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Implementation of the Cocoa Area Development Program Corporate-Based (Plant Integration Cocoa And Cow Livestock) In the Regency East Kolaka

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ABSTRACT
The agricultural sector is a mainstay in development in East Kolaka Regency, especially in cocoa and cow livestock commodities. The study aims to evaluate the impact of the corporate-based cocoa area development program (integration of cocoa plants and cow livestock) in the East Kolaka Regency. This study uses a qualitative descriptive analysis. The study results concluded that smallholder cocoa plantations have prospects in supporting the integrated farming model with cow livestock. Integrated farming strongly supports the pattern of commodity diversification (cocoa and cow livestock), which can support each other in both business sub-sectors. Cocoa farming does not affect increasing cocoa farming in each village. This is because the distribution of the proceeds from the sale of cow livestock is divided into groups, so the integration of cocoa and cow livestock is not carried out correctly.

Keywords:
Implementation, Cocoa, Cow livestock, East Kolaka Regency

INTRODUCTION

Currently, sector agriculture remains the sector's mainstay in national development. Development sector agriculture is measured on average base wealth from agricultural produce, equity income, quality of life, a damaged environment, and social justice and sustainability. Size success development agriculture can be seen from the sector plantations and sectors farm. The second sector This owns an essential role in the development of agriculture.

Increased production results from agriculture, plantation, fishery, and animal husbandry. Still, becoming a priority main to provide products and food to fill society's needs. Increased production yields related to land utilization for business agriculture, plantation, fishery land, and livestock. Plantation business and sector Livestock is a sector that has the potential for development in agriculture. Plantation production consists of various commodity superior, including plants cocoa has become one of the product icons of the plantation. Besides, it is from the sector farms, and cows become priority livestock to fulfil the need for food house stairs.

Potency development cow livestock integrated ruminants with various plants, fish, and forests are so big that when This potential can be exploited, it will catch up with the lack of supply domestically, and the excess can be exported. Almost all breeders are rice field farmers, gardeners, cultivators, and fishermen, so the combination activity business farm with farming Others will improve efficiency to increase production's power competitiveness.

The integration pattern between crops and livestock, often called agriculture integrated, combines the activity of animal husbandry and agriculture. The integration pattern emphasizes principles of utilization management source existing resources, such as human resources, natural resources (soil and water), and environmental resources, to optimize the quantity and quality of agricultural products. Through pattern, this is the farm not only produces product cow livestock but at a time

contributes to the supply of fertilizer cages needed to fertilize land farm, so the pattern is often called farm pattern without waste Because waste farms used for fertilizer, and waste agriculture used for feed cow livestock. Animal integration of livestock and crops is intended to obtain optimal business results in the context of improving fertility grounds. Interaction between livestock and crops must each other complement, support, and be mutually profitable, so it can encourage the enhancement of efficient production and increase profits for farmers.

One-of-a-kind integration between crops and livestock is the integration between plant cocoa and cow livestock. The integration of plant cocoa and cow livestock is an act to fertilize plant cocoa and cow livestock through feed from cocoa and fertilizer from manure cows. System integration crops and livestock are very profitable Because cow livestock can use weeds and forages, straw, or waste agriculture as feed (Jasmal et al., 2009). Society can take advantage of waste agriculture to become fertilizer. Enough organic is available (Suherman et al., 2018). Integration plant cocoa and cow livestock cows can press cost cause dirt cow livestock as organic fertilizer aims to increase fertility ground. System integration can also add income House ladder, with the dirt cow becoming compost. Fertilizer compost can be sold to other farmers or people who need it (Syamsu in Khurniyah et al., 2019). Processing waste agriculture and animal husbandry can be a farmer's income source (Suherman & Kurniawan, 2017).

Purchasing fertilizer in the cultivation activity of cocoa is still dominant. However, the farmers started to utilize dirt cows as fertilizer cages. Besides, the cow's waste started being utilized as fertilizer compost. There is an integration between cocoa with cow livestock to make plants. This own level of Power enough competitiveness good and optimal productivity anyway source cost operational farmer more dominant from sales cocoa. Using plantation waste as feed livestock and dirt cow livestock as fertilizer will produce a cycle that is not disconnected between plant cocoa and cow livestock so that profits are also obtained from minimization cost production.

The current conventional system of integration is generally carried out unwisely because it pays little attention to the principles of ecological balance. An integrated system without regard for the principles of ecological balance is part of an effort to destroy natural resources and the environment. Conventional systems tend to lead to monoculture planting, which requires the use of chemical (inorganic) fertilizers and pesticides on a large scale, causing damage to the ecosystem. In addition, intensive tillage causes widespread soil degradation and pollutes surface water and groundwater. Seeing this fact, there is a need for breakthrough efforts to encourage environmental improvement by changing conventional agricultural systems into environmentally friendly agricultural systems developed through crop and livestock integration systems (crop-livestock systems).

