	0	0	0	1	0	3	5
IDT-KLP	1	1	1	1	0	0	1	1	1	7	3
PEMDA	1	1	0	1	0	1	1	1	0	6	4
PTN-PTS	1	1	1	1	1	1	1	1	0	8	2
DISBUN	1	1	1	1	0	1	1	1	0	7	3
PERINDAG	1	0	1	1	0	1	1	1	0	6	4
BANK	0	0	0	0	1	0	0	1	0	2	6
KONS	1	1	1	1	1	1	1	1	1	9	1
Jumlah/D	8	7	6	7	4	6	7	9	3		
Level	2	3	4	3	5	4	3	1	6	•	

If you look at the results of the ISM analysis based on the hierarchical structure (level) and the relationship between Driver Power (DP) and Dependence (D), it is clear that there are 6 levels of structure where the main structure is Banking followed by Coconut Farmers as the second level, then the Department of Industry and Trade and Regional Government and Collecting Traders at the third level. This provides an indication that the lack of financial capital for farmers requires the banking world to be a source of funding in credit facilities, but requires assistance to be able to access capital. In line with this, the existence of PTN-PTS at level 5 as well as the second key element is a new hope for coconut farmers and coconut processors in terms of ongoing assistance and training.

The actor elements included in the Linkage quadrant are Coconut Farmers, Regional Government, Plantation Service, Coconut Processing Industry and PERINDAG Service. This gives an indication to the parties that for the development of the coconut processing business this element needs to receive primary attention because it has a relationship with various other elements so that the coconut processing development system is unstable. Meanwhile, the Consumer actor element and the higher education element (PTN-PTS) are in the Independent quadrant, which indicates that these two

system actor elements have a large driving force in the success of the coconut processing development business system.

## 3. Interpretative Structural Modeling (ISM) Analysis of the Needs of Elements of the Coconut Processing Business Development System

The results of ISM's analysis of the needs of elements of the coconut processing business development system in the Konawe Islands Regency show that the needs of actors who are the main key elements are ease of access and guaranteed marketing of processed products, the need for rehabilitation, intensification and extensification of coconut plants. This is followed by the need to diversify processed production at relatively cheap or competitive prices. For more The clear results of the ISM analysis of the elements of the coconut processing business development system are presented in Table 3.

If you look at the results of the ISM analysis of the needs of the elements of the coconut processing business development system based on the hierarchical structure (level) and the relationship between Driver Power (DP) and Dependence (D), it is clearly seen that there are 10 levels of structure where the main structure is the need for coconut selling prices. which is feasible, as presented in Figure 3. These results strongly indicate that the price of coconut at the current actor level is low and inadequate, so that it becomes a reinforcement to be made a top priority by policy makers in efforts to develop coconut processing businesses.

