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The Improvement Agribusiness Models on Cashew Nut Production Based Integrated Farming Systems at South East Sulawesi Province during Covid 19 Pandemic

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In several Monthly ago, there is a giant world deceive where high infection virulence include Indonesia nation who namely Covid 19 Pandemic. By WHO instructions that's all human activity are Work from home (WFH) and social distention. This study aims to: (1). identify of prototype integrated farming system and constrain factors for cashew products (2) determine of Agribusiness models of integrated farming system and its products characteristics. Research was conducted in the central region of cashew plantations in mainland people south east Sulawesi Province are concentrated on the Muna Island. Desain Model conceptual Agribusiness using innovation technology transforms and Entrepreneurial capacity building approach. The type of data in this study is qualitative and quantitative data and sources include primary and secondary data. Analysis methods used to identify of prototype diversified integrated farming system and constrain factors using Qualitative-descriptive and revenue each prototypes integrated farming diversified by formulation: $\pi = NP-BT-BD$.

Result of this research is: (a) Constrain factors diagnosis namely Dangerous spiral circles chain etc.: (1) monoculture Systems, (2) lossed productivity (Yield gap), (3) low income, (4) low consumption, (5) bad nutrient and health, (6) unproductive, (7). Poverty life status.

(b).found two prototype of integrated farming diversified that has improved Agribusiness models is: First is various crops Multiple Cropping prototype, such as. Combined Cashew // edible plant, (patterns of. A), with horizontal diversification methods, and nature adaptive - autotrophic and the Second is Multiple Integration prototype such as: Integrated of Cashew- Horse, (B), Cashew- cattle,(C).Cashew-Goats (D) and cashew-poultry (E). The principle prototype diversified Vertical coordinative methods, nature mutual- herbivores. Performance of diversified integrated farming system by cashew farmers are Subsistence Facultative level consist; (A) cashew plant // Food plants and (B).Cashew Horse. Integrated farming Commercial level namely (C) integrated farming cashew + cattle, (D) cashew + Goat (E) cashew // corn + Poultry. Integrated farming commercial level is significance different than the subsistence level Facultative. The highest revenues in integrated farming cashew integration patterns - a cow with an average profit of Rp.38.313 million and benefit-cost ratio (B / C) = 8.07 and the lowest in integrated farming pattern patterns pink mete- E integration birds with an average income of Rp. 10.974 million and the benefit-cost ratio B / C is 4.18.

Agribusiness development models based agroteknopreneurs (ATP) are resultant from triangulation effect of innovation, farming and tree resource of entrepreneurs. The measurement of technology transform and entrepreneurship capacity building's although social economic and environmental variable. So, Effect of them technology transforms in social economic chains are called the welfare circle trap.

Keywords: Agribusiness Model, Cashew, integrated farming, Entrepreneurship

I. INTRODUCTION

Cashew (Anacardium occidental, L) is one of the commodities that best important to the economy devlopment of Indonesia. Besides, as a source of foreign exchange earnings and income of farmers, it also serves for land conservation efforts and Multiporpose Tree Species (MPTS). Cashew is coming from South America and Brazil is known as greening plant, grows well in tropical climates, and spread to Indonesia in the 1960s. The economics value then developed in the plantation business people. Cashew plantation business people in addition to functioning as plant conservation, as well as a producer of foodstuffs and industrial raw materials (Cahyono, 2001, La Panga, 2016, and La Panga, 2020).