Farming model integration crops and livestock began to be developed intensively since an improvement program productivity paddy integrated. This is done in a rehabilitation effort land degraded agriculture consequence use of fertilizer inorganic excessive. Through system integration of crops-livestock, agriculture friendly environment can be developed system agriculture continuously, optimizing the utilization source existing resources, maintaining and improving human health, protecting the environment, and producing enough food. Cow livestock obtains feed from plants cocoa (leaves cocoa trimmings, skin fruit cocoa), grass elephants, and

pruned leaves plant protectors like *lamtoro*. From content nutrition, ingredients Such feed can be considered material feed quality, where crude protein content skin fruit cocoa is about 10% transient forage from plants *Gamal* and *lamtoro* more than 20% (Harli, 2017).

If cocoa is cultivated following standard technical, then with 1 hectare, just cacao can produce 500-700 kg each harvest. Cultivation and management patterns in plants like this happen due to a lack of knowledge from farmers and the lack of government assistance. Besides That factor, potential land also makes farmers add vast land for business plantations (Shakir et al., 2012).

Cocoa's skin is one of the ingredients that feed cow livestock enough cows, giving the prospect of creating an integration model cocoa cow. Cocoa's skin can reduce the portion gift grass and is a must-provided breeder, especially in business pattern intensive (housed full). Power support cocoa's skin as one source of feed cow livestock determined by the production of cocoa produced per unit vast and distribution production throughout the year because plant cocoa is a commodity plant annually (Priyanto in Nappu & Taufik, 2016).

Application of the farming model integration plant cocoa and cow livestock in the Tinete Village and the Atolanu Village pointed out that breeders capable of giving skin cocoa as feed cow livestock reach 3-5 kg/head/day. It can save power work on provision feed forage up to 50%. Cow livestock, like skin cocoa, which can be used as step anticipation, lack feed forage.

The combination system of a *dry lot* and *pasture fattening* is a mix of *dry lot fattening*. On the system, when the rainy season was abundant, cows grazed in the fields herd and no must in a cage. While in the dry season, the cow is caged and fed fully. At noonday, they grazed in the fields grazing, while cows were caged and given concentrate at night. System fattening: This needs more extended time than system dry lot fattening; however shorter than system *pasture fattening*. The initial cow was kept in the field grazing, then a few months before for sale given feed concentrate complete, result more Good compared to that cow from scratch maintenance given feed forages and concentrates in a balanced manner. System kereman is almost The same with *dry lot fattening*, namely livestock cow gave feed forages and concentrates and cow in the cage during maintenance. The difference is that system kereman is done by breeders' tradition, and gift feed still depends on conditions (Nugraha, 2022).

Increasing human capacity will play a role in the governance of life and facilitate the transfer of technology delivered by weapons officers in the field or in the training they participate in. According to (Salman, 2011), with good knowledge of the community, a community can identify and solve its problems. Empowered community groups with sufficient human capacity will indeed become empowered communities and should be able to manage themselves and their environment to overcome problems and meet their needs.

Based on some of the results of previous studies, integrated farming activities between crops and livestock have shown success in growth potential and diversifying output results which are products of integrated farming activities. (Anugrah et al., 2014).

It has been widely discussed and revealed that the success of agricultural development is not only determined by technical and biological factors but how the institutional existence and involvement of the farmers themselves. Farmers'

institutional development is essential for achieving agricultural development (Kariyasa, 2005).

Talking about institutions, generally, people's views are more focused on organizations, even though institutions are not only limited in terms of organizations but also contain an understanding of institutions or institutions. An institution's definition can be identified through its elements: the rules of the game, rights and obligations, jurisdictional boundaries or bonds, and sanctions (tools to maintain the existence of institutions). (Nasrul, 2012).

The understanding of an institution as an organization is characterized by an organizational structure, clear goals, having participants, and technology and resources. In organizations, the rules of the game are usually written, and the structure can be recognized by the existence of management in the organization, such as the chairman, secretary, treasurer, and so on. The definition of institutional as an organization is easy to recognize in concrete forms such as; farmer groups, Gapoktan, KUD, Banks, and others (Winardi, 2003).