**Table 3.**Results of ISM analysis of the needs of elements of the coconut processing business development system

Benen		Benen Kebatukan dari setap pelaku saken pengahangan usah pengabhan kepa BBF1   NSBF2   NSBF3   NSBF4   NSBF5   NSBF6   NSBF7   NSBF5   NSBF9   NSBF9   NSBF11   NSBF12   NSBF12   NSBF13   NSBF14   NSBF15   NSBF15   NSBF15   NSBF15   NSBF15   NSBF15   NSBF16   NSBF17   NSBF18   NSBF18   NSBF19   NSBF20   NSBF22   NSBF22   NSBF22   NSBF24   NSBF25   NSBF25   NSBF25   NSBF26   NSBF26   NSBF27   NSBF2														DP	IK										
Kebutuhan	NBIH 1	NBIH 2	NBIH3	NBIH4	NSIH 5	KBIH 6	NBIH 7	KBIH 8	KBIH9	KBIH 10	NBIH 11	NBIH 12	KBIH 13	KBIH 14	NBIH 15	NBIH 16	<b>KBIH</b> 17	KBIH 18	KBIH 19	KBIH 20	NBIH 21	NBIH 22	KBIH 23	NBIH 24	NBIH 25	1	
NBIH 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	25	1
KBIH 2	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	13
KBIH3	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	20	4
KBIH 4	0	1	0	1	1	1	0	0	0	0	1	1	1	0	0	1	1	1	1	1	1	1	1	0	0	15	8
NBIH 5	0	0	0	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	6	11
NBIH 6	1	1	1	0	0	1	1	1	1	1	1	1	1	0	0	0	0	1	0	0	1	1	1	1	1	17	6
NBIH 7	0	1	1	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	1	0	0	9	9
KBIH 8	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	14
KBIH 9	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	22	3
NBIH 10	0	1	1	0	0	0	0	0	0	1		0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	13
NBIH 11	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	0	0	0	0	1	1	1	1	16	7
NBIH 12	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	5	12
NBIH 13	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1	0	0	1	0	0	0	0	7	10
NBIH 14	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	5	12
NBIH 15	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	4	13
NBH 16	1	1	0	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	19	5
IBIH 17	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	I	0	0	0	0	0	0	0	0	3	14
NBIH 18	1	l	l	1	I	I	1	0	0	0	l	l l	I I	1	1	0	0	I	0	I	l l	l	I	I I	1	19	5
IBIH 19	1	l l	1	1	1	1	1	1	I	1	I	1	1	1	1	1	I	1	1	1	1	l l	I	I I	1	25	1
IBIH 20	U	1	0	U	1	U	U	0	U	0	U	U	1	0	1	0	U	0	0	1	0	1	0	1	1	6	11
KBIH 21	1	1	1	1	1	U	U	0	0	0	1	1	1	0	1	0	0	0	0	1	1	1	1	1	1	15	8
WH 22	U	U	0	U	U	U	U	0	U	1	1	U	U	0	0	1	0	0	0	U	0	1	0	U	U	3	14
NBIH 23 NBIH 24	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22 20	3
NBIH 24	1	1	1	1	1	1	1	0	1 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	24	4
Noin 25	11	23	15	1/	13	12	10	9	1 0	11	12	15	1/	11	13	10	13	12	Q	1/	13	20	14	12	12	44	
IEML	11	1	15	14 A	5	6	10 X	9	δ 10	7	6	15	14 A	7	5	10 X	13	6	10	14	5	20	14	6	6	$\vdash$	
шил	l '	1	٦		٦	0	0	,	10	- 1	0	ا	7		٦,	0		U	10	7	,	4	7	U	0		

### 4. Interpretative Structural Modeling (ISM) Analysis of Coconut Processing Business Development System Problems

The results of ISM's analysis of problems with elements of the coconut processing business development system in the Konawe Islands Regency show that the problems which are the main key elements are that people's coconut production and productivity fluctuates from season to season because most coconut plants are old and the area of coconut plantations is relatively small scale. in general less than 1 hectare per farm. As a result, the continuity of agro-industrial production is difficult to ensure. (MSL-1). This is followed by the problem of the need for the quality of people's coconuts as raw material to be relatively low, making it difficult for the processed coconut production process to be optimized to reach the desired quality scale.

The third key element that is a problem in developing coconut processing businesses is the limited capital of business actors, while there are difficulties and many banking obstacles to obtain commercial credit for developing coconut processing businesses (MSL-2); limited skilled workforce who have special expertise and skills in the field of coconut processing so that the level of technology used ranges from conventional technology (MSL-4); and there is no cooperation model (partnership) that can benefit all parties, especially between planters as raw material suppliers and coconut processors as business actors (MSL-5). For greater clarity, the results of the ISM analysis of the problem elements of the coconut processing business development system are presented in Table 4.