Development of cashews as cash crops and industrial crops receive priority in the development of agribusiness plantations, especially the East region of Indonesia. Cashew is the main producing area to contribute to a national cashew agribusiness is: East Nusa Tenggara (31, 76%), Southeast Sulawesi (20, 12%), South Sulawesi (13.36%), Jawa Timur (10, 15%) and West Nusa Tenggara (9.58%), (BPS.Dirjen Perkebunan RI, 2017). Raw cashew nut production data Sultra 2018 around 24,825 tons, and productivity is around 210, 55 kg / ha with an area of about 117.906 ha farm. And the number of farmers 100 633 households. Demand export raw cashew production nationwide increased from year to year until the year 2017 mainly to India and Vietnam which is a major producer of cashew world. Export of cashew dominant form of logs approximately 49.0% (36% and 13% logs cashews) has hurt farmers, the processing industry and the government. The losses in the form of a potential loss of entrepreneurial opportunities in cashew processing to obtain economic value added, which has up Rp.1, 8 - 2.9 trillion per year. These conditions indicate that the importance of the cashew industry Indonesia for the international market (Listyati and Sudjamoko, 2011, La Panga, 2016).

Cashew farm diversification in intercropping with crops interrupted (corn, cassava and peanuts) and integrated with cattle on dry land, can increase food production, farmers' motivation, and managing compost as organic fertilizer provided 2.1 tons per week. (Witjaksono, et al., 2004, La Panga, 2020). Farm diversification is an effort to expand and diversify the farming through technological innovation. By Drucker (1986) in Alifuddin and rasak, (2015) confirms that innovation is the special function of entrepreneurship, existing business, public service institutions, as well as individual business start-ups. Technological innovation can open up opportunities in the mix of farm land cashew crop monocultures. If the utilization of land resources, labor and capital optimally through technological innovation will improve farm productivity in a sustainable integrated. Integrated farming system is a system of integrated agricultural development with technological innovation, social engineering and financial engineering as well as institutional engineering. The technological innovations include entrepreneurial environment seeks to find, create, and develop new products, methods and equipment that can be utilized for increasing the productivity of agribusiness. Agricultural technology innovation entrepreneurial environment by optimizing the utilization of resources (land, labor, and capital) will drive increased productivity and sustainable farming income (Ashari, 2006, Mardikanto, 2009, La Panga 2020).

Farmers on the island of Muna has long been seeking Cashew and empower wastelands between cashew crop monoculture, family labor and capital, but not optimal. This allows for the implementation of integrated farming systems with farm diversification patterns and application of entrepreneurship can increase the added value and the food security of farmers (Said, 2004). Efforts in increasing production and income petan cashew in districts muna required cashew farming systems diversification. This study aims to: (1). identify of cantrain factors and prototype integrated farming diversification at South East Sulawesi Province, (2) determine of Agrobusiness Models for Integrated farming system and Its cashew prosducts caraterization at South East Sulawesi Province. In this study suggests some important information and technology and renewable:

First, it is important Issue cashew plantation farming is farming awakened the performance of the pattern of subsistence farming, monoculture, aimed at reforestation. Land between nut crops is still potential for the development of other crops or livestock enterprises. (Supriatna,2005) Research about the performance Cashew plantation farming folk conclusion that farming of cashew originally planted as reforestation land rehabilitation. Recommendation technology, Muna local seed varieties, productivity of 285 kg / ha / yr. Cost of family capital and family labor and the results are marketed as green. Mahajan and Parashram (2012) in a study of White Gold: An Experience of Cashew concluded the potential for increased production of cashew appropriate environmental conditions can increase business opportunities for the poor in India. (Kasuga,2013). Performance cultivation genotype polyclonal seeds varieties and local varieties of cashew orchards Southeast Tanzania. The study concluded that there was no significant difference between polyclonal varieties of seed orchards with local varieties in growth, plant height, diameter canopi, production, seed weight spindles. This study wants to analyze the performance of integrated farming of cashew entrepreneurship to increase incomes and food security of farmers.