East Kolaka Regency has an agricultural development area that can contribute to economic development, one of which is cacao production, which continues to strive to become the leading commodity of East Kolaka Regency. Integrating cocoa plants and cattle into a chain to produce feed and fertilizer in developing cocoa plants and cattle production. This link shows the need for feed for cattle and fertilizer from cow dung to increase the fertility of cocoa plants, which will also increase agricultural development. Based on the background presented, a research proposal was made to implement a corporate-based cocoa area development program (integration of cocoa plants and cattle livestock) in the East Kolaka Regency.

The results of observations on the condition of smallholder farms show that every livestock can consume cocoa shells of 3-5 kg/head/day, so for every 1 ha of cocoa plantations, it has a potential carrying capacity of 6.05 livestock (Saputra dalam Hasmadiana et al., 2022). In other words, if the farmer wants to maintain the continuity of feed on cocoa shells throughout the year, then in 1 ha of the cocoa garden, 6.05 heads of cattle can be raised with an average supply of 3-5 kg/head/day (Harley, 2017).

METHOD

Research Location

This research was conducted in the Tinette Village Subdistrict Aere and Atolanu Subdistrict Village Lambandia East Kolaka Regency with consideration that the second district is the center plantation cocoa, the largest in the East Kolaka Regency (Central Bureau of Statistics Kab . East Kolaka, 2021). The villages are an ex-location of the implementation Pilot Project of the National Program for Corporation-Based Development of Cocoa Areas from Plant Integration Activities Cocoa and Cow Livestock in 2018 and 2019 based on the Minister of Agriculture Number: 46/Kpts/PD Decree.300/1/2015 Regarding Determination of National Plantation Areas.

Research Design

This research is qualitative, namely research methods to evaluate performance target-related ex - *projects* with benefits, impacts, and problems that occur with do collect as much as possible fact profound. Data is presented verbally, not in form number (Muhadjir, 1992). Approach This used writer because the subject This

research study evaluates development programs of corporate-based cocoa area (Crop Integration Cocoa and Cow Livestock in the East Kolaka Regency).

Research Informants

This study uses informants consisting of :

1. Head Tinete Village and Chief Village Atolanu
2. Plantation and Horticulture Service Officer East Kolaka Regency in charge Plantation and Plantation Service Food and Livestock
3. Plantation and Horticulture Service Officer Sulawesi Province
4. Indonesian Bank of Kendari.
5. Chairman of Tinete Community Economic Institution/*Lembaga Ekonomi Masyarakat* (LEM) Cooperative
6. Chairman of Cooperative Community Economic Institute. *Lembaga Ekonomi Masyarakat* (LEM) Atolanu
7. *LEM* members (recipients benefits) in Plant Integration activities Cocoa and Cow Livestock.

Informants were chosen because it is a related stakeholder who knows or is involved directly in Plant Integration activities Cocoa and Cow Livestock and their capacity to deliver information about the implementation of Plant Integration activities Cocoa and Cow Livestock during and after the project is carried out.

Determination informants from *LEM Sejahtera* members, using purposive sampling, namely the technique determination sample with consideration specific (Sugiyono, 2016). The total population is the number of *LEM Sejahtera* members of Tinete and Atolanu Village, as many as 239. The selected sample as level representation is 10% of the divided population based on criteria ownership-wide land, as seen in Table 1 and Table 2.

Table 1. Number of *LEM Sejahtera* Members of Tinete Village based on Area of Cocoa Plantation Land Ownership

Members of *LEM Sejahtera*	**Land area cocoa garden**			**Amount**
	< 2 ha	**>2 - 3 ha**	**>3 ha**	
Farmer Group *Sumber Rejeki*	-	20	1	21
Farmer Group *Usaha Bersama*	-	24	1	25
Farmer Group *Pada Idi*	-	28	1	29
Farmer Group *Pada Elo*	-	25	3	28
Farmer Group *Sipakinge*	3	21	5	29
Total	**3**	**118**	**11**	**132**

Source : Profile of LEM Sejahtera Desa Tinette

Table 2. Number of Village Welfare LEM Members Atolanu Village Based on Area of Ownership Land Cocoa Garden

Members of *LEM Sejahtera*	**Land area cocoa garden**			**Amount**
	< 2 ha	**>2 - 3 ha**	**>3 ha**	
Farmer Group *Mega Buana*	10	11	4	25

Members of *LEM Sejahtera*	Land area cocoa garden			Amount
	< 2 ha	>2 - 3 ha	>3 ha	
Farmer Group *Mallilu Sipakainge III*	1	21	-	22
Farmer Group *Mallilu Sipakainge IV*	-	22	1	23
Farmer Group *Mallilu Sipakainge I*	-	12	1	13
Farmer Group *Mallilu Sipakainge II*	3	21	-	24
Total	**14**	**87**	**6**	**17**

Source : Profile of LEM Sejahtera Desa Atolan

Thus, a sample of 24 informants was obtained, divided into eight people for land area < 2 ha, eight for land area > 2 – 3 ha, and eight for land area > 3 ha.