**Table 4.**Results of ISM analysis of Problem Elements of Actors in the Coconut Agro-Industry Development System

Faktor		Sub-elemen kendala pengembangan agroindustri kelapa									
Sub-elemen	MSL-1	MSL-2	MSL-3	MSL-4	MSL-5	MSL-6	MSL-7	MSL-8	DP	R	
MSL-1	1	1	1	1	1	1	1	1	8	1	
MSL-2	0	1	1	1	1	1	0	1	6	3	
MSL-3	1	0	1	1	1	1	1	1	7	2	
MSL-4	1	0	1	1	0	1	1	1	6	3	
MSL-5	0	1	0	1	1	1	1	1	6	3	
MSL-6	1	1	1	1	1	1	0	0	6	3	
MSL-7	0	1	0	1	0	1	1	1	5	4	
MSL-8	1	0	1	0	0	1	0	1	4	5	
Jumlah/D	5	5	6	7	5	8	5	7			
Level	4	4	3	2	4	1	4	2			

If you look at the results of the ISM analysis of the elements of the coconut processing business development system based on the hierarchical structure (level) and the relationship between Driver Power (DP) and Dependence (D), it is clear that there are 4 levels of structure where the main structure or level is the lack of adequate assistance. sustainability in the development and management system for coconut processing, especially those related to technical aspects of production, marketing of processed products, financial management and accessibility of additional financial capital (MSL-6). These results strongly indicate that ongoing assistance is urgently needed in the development of coconut processing businesses. The second level in the hierarchical structure of the ISM analysis results shows that there are limited skilled workers who have special expertise and skills in the field of coconut processing so that the level of technology used ranges from conventional technology (MSL-4); and weak competitiveness of processed coconut products, as a result of the limitations of the management system which still uses conventional technology (MSL-8). For greater clarity, the results of the ISM analysis of the problem of elements of the coconut processing business development system based on the hierarchical structure (level) and the relationship between Driver Power (DP) and Dependence (D), are presented in Figure 1.

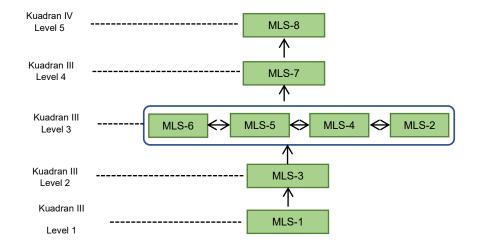


Figure 1.

Hierarchical Structure of Problem Elements of the
Coconut Agro-Industry Development System Based on ISM Analysis Results

Furthermore, if you look at the results presented in Figure 5, it can be seen that almost all the problems (MSL-1, MSL-3, MSL-4, MSL-5, MSL-6, MSL-7, MSL-8) in efforts to develop processing businesses Coconut is included in the Linkage quadrant except MSL-2. This provides strong direction so that in handling these problems it is necessary to take into account carefully and carefully because there are connections or relationships that can influence efforts to realize the development of a coconut processing business. For more details, see Figure 2.

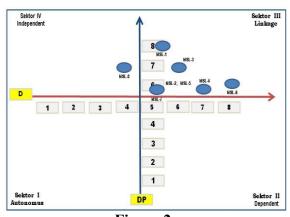


Figure 2.

ISM Analysis Results of the Relationship Between Driver Power (DP) and Dependence (D) on Problems in the Coconut Agro-Industry Development System.

### B. Conventional Institutional Model and Scenario ResultsKelembagaan Usaha Pengolahan Kelapa Konvensional

### 1. Conventional Coconut Processing Business Institutions

In this research, to determine the institutional nature of the coconut processing business (copra, coconut shell charcoal, coconut oil, nata decoco) which has been going on so far in the Konawe Islands Regency, it was carried out using the Focus Group Discussion (FGD) method followed by ISM analysis. An FGD was conducted which was attended by government stakeholders, coconut farmers, coconut processors and community leaders. From the results of the FGD, information was revealed about ownership rights and institutional structures, decision making and relationships between conventional coconut processing institutions.