Second, integrated farming and subsistence patterns, an attempt to diversify the technology applied to increase productivity. Empirical facts subsistence model of integrated farming of cashew people approaching Theory Dangerous Spiral Circle (Harper, et.al,1986). Efforts to break the cycle of harmful spiral through a system of intensive polyculture farm diversification. The decision of farmers for farm diversification is farmer courage to accept risks in entrepreneurship cashew. Wongnaa Research, (2013) Factors that affect productivity in the town WENCHI cashiew Ghana, show that (1). the average size farm on a subsistence level of about 3.33 acres, (2) extensive farming, farming technology (fertilizers, pesticides, pruning, education, extension contact) positively correlated to the increase in production cashew. (3) Labor and farming experience were not significant. Yuhono and Suhirman, (2006), analyzing the socio-economic aspects of conservation farming on sloping land with Agroforestry patterns. that (1). There are still many untapped sloping land with a plantation and forestry planting pattern, (2). Pattern still subsistence farming, conservation farming knowledge and technology is still low, but the response is quite high. (3). Integrated farming incomes higher than farming it analyzes the factors monoculture. Researching farm diversification patterns and needs of integrated farming technology in increasing productivity and food security cashew farmers.

Third, Concession cashew plantations for farmers means of investing and cost benefits to the needs of long-term survival. Integrated farming options, opportunities subsistence farming into commercial transformation through innovation entrepreneurship. Prajitno Research, (2009), integrated farming system as a model of sustainable agriculture diversification at farm level measured by the criteria; (1). The increases in total farm production due to the

efficient use of available resources, (2) increase the income of farmers as a result of farm diversification. (3). Increased social and cultural values experienced by farmers as a result of the practice of integrated farming. (4). Improving the condition of the environment and conservation of land resources, water and other inputs. Analysis of the economic feasibility of an integrated farming system that (1) the integration of farmers apply food crops, plantations and cattle can create jobs for the community, increase production and farmers' income, (2) farmers are not prepared to maintain the cattle developed off the cage. (3) Improving the welfare of farmers (Siswati and Aryanto, 2011). The same study Witjaksono, 2008. Assessing the economic added value of agricultural systems integration goats and Cashew concluded that (1). The added value of the increase in body weight of goats per head/day. (2) the added value of manure per day, (3) added value organic fertilizer sales. In this study, to evaluate the difference in value-added benefits and costs of integrated farming developed cashew nut farmers in order to increase farmers' incomes and food security in the island of Muna among subsistence farmers to commercial farmers.

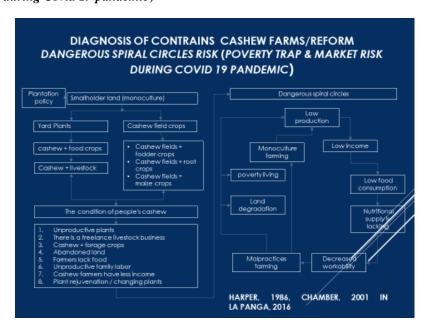
Four, entrepreneurship performance is the cashew agribusiness activities as an approach that core of farm production. Competitive advantage of commodity Cashew in entrepreneurship and sustainable can be done through three (3) approaches: the market base (marketing based), the resource base (resource based), and the base community (community-based), (Mardikanto, 2009) (1) The integrated farms pattern of these efforts shows plants with breeds gave positive impacts in increasing farmers' income, (2) aspects of the use of cost shows the high level of efficiency is the pattern of nut crops, cassava - cow. (3) The income aspect patterns peanut- cashew - cows gave the highest profit. Study integrative farming entrepreneurship and economic behavior of cashew farmers in the La Ola et al. 2010 on the economic behavior of cashew farmers in Buton and Muna. The results show that the economic behavior Cashew farmers in Buton more support production, marketing, savings and investment. Farmers more productive diversification, processing and selling spindles. While Cashew farmers in Muna more supportive and less productive consumption in diversified business processing and selling spindles. This study reveals about the performance characteristics of the resource based entrepreneurship, diversification patterns of integrated farming technology can improve productivity and food security of farmers.