RESULTS AND DISCUSSION

Corporate-Based Cocoa Area Development Program

An agricultural area development program based on farmer corporations is a program initiated by the Ministry of Agriculture. It is proven by the issued Decree of the Minister of Agriculture No. KEPMENTAN RI No: 46/Kpts/PD.300/1/2015 Dated 16 January 2015 and Regulation of the Minister of Agriculture Republic of Indonesia No. 18/PERMENTAN/RC.040/4/2018 dated 18 April 2018.

One of a kind the activities of this program is the development area of corporate-based cocoa. The formation of the area used center cocoa will integrate system production upstream and downstream, which helps sustainably increase scale and quality production, productivity, power competitiveness, and added value resource agriculture.

The Central Government through the Ministry of Agriculture Directorate General of Plantations, the Regional Government through the Food Service of the Province of Southeast Sulawesi, and the District Office in charge of plantations established policies and strategies for sustainably developing cocoa plants in 2018 and 2019 by increasing production, productivity, and quality of cocoa plants. In a sustainable manner in the form of TP in Kolaka, North Kolaka, and East Kolaka Regencies. Independent District. The approach to increasing the production and productivity of cocoa plantations sustainably is as follows: 1) Cocoa rejuvenation, namely providing superior seeds/shoot grafting and production facilities (fertilizers, pesticides, hand sprayers, etc.), empowering farmer groups through strengthening institutions' Economy Prosperous Community and training on pest and disease control as well as technical guidance on technology application good cultivation, facilitation of harvest and post-harvest facilities, integration of cocoa and livestock.

One of the activities in the development program area is corporate-based cocoa implemented in the East Kolaka Regency, namely, the integration of plant cocoa and cow livestock cow. A must step taken in anticipation system business farmer sustainability is farming diversification (multi-commodity), one of which is the application of farming models integrating crops and livestock. It is an alternative way to do efficient business on a relative land area, however able to increase business productivity so that there is added value from various sectors' mutual effort and support.

Agriculture integrated (integration crop-livestock) is a system characterized by close linkages between component crops and livestock in farming or within an area.

This relationship's characteristics include diverse resources such as forage, residue plants, and fertilizers produced by organic livestock in a production process. The most important thing that is necessary is to understand the concept of integration of crop-cow livestock, where this hope to stop the result of practices destructive agriculture resource land and lower productivity agriculture. Expected farmers can slowly get out of the trap of poverty.

Based on the interview results with the informant, the system integration of crops and cow livestock in the East Kolaka Regency is already practiced by daily farmers considering risk climate, factor economy, and healthy cow livestock. Although pattern integration is lacking, they Can anticipate the mobilization of cow livestock and arrangement or diversification activity through based strategies.

Farmer cocoa usually utilizes waste skin fruit cocoa and forage from elephants grass and plant protectors (*gamal and lamtoro*) as feed in business cow livestock. Waste skin fruit cocoa is always available. Remember, fruit cocoa on plantations society can be harvested almost yearly. Temporarily, with intervals and ways of correct cutting, forage from elephant grass, plant gamal, and lamtoro as plant plantation protection, cocoa is always an ingredient available. Although so, not yet managed efficiently.

Cow livestock with system pen communities in plantation areas cocoa produces fertilizer organic from dirt cow livestock. They are usable directly in the plantation area to increase the production and productivity of each hectare garden plant cocoa. It can reduce must cost issued to comply need for fertilizer. Besides, cow livestock grazing in the plantation area cocoa will eat grass, and weeds bully plants to save pesticide costs and maintain garden cocoa. Breeder No need to look for feed because it's in a plantation area. Grass and waste plant cocoa, like shell cocoa, are already available as feed cow livestock. With thereby activity, daily breeders to find turf can be diverted to other valuable activities.

The interview results with informants who stated that the skin fruit cocoa is potentially a source feed alternative for ruminants. Potency skin fruit cocoa in the East Kolaka Regency is big enough. East Kolaka Regency is one of the producing districts in Southeast Sulawesi cocoa, the biggest in quantity and quality. Availability feeds waste cocoa in the season the harvest is abundant and can fulfill the need for livestock cows. Skin fruit cocoa as a feed source fiber can replace grass.