Based on the results of the FGD, it was found that all business actors processing coconut into copra, shell charcoal and coconut oil are classified in the micro business category, apart from getting a number of actors who are expected to be involved in the coconut processing business development system either directly or indirectly, the needs of the parties as system actors development of coconut processing businesses as well as formulation of problems for developing coconut processing businesses as previously described. Specifically for making natadecoco, there are no business actors running this business at the research location. The ownership status of all businesses reveals that they are family-owned (home industry) which has not yet developed an institutional structure according to standard regulations as appropriate. In making decisions related to all business activities, collecting raw materials, processing and marketing processed coconut products, the authority of the business owner, in this case mostly played by the head of the household. Regarding the relationship between coconut processing business institutions and multi-stakeholders, especially the government, this has been carried out through the appropriate government and business actor relationship mechanisms.

Konawe Islands Regency Coconut Processing Businesses receive assistance and supervision from the local government in developing their business. However, it is felt that there are still many weaknesses related to the technical production and marketing of products that have not been covered by the government in a sustainable manner. At the village level there are institutions formed together with the government such as Village-Owned Enterprises (BUMDES) which can provide financial facilities for business actors but are unable to solve the main problems in coconut processing, namely technical production and product marketing. Apart from going through BUMDES, accessing additional financial capital for coconut processing businesses can also be done through banking. However, coconut processing business actors reveal that accessing additional business capital through banking is much more difficult and complicated so that practically no one is able to borrow funds from banking for business development. These facts are the main factors to be considered in designing an institutional model that can handle the technicalities of production and marketing in a sustainable manner and is able

to enable coconut processing businesses to access additional financial capital through banking.

On the other hand, it was also revealed that the government's role so far has been apart from facilitating MSMEs, including those engaged in the coconut processing business, as well as providing facilitation and supervision to buyers or manufacturers and sellers of production facilities. This is highly appreciated by business actors, but in many cases there are still obstacles that are unable to solve the problems of the coconut processing business comprehensively. This should not happen if the institutional concepts offered by the government are implemented consistently and sustainably. It is known that since 2017 the government, in this case the Directorate General of Plantations, Ministry of Agriculture of the Republic of Indonesia, has initiated the formation of Community Economic Institutions (LEM) with the aim of encouraging the accelerated transformation of rural community economic institutions, which previously took the form of agribusiness-based economic institutions in the form of farmer groups. which are small, weak, slum, less productive, less competitive; then it will be pushed to become an economic institution for rural communities that is more resilient, productive, modern, efficient and becomes a mainstay in the welfare of its members and rural communities in general.

The policy concept for establishing LEM is the formation of One Village One Economic Institution, namely by encouraging farmer groups existing in one village area to want to join into a Community Economic Institution (LEM) which has a larger economic scale or village level, and which has productive business units, so that the LEM will have the ability and strength to mobilize the community economy at the same level. village. The formation of LEM is focused on efforts to empower the independence of the village community itself using a From-By-For village community pattern, the technical implementation of which is accompanied by LEM Facilitators. In fact, through the FGDs conducted in this research, the formation of LEM has not been carried out in the research area, especially those related to coconut processing businesses. Therefore, the basic concept of LEM can be used as a source in designing the institutional development of a coconut processing business scenario.

#### 2. Institutional Coconut Processing Business Scenario Results

After reviewing several weaknesses in the conventional coconut processing business institutional model as explained in the results of the first stage FGD, this research has carried out further FGD and ISM analysis to obtain the needs and

relationships of each party related to the institutional design of the coconut processing business scenario. Based on the results of the ISM analysis previously presented and the follow-up FGD, it was revealed that the institutional model of the coconut processing business needs to be revitalized with the aim of increasing productivity and profits from the coconut processing business. The strategic role of PTN-PTS as system actors which in the ISM analysis occupies the Independent Sector and is the second key element after Farmers. Therefore, In Institutional design for the development of coconut processing businesses, PTN-PTS plays a role in connecting parties which have so far been an obstacle for farmers and coconut processors, especially with banks, related agencies, including guidance and training for coconut processing businesses from a technical production side, sustainable marketing and financial management.