II. RESEARCH METHODS

Research was conducted in the central region of cashew plantations in mainland people are concentrated on the island of Muna. The study lasted for four months in a period of flowering until production starts from April to August 2016. The type of data in this study is qualitative data and quantitative data and data sources include primary data and secondary data. Analysis Method The data used to identify the pattern of diversified integrated farming developed farmers cashew in Muna using kualitative descriptive and knowing revenue integrated farming based diversified patterns developed peasant farmers cashew in Muna using $\pi = \text{NP-BT-BD}$, where, $\pi = \text{Integrated farming income (Rp)}$, NP = the value of production (the product of the products at a unit price), BT = Cash Cost farming (Rp), BD = Cost taken into account (USD).

III. RESULTS AND DISCUSSION

a. Diagnosis of Constrains Cashew Farms/ the reformed Dangerous spiral circles risk (Poverty Trap & market risk during Covid 19 pandemic)



Source; By Research, La Panga, 2016

Based of diagram founded the several contrain of Mixed culture based cashew consist: 1.Smoll holder land (Monoculture) 2. low production, low income, 3. Low of food consumption, 4. Nutrisional suplyed lucking, 5. Decreased workability, 6. Malpractise farming, 7. Land degradation, 8. Poverty living for farmer.

b. Characteristic's Cashew Nut Farming

Table 1. Extensive stands of TBM, TM, TTR, Production, Productivity and lost production Cashew every year in Muna

	Size and characteristics of stands	CENTRA DEVELOPMEN IN SULTRA				
No	Cashew	MUNA	MUBAR	BOMBANA	KONSEL	
1	TBM (Ha)	1.045	190	3.250	378	
2	TM (Ha)	14.663	5.919	14.020	14.898	
3	TTR (Ha)	11.089	1.083	620	490	
4	Total Large (Ha)	26.798	7.191	17.890	15.766	
5	Actual production (ton)	6.908,15	598,85	656	6.100	
6	Productivity (kg/ha)	257	183	146	409	
7	TBM + TTR(Ha)/IFS	12.134	1.273	3.870	868	
8	TBM + TM (Ha)/	15.708	7.002	14.640	15.388	
9	Potencial production (%)	96,10	97,35	81,83	97,60	
10	Production Lossed (%)	41,38	15,05	3,50	3,16	

Source: Muna processed from BPS data in Figures, 2015.

Information:

TBM = Plants before Produce
TM = Plants Produce

TTR = Old and damaged plants

TBM + TTR = Extensive farming development potential of various plants

TM + TTR = Vast potential for development of livestock farming production integration

potential is the result of cashew nuts is harvested from TM + TTR.

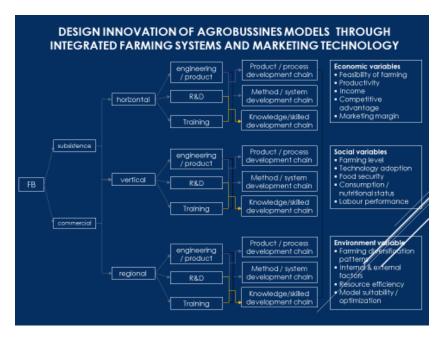
Production lossed = Loss (yield gap) is obtained from the difference between the production of

potential production with actual production.

Based on data in Table 1 above shows that the cashew nut stand condition can be described in broad development indicators immature plants (TBM) or young plants, plant area produces (the productive / TM), and a plant area of old / broken (TTR). Overall vast stands of cashew have increased every year for the last four years since 2012 to 2015. The increase in broad stands of plants Cashew 2015 respectively is 57.67% immature (TBM), 4.98% area plants produce (TM), the total area being old crop / broken no increase / remain the same as in 2014 and the overall broad cashew crop has increased by 5.88% from 2014.

An increased extensive stand of cashew crop is directly proportional to the increase in production potential both in scale monoculture farming and farming polikutur / integrated. Muna in the last four years have shown a significant increase, but the results have not enjoyed by most people Muna. This is as shown in the table above, there are differences in the amount of actual production and potential production of cashew farming. This shows the productivity gap (yield yield gap I and II). The difference in results yields gap I caused because the technology cannot be moved and the environment. Yield gap is due to differences productivities II of a farm with the resulting potential farmers. There are two main factors that cause the yield gap II; constraints biological and socio-economic constraints (Cramer and Jensen, 1988, Sukartawi, 1989).

c. Design Inovation of Improvement Agribusiness models through soscial economic and environment of Diversification product prototypes.