One support asset importance activity is livestock cows raised by *LEM Sejahtera* in 2018 and 2019. Fattening results cow livestock cow cut expected to provide income new *LEM Sejahtera* namely with sell cow cut that has ready for sale. Profits from sales can be saved as *LEM Sejahtera'*s income. Meanwhile, capital from sales can continue to be screened for purchase cow new.

Besides additional revenue from sales of cow cuts, *LEM Sejahtera* earns additional income from products generated from the maintenance of cows, such as manure, urine, and waste processed feed to become organic fertilizer. Some products produced are organic fertilizer liquid/*Pupuk Orgaik Cair* (POC), Biofarm MA-11, and decomposer MA-11. Potency can fulfill the significant need for organic fertilizer in the Tinette Village Aere Subdistrict, Atolanu Village Lambandia Subdistrict, and several villages in the East Kolaka Regency.

In scale, many kept cows can also produce biogas, which can be used as a fuel source energy potential to support energy needed by the house ladder farmer.

Potency enhancement productivity plant of patterns integration crop-livestock, assuming that use fertilizer organic applied based on rules and requirements the fertilizer fulfilled from plant integration activities cocoa and cow livestock, then the amount of product produced, is expected to increase besides reducing cost farming with the assumption that integrated farming is implemented in a sound system and all subsystems run synergistically sustainable. Hence the ultimate goal of crop integration of cocoa and cow livestock cow for improvement income farmers doubled in a few years could be soon reached.

However, thus, in execution activity, the integration of plant cocoa and cow livestock as a whole has not shown ideal conditions at the location activity. From 2 research locations, *LEM Sejahtera* Tinete has carried out activity integration and utilization of potency products for the fulfillment of member's internal needs nor become a source income group, where *LEM Sejahtera* has been operating activity integration plant cocoa and cow livestock cow-oriented product commercially for the fulfillment of foreign markets need member until becoming source income addition for *LEM Sejahtera* Tinete. Source income group can be obtained from selling fertilizers and products farming integrated plants.

In general, obstacles encountered in implementing plant cocoa and cow livestock cows are livestock. No one is in the communal cage. As many as six people (0.04%) are members of *LEM Sejahtera* Desa Tinette and bring go-home cow livestock to cage each so that the waste cow livestock No centered (in the cage communal) in large numbers. Meanwhile, maintenance cow livestock cows in the Village Atolanu are still in the communal cage. Dirt cow livestock collected cows is used as material maker fertilizer compost.

Another problem is the availability of facilities and infrastructure machines -like support breaker waste skin fruit cocoa to feed cow livestock. So at the start of activities, *LEM Sejahtera* members had difficulty giving feed from waste fruit cocoa to cow livestock cows due to processing easy feed. Consuming cow livestock needs a long time, which is less effective than feeding cow livestock.

LEM Sejahtera's entrepreneurial spirit still exists, limited to understanding instruction implementation activities, so impressed only operates routine activity integration crop-livestock and tends Still rely on help from government funding province or government regency local. Attempts to dig into market and business potential groups through the general motivation of the chairman are still limited. But *LEM Sejahtera* Tinete has the motivation to build communication through connection Work with broad relations. It shows the farmers' success in developing activity business integration plant cocoa and cow livestock cow in the system agribusiness form product fertilizer organic liquid. However, marketing its products is limited to the *LEM Sejahtera* network in the East Kolaka Regency.

Activity integration plant cocoa and cow livestock can be a source of inspiration for pattern activity institutional innovation techno-farm scale broad. Of course, it needs optimal support from the various party, in this case, the government, private parties, and banking. The government can support physique form facilities, infrastructure, and non-physical form accompaniment training. Party private can support the necessary facilities and infrastructure and network cooperation marketing. Party banking can provide ease of service financing. Because, through this modeling approach, expected development efforts are cocoa-based corporation in-kind activity integration plant

cocoa and cow livestock as adoption of the development program model agriculture rural on a scale area can be done.

Implementation Impact of the Cocoa Area Development Program

1. Farming Conditions Cocoa

Plant cocoa has become one of the prima donna farmers in this region because its cultivation is relatively more straightforward. Cultivation patterns planted cocoa by the people in the Aere District and Lambandia District are Still traditional and slightly part do the technical cultivation of cocoa following standards. This low-impact production plant cocoa them. Production rate plant cocoa in the Aere District can be seen in Table 3 and Table 4.