### CONCLUSION AND RECOMMENDATION

Based on the description that has been presented, the conclusion of this research is that the elements of the coconut processing business development system which are the main key elements are coconut farmers and consumers of processed coconut products. This provides a strong indication that for the development of coconut processing businesses in the Konawe Islands Regency, coconut farmers must first be prioritized as suppliers of raw materials and also consumers as parties who will absorb the products produced. The needs elements of the coconut processing business development system actors are the main key elements namely easy access and guaranteed marketing of processed products, the need for rehabilitation, intensification and extensification of coconut plants. This is followed by the need to diversify processed production at relatively cheap or competitive prices. Sustainability of institutional development of coconut processing businesses requires assistance from PTN-PTS to play a role in connecting between parties which have been an obstacle for farmers and coconut processors, especially with banks, related agencies including guidance and training for coconut processing businesses from a technical production side, sustainable marketing and financial management.

### **REFERENCES**

Abdul dan Bambang. (2005). Akuntansi Manajemen. BPFE. Yogyakarta.

Allorerung, D.,dan Mahmud. (2003). *Kemungkinan Pengembangan Pengolahan Buah Kelapa Secara Terpadu Skala Pedesaan*. Prosiding Konferensi Nasional Kelapa IV.Bandar Lampung 21–23, Pp.327-340.

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- Amin, Sarmidi. 2009. *Cocopreneurship : Aneka Peluang Bisnis dari Kelapa*. Yogyakarta. Penerbit Lily Publisher. 166 halaman.
- Asri Rachmat Rosidi, Siti Asmaul Mustaniroh, Panji Deoranto. (2017). *Analisis Kelembagaan Rantai Pasok Agroindustri Kopra. (Studi Kasus Di Kabupaten Halmahera Timur)*. Jurnal Teknologi Pertanian Vol. 18 No. 2 [Agustus 2017], hal 91-106.
- Badan Pusat Statistik, (2018). Kabupaten Konawe Kepulauan Sulawesi Tenggara.
- Barlina, Rindengan. (2007). Pengaruh Perbandingan Air Kelapa Dan Penambahan Daging Kelapa Muda Serta Lama Penyimpanan Terhadap Serbuk Minuman Kelapa. Jurnal Littri Vol 13 (12): hal 73-80.
- Damanik. (2007). Strategi Pengembangan Agribisnis Kelapa (Cocos nucifera) untuk Meningkatkan Pendapatan Petani di Kabupaten Indragiri Hilir, Riau. Pusat Penelitian dan Pengembangan Perkebunan. Perspektif Vol. 6 No. 2 / Desember 2007. Hal 94-104.
- Gaga, A. (2021). Farming Development Strategy in Coconut in Pohuwato Regency. Jambura Agribusiness Journal 2(2): hal 81–86.
- Lia Kristiana. (2014). Analisis Strategi Pengembangan Agribisnis Kelapa Sebagai Komoditas Unggulan di Kecamatan Cidaun Kabupaten Cianjur. Program Studi Agroekoteknologi. Fakultas Pertanian. Universitas Madura. AGROSAINS. Vol. 01 No 01.
- Pariaman; RozaYulida; Kausar. (2015). Peran Penyuluhan Dalam Pemberdayaan Petani Kelapa Pola Swadaya Di Desa Bente Kecamatan Mandah Kabupaten Indragiri Hilir. Jurnal Jom FapertaVol. 2 No. 2.
- Rahman Abdul. (2011). Budidaya Kelapa Dalam. Yogyakatra : Lembaga Pendidikan Perkebunan.
- Shantybio, (2006). *Nata De Coco Yang Kaya Serat Biology Mikrobiologi*. http://transdigit.com.
- Warisno. (2003). Budi Daya Kelapa Genjah. Kanisius, Yogyakarta, hal 15-16.
- Wulandari, Suci. (2009). Analisis Peluang dan Tantangan Pengembangan Agroindustri Kelapa. Jurnal Agrointek. Vol. (4). No.1: hal 28-39.