Source: By Research La Panga, et, al. 2017, Text book 2020.

d. Integrated Farming Diversify Based Cashew

Patterns diversified integrated farming and adoption of the technology applied in Entrepreneurship Development of Integrated Farming Cashew in Muna and sustainable food security can be described as follows:

The mindset of farmers (Mindset) has undergone a social transformation by changing the pattern of cashew farming through diversification of farming methods appropriate approach needs for food and trade. Experience farmers in developing integrated farming, 2 (two) prototype developed integrated farming of cashew farmers in Muna namely: (1) Prototype farming various plants and (2) that is a mixture of farming Prototype Various crop farming with livestock (integrated farming). Prototype integrated farming form the type of farming multiple cropping (various) can be realized in this type of crop farming stream (intercropping) and the type of crop farming hallway / fence (Alley cropping). While farming prototype integrative (Multiple Integration) can be realized in the integration patterns Cashew Plants with different types of livestock both ruminant and non-ruminant. The farm Prototype is the appearance or performance integrated farming system developed cashew farmers. In Muna can be described as follows:

- 1. Prototype farming Various plants that intercropping crops (corn Cashew // Peanut Cassava) in the form of an integrated farming to combine cashew crop to crop often called Multi cropping or intercropping. This farming land use patterns nut together with the mutualistic nutrient competition. Farm diversification intercropping method as above to follow the adaptive function autotrophic where a plot of land to grow and develop competition known as the method of horizontal diversification. It said horizontal diversification as jointly compete in absorbing nutrients on a plot of land and agro-climatic space above it.
- 2. Prototype farming miscellaneous farming (Multi-integration) can be cultivated commodity mix of crops livestock such as: (a). integrated farming pattern (Cashew / Corn + Livestock Horse + HMT). Integrated of farming patterns like this shows where the models agro pasture cashew crop serves as shade and hedgerows along fodder and forage crops or cattle berth as a freelance cage. While corn and banana plants that are food crops that farmers keep food availability. (B) Miscellaneous Farming (Cashew / corn + Cattle + HMT). Integrated farming is also a model of cashew plants agro pasture which serves as a shade plant and moorings livestock and serves as a cage or off. Cashew with cows mutually beneficial for the harvesting process sampi serve as a sorting seeds and artificial fruit, while the cashew plant expects that cow manure, can improve soil fertility. (C) .Patern of various farming (Cashew / corn + Goat + HMT). Goats still relatively small ruminants and ruminant. Livestock is expecting feed of fodder and forage crops or older. Because of the combination of livestock forage on land Cashew include hedgerows like Lamtorogung, Gamal, and shrubs. Besides as a source of food goat can also produce byproducts that dirt as well as manure for the main crop. (D). Pattern various farming (Cashew / corn + Poultry). The pattern of the last farm diversification is still a developing agroforestry systems commodity or free-range chicken cashew crop canopy taken. Hope farmers here are in addition to expecting revenue can also improve soil fertility of goat manure.

Integrated farming pattern patterns (b, c, d, e) is the prototype integrated farming methods multiple integration with vertical diversification coordinative. This is possible because the integration Farming is a combination of farming that utilizes a piece of land with the integration of crop and livestock commodities that are