Table 3. Production Levels Plant Cocoa Year 2018 – 2021 in the Aere District

No.	Year	Area (ha)	Production (Kg)	
			Amount (Kg)	Average (Kg/ha)
1.	2018	10479.70	6539.00	1093.70
2.	2019	10479.70	6539.00	1093.70
3.	2020	10,489.53	2,613.50	330,10
4.	2021	10,290.00	4026.99	481,12

Source: Statistical Data on Plantations from the Office of Plantations and Horticulture East Kolaka Regency (2021)

Table 4. Production Levels Plant Cocoa Year 2018 – 2021 in the Lambandia District

No.	Year	Area (ha)	Production (Kg)	
			Amount (Kg)	Average (Kg/ha)
1.	2018	25,532.00	9,417.50	446,40
2.	2019	20,880.00	3,723,00	222.00
3.	2020	18,903.00	2.643.50	171.80
4.	2021	17,658.00	6.956.95	478.01

Source: Statistical Data on Plantations from the Office of Plantations and Horticulture East Kolaka Regency (2021)

Based on the data above, the amount of production plant cocoa in the Aere District in 2018 and 2019 did not change with the area. In 2020 the area will increase, but the amount of production will be reduced by up to 70%. Later in 2021, production will increase, although the land area garden will be reduced.

While the number of production plant cocoa in the Lambandia District in 2019 experienced a decline, the area of land and the amount of cocoa production increased by 50%. This condition Continues to continue. In 2020 total land area was reduced, and the amount of cocoa production decreased by 77%. Later in 2021, production will increase, although the land area garden will be reduced. Because of production, such as the availability of enough fertilizer, behavior farmers in management garden plant cocoa started to intense do activity maintenance from weeding and pruning in the field garden cocoa.

Problems encountered by cocoa farmers in the Aere District and Lambandia District are low productivity plant consequence height attack pests and diseases plant,

pattern cultivation that does not fulfill standard technically, at least knowledge farmer about technical match plant cocoa. Besides, the land area subtraction caused Many farmers to transform garden cocoa into paddy fields.

The observations showed that the condition of the plant cocoa farmers in the Aere District and Lambandia District No was maintained or not managed following standard techniques. Start from a distance plant until sanitation and maintenance plant Not yet in accordance pattern proper cultivation.

Based on observation space, distance planting carried out by farmers in the Aere District and Lambandia District is 1 x 2 m and 2 x 2 m. The ideal spacing for plant cocoa is the appropriate distance with the development part on the plant and Enough availability room for development roots in the ground. With choice distance, the plant is tightly related to characteristic growth, resources, material planting, and area fertility. Viewed in terms of production, distance planting 3 x 3 m, 4 x 2 m, and 3.5 x 2.5 m is the same (Agricultural Extension and HR Development Agency . 2011).

Based on observation field and interview information, farmers cannot maintain activity from weeding and trimming the cocoa plants. It will impact the low productivity plant cocoa due to plant conditions No maintained with ok.

Information from farmers' cocoa *LEM Sejahtera* members explained the existing farming conditions. Member groups plant several types besides cocoa, namely pepper, and some plants horticulture. This is done out of anticipation. If the price of cocoa is down, an alternative plant can produce in the short term to meet everyday needs. Besides, many crops grown in one area besides cocoa make it challenging to maintain and clean land gardens.

Based on the data and information obtained, it shows that farmers in the Aere District and Lambandia District No cultivate 1 type of plant only results in low productivity Because it is No cultivated per standard technical. Presumption them that if many are planted in a large area, then the result more Lots without calculating the cost and time needed to manage it. The vast land is vast and yet comparable with the results obtained.

Superior rural communities are the potential to have enough land to work for farmers. Likewise, in the Aere District and Lambandia District, farmers own enough land wide area to work on the farmer. As for area land garden cocoa farmers who are members of *LEM Sejahtera* in the Tinete Village and the Atolanu Village can be seen in Table 5 and Table 6.

Table 5. Number of Farmers and area land that is part of the *LEM Sejahtera* Tinette Village

No	Group Name	Number of members group (people)	Land area plant Cocoa (ha)
1	Farmer Group Sumber Rejeki	21	47
2	Farmer Group Usaha Bersama	25	59
3	Farmer Group Pada Idi	29	72
4	Farmer Group Pada Elo	28	66
5	Farmer Group Sipakainge	29	70
Total		**132**	**314**

Source : LEM Tinette Village Profile

Table 6. Number of Farmers and Land Areas incorporated in LEM Sejahtera Atolanu Village

No	Group Name	Number of members group (people)	Land area plant Cocoa (ha)
1	Farmer Group Mega Buana	25	31
2	Farmer Group Mallilu Sipakainge III	22	52
3	Farmer Group Mallilu Sipakainge IV	23	61
4	Farmer Group Mallilu Sipakainge I	13	35
5	Farmer Group Mallilu Sipakainge II	24	49
	Total	**107**	**228**