mutualistic in a chain mechanism eat / feed chain (mutual herbiforik). In this context cashew expect livestock manure to enrich the nutrients and the humidity, while the feed of cattle expect cashew young leaves, or grass under the canopy of cashew and also can make the fruit of all the byproducts of cashew as feed. If the pattern of integrated farming want to increase scale commercial farming it must measures (1). Vertical integration, where the stages of production and or marketing of farming can be coordinated with the company as a partner, and or conduct (2). Contract production of cashew farming where farmers are integrated making production agreements with processors, intermediaries, dealers as a first partner before or after the coming of the company. These results indicate that there are five patterns farm diversification cashew farmers in the district have been developed Muna. Cashew farm diversification in an integrated manner based on the widely spaced crops, forage grasses and vegetation microclimate that allows food commodities can grow and develop under the canopy of cashew nuts. Comprehensive integrated farming and the average production and dissemination of this research sample is based on the pattern of diversified integrated farming system that's developed Cashew farmers in Muna can be presented in table 2:

Table. 2. Average area, production and sample according to the pattern of Diversify Integrated Farming Systems based Cashew in Muna

No	Prototype Integrated Farming system	Average Size (Ha)	Cashew Production (ton/ha)	Frame sample Farmers	Frekuensi Production
1	A.Cashew-food crop	1,67	1,533	20	IFS round time
2	B. Cashew-Horse	2,50	2,300	20	IFS round time
3	C. Cashew-Cow	2.56	2,533	20	IFS round time
4	D. Cashew-goat	1,75	1,300	20	IFS round time
5	E. Cashew-poultry	1,37	0,800	20	IFS round time
Total				100	

Source: Result By Research. La Panga, et.al. 2018

Information:

A. = integrated farming pattern cashew - edible plant/foodcrop

B. = integrated farming pattern cashew - livestock Horses

C. = integrated farming pattern cashew – cattle/cow

D. = integrated farming pattern cashew - goats

E. = integrated farming pattern cashew - poultry

Based on Table 2 above shows that the mapping pattern of diversified integrated farming that has developed cashew farmers in Muna there are five (5) patterns. The highest proportion of respondents who Cashew farming patterns / corn / peanut / cassava (Pattern A) and the pattern of cashew farming / cattle corn + (pattern C) occupied respectively by 23.08%. While the proportion of the next integrated farming is the pattern of cashew / corn + Goat (pattern D) by 27 respondents or 20.77%. as well as cashew nut farming patterns / maize + horse (pattern B) of 23 respondents to the proportion of 17. 69%. And the lowest sampling is integrated farming pattern cashew crop / corn + poultry by 20% of respondents, or about 15:38. Mapping the number of samples that are not the same in farming patterns due cashew farmer groups to develop pattern-based cashew farming has been degraded due to the high economic life of cashew nuts.

Analysis of the results of Integrated farming is farming performance measure either one or more commodities that are cultivated in an area / land. For farming involving various kinds of commodities or in integrated farming, the result is more than monocultures. Improved farming performance is increasing the number of production produced and may have implications increase farmers' income. Production in this study is the result obtained by farmers in developing cashew farming well integrated with food crops or livestock integration is measured in ton / ha or tones / ha / year in the farm or livestock unit the integration of livestock and crop production per one.

The Production of integrated farming plantations Cashew in shell, cashew nuts, food crops; corn (kg / biomass), groundnut seed wet and dry cassava in kg/ha. While the production of livestock and meat horse tail number as well as their social value, the number of cattle and beef, the number of tails and mutton as well as the number of tails and beef and chicken meat and eggs.

Data analysis of the results of integrated farming developed cashew farmers in Muna with a sample of 130 people who were grouped in five categories of integrated farming can be found in appendix 4. (analysis of revenue according to the pattern UTI)

The recapitulation of the results of analysis developed integrated farming of cashew farmers in Muna can be described by patterns of farming as presented in the following table:

Cashew Pattern Cost Price Revenue Profit No R Production B/C UTT (Rp.000)(Rp/kg) (Rp.000)(Rp.000)(t/ha) 17.000 26.067 21.778 1 Pattern A 20 4.288. 1,533 4,89 2 Pattern B 20 4.568. 2,300 17.000 39.100 34.532 7.56 3 Pattern C 20 4.748. 2,533 17.000 43.061 38.313 8,07 4 Pattern D 20 3.344. 1,300 17.000 22.100 18.756 5,60 0,80 17.000 10.974 5 Pattern E 20 2.626. 13.600 4,18 100 15.547 128.311 Total 8,466 143,964 42,49

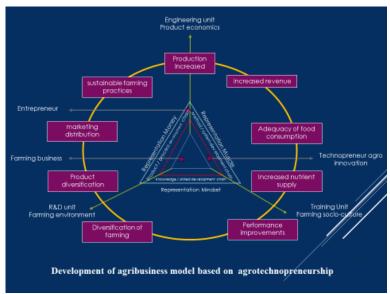
Table 3. Summary of Results Cashew farming according to integrated farming pattern developed Cashew farmers in Muna, 2016.

Source: Result of Research, by. La Panga, et.al.2018

Based on the above table 2 can be explained that the expenses of production facilities, production and income varies from cashew nut highest in integration patterns cashew-cattle (Pattern C) with an average profit Rp.38.313.000 and the ratio B / C 8 , 07 and the second highest in the pattern cashew farm-horse (pattern B). With the amount of production per hectare per year showed that an average of 2,300 tones / ha with the reception of Rp. 39.1 million - with an average profit of Rp. 34.532 million, - thus that the cost benefit ratio (B / C) indicates the value of the benefits and feasibility of integrated farming pattern C is 8.07. Whereas the lowest of the above table are (pattern E) with the value of the average income of Rp. 13.6 million, area $0.80\,\mathrm{ha}$.

It is possible that a combination of subsistence farming still category is integrated farming cashew crop to crop and livestock integration horses (Pattern A and Pattern B). The combination of cashew crop farming with crops and cashew crop integration patterns with horses still subsistent for farming management not using technology fully.

e. Development of agribusiness model based on agrotechnopreneurs (ATP)



Source: By Research, 2018 Text books. La Panga, 2020

Agribussiness develoment models based agroteknopreneurs (ATP) are resultante from triangulation effect of inovation, farming and tree resource of entrepreneurs. The measurement of technology transform and entrepreneurship capasity building although social economic and environmental variable. So. Effect of them technology transforms in social economic chains are called the walfare cyrcle trap.

IV. CONCLUSIONS AND RECOMMENDATIONS

Conclusion

Found two prototype and five diversified integrated farming pattern that has developed the prototype of cashew farmers Integrated farming of various crops (Multiple Cropping) method hoprisontal adaptive diversification - autotrophic and prototype Integration Integrated crop-livestock farming (Multiple integration) with diversified methods Vertical coordinative nature mutual- herbiforik. Performance of diversified integrated farming pattern developed cashew farmers on the island of Muna is integrated farming Subsistence level Facultative namely cashew integrated farming pattern - edible plants and integrated farming patterns Cashew // HMT + Horse and integrated farming Commercial level namely (a) Patterns integrated farming cashew / HMT + Ox, (b) cashew // HMT + Goat (c) cashew / corn + Poultry.

Integrated farming commercial level different significance than the subsistence level facultative. The highest revenues in integrated farming cashew integration patterns - a cow with an average profit of Rp. 38.313 million and the ratio of the benefit-coctnya (B / C) = 8.07 and the lowest in the patterns of integrated farming pattern E integration guava mete- birds with an average income of Rp. 10.974 million and the benefit-cost ratio B / C is 4.18.

Suggestion/Recommendation

(1). Government may promoting the re-development of commodity cashew is monumental in the context of the system of smallholders in order to support economic development and industry-based investments, (2). To increase development policy of farm cashew, regionally, nationally and internationally is necessary to study the grand design of science and technology development genetic engineering technology treadmill and cashew products in supporting the economic and industrial development permentean Indonesia, (3) Empowerment of local commodity areas through integrated farming on a commercial scale can be pillars of agribusiness development permentean regional, national or international through entrepreneurial approaches.

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