Source: LEM Atolanu Village Profile

Tables 5 and 6 show the average area of the garden cocoa farmer in Tinete Village, 2.37 ha, and Atolanu Village, 2.13 ha. This impact is positive as well as harmful. Impact the positive source Power nature (land) is broad enough to help the development of the farmer personally in his life and for the progressive group. Strength and potential institutional Farmers are decisive for the institution's growth and development. With potency, natural, especially enough land, will help increase individual farmers' economy and impact institutional strengthening of the farmer they live in. Impact negatively, large garden areas can cause No optimal farmer to manage garden plant cocoa, not yet Again activities for business agriculture and plantations.

The input provided in the integration program plant cocoa and cow livestock cow, i.e., gift cow livestock 20 cows man for the Village Tinete and the Village Atolanu as many as 20 tails later male managed by *LEM Sejahtera*. Maintenance carried out by LEM members viz with do fattening cow well in the cage communal nor released around the cage.

Several factors are very influential system fattening of cow livestock, the technique of gift feed/ration, vast available land, age, condition of the cows to be fattened, and fattening time. Overseas, fattening cows are known with system *pasture fattening*, *dry lot fattening*, and combinations, while in Indonesia, it is known with system *kereman* or system *anvil* (Timor). Fattening modern cows uses the principle feedlot, which gives feed cows quality forages and concentrates in cages. The *dry lot fattening* system is fattening cows with reproducing gift feed concentrate. The fattening system is done in the cage. Feed forages and concentrates are given to cows in the stable. So, feed must be provided following portion perfect time. On the system fattening, This should always be forage available. System fattening *pasture fattening*. Namely, cows grazed in the field shepherding throughout the day. With this system, some livestock is not caged; some are also caged after Evening day or when the sun shines hot. A must be noticed in the system is how herding utilizes forage as good.

The results of observations made during this study were deviations that occurred in activities integrating plant cocoa. The deviation is activity maintenance of cow livestock that should be done, i.e., maintaining and raising livestock given cow in each group can develop breed but what happened precisely selling instead buy so that initially 20 tails So reduce Because the part has been sold and in part Again dead

Because sick. Data is obtained in Table 7 based on the observations field and information.

Table 7. Data on the Development of Amount of Aid Cows in the Tinete Village and the Atolanu Village

Group name	Amount of assistance cow the start of the program (tail)	Number of cows in current condition (heads)		
		For sale	Dead	remainder
LEM Sejahtera Tinete	20	15	3	2
LEM Sejahtera Atolanu	20	13	6	1

Source: Observation results roomy

The data and information show that helping give the cow to *LEM Sejahtera* Tinete and Lem Sejahtera Atolanu does not increase the number of cows. The number of cows tends to be reduced, and no additions. Indeed in the execution activity integration plant cocoa and cow livestock cows, several cows should still Because activity This directed to be sustainable so that maximum results can be obtained. Cows that have fattened can be sold. Profits from the sales of cows can be saved to increase the capital of the LEM Sejahtera cooperative. The money from the sale can be used again to replace the cow new. However, the reality is the opposite. There is no increase in the number of cows. Because the government area or province does not strictly supervise. LEM Sejahtera members sell cows to help increase financial capital institutional because cocoa sales cannot be relied upon to comply with the need life member group.

2. Institutional Cocoa Farmer

During this, various forms of institutional farmers, like group farmers, meet and are found at the research location in the Aere District and Lambandia District (Table 8). But in terms of development, not optimal cause impressed only as a complement to the implementation project government and not as a platform for the empowerment of actual public farming. As a result, its existence and performance are not exhilarating or even sustainable. It is seen in several groups; only farmers are administratively registered. However, existence and activities are almost no if it is still minimal. Because development sector agriculture often fails due to yet ready infrastructure farmers themselves, especially institutional farmers, Not yet Can operate function with ok. Obstacles that become the cause are low-skill (human resources) farmers, the lack of group capital, the lack of assistance and facilitation of government, and limitations in access to information and technology.

Table 8. Data on the number of groups Village Tinete and the Village Atolanu

No.	Group Name	Village	Structure Organization	Number of Members	Commodity	liveliness group
1	Farmer Group Sumber Rejeki	Tinete	There is	21	Cocoa	Active
2	Farmer Group Usaha Bersama	Tinete	There is	25	Cocoa	Active
3	Farmer Group Pada Idi	Tinete	There is	29	Cocoa	Active

4	Farmer Group Pada Elo	Tinete	There is	28	Cocoa	Active
5	Farmer Group Sipakainge	Tinete	There is	29	Cocoa	Active
6	Sukses Bersama	Tinete	There is	25	Cocoa	No active
7	Bersama Kita Jaya	Tinete	There is	20	Cocoa	No active
8	Mamminasae	Atolanu	There is	24	Cocoa	No active
9	Sejahtera	Atolanu	There is	23	Horticulture	No active
10	Cita Mandiri	Atolanu	There is	22	Cocoa	No active
11	Bina Sejahtera	Atolanu	There is	18	Horticulture	No active
12	Mekar	Atolanu	There is	22	Horticulture	No active
13	Farmer Group Mega Buana	Atolanu	There is	25	Cocoa	Active
14	Farmer Group Mallilu Sipakainge III	Atolanu	There is	22	Cocoa	Active
15	Farmer Group Mallilu Sipakainge IV	Atolanu	There is	23	Cocoa	Active
16	Farmer Group Mallilu Sipakainge I	Atolanu	There is	13	Cocoa	Active
17	Farmer Group Mallilu Sipakainge II	Atolanu	There is	24	Cocoa	Active

Source: Prodes Village Tinete and the Village Atolanu (2022)

Based on information from interviews informant obtained a picture of that group's existing farmers. It is only its nature pseudo and is not active in the group agenda. Its existence is limited to chairman representative group gathering grouped farmers No on awareness together to plan and achieve a specific goal. Under these conditions, it is necessary to raise awareness of its importance group for community farmers. Existence group as A institution needed strength in achieving maximum results in individual farming and life good community in the organization group he asked for.

The information above shows that group farmers in the Aere District and Lambandia District are a group domicile or not specific to one commodity just. However, a group for all types of farming. Based on the group decree, the structure organization group consists of a chairman, secretary, and treasurer. Formed groups Still need intensive assistance.

The immediate impact felt by the LEM Sejahtera group with an integration program plant cocoa and cow livestock cow directly is explicit knowledge about the function and role of each board, its importance to each other, Work equality, and understanding in the group. Activity training like training management finance institutions provided by Bank Indonesia Kendari as well as Cultivation Technique training Plant Cocoa by the Department of Plantation and Horticulture Southeast Sulawesi Province also provided the ability for the group to organize life the group following mechanism organization. Impact period length is if the mechanism the organization runs according to the material presented and given in training is ability managerial the organization will run well and institutionally will make the group grow more.

The added value received by group farming is the ability to finish the problems in the group. The group will petrify the administrator group with its members to formulate appropriate steps and methods in dealing with existing problems. This condition will allow the farmer to develop Good If always practiced in the requested life group.

Based on the information obtained, the implementation function of the structural organization in the LEM Sejahtera Desa group Tinete and the Village Atolanu Not yet walk as expected, Where function organization is run only by the chairman group or one or two active administrators.

Lack of assistance and training become a tree problem that becomes reason weak organization group farmers in the Tinete Village and the Atolanu Village. Besides, it's the human resources of farmers who haven't adequate Where level his education part big only limited elementary level. This is also one of the factors causing the transfer of technology and knowledge difficult.

Activity empowerment farmers in the training model become means of beginning for the group to learn about management group. With thereby, we can know that coaching program group farmers become one of the methods to foster and develop organization group farmers.

3. Human Resources

Ability processing potency nature and environment determined by capacity and capability source Power the human. Although potency naturally infers, If a manager has no capability, then potential will not give maximum results in humans (Priyono, 2010). Linkages in this study see potential in the village Tinete and the Village Atolanu to help enhance the well-being of public stay analysis on potential management by sources Power the human.

The level of education of the incorporated farmers into Community Economic Institutions (LEM) in the Tinete Village and the Atolanu Village is Still low. It can be seen in Table 9 and Table 10.

Table 9. Education Level of *LEM Sejahtera* Members Tinette Village

Level of education	Amount	
	Person	%
Graduate	1	0.76
Diploma 3	0	0.00
Diploma 2	0	0.00
Diploma 1	0	0.00
Senior High School	15	11.36
Junior High School	26	19.70
Elementary	90	68.18
Other	0	0.00
Total	**132**	**100.00**

Source: *LEM Sejahtera* Tinete Village Profile

Table 10. Education Level *of LEM Sejahtera* Members Atolanu Village

Level of education	Amount	
	Person	%
Graduate	2	1.87
Diploma 3	0	0.00
Diploma 2	0	0.00
Diploma 1	0	0.00
Senior High School	3	2.80

Junior High School	10	9.35
Elementary	92	85.98
Other	0	0.00
Total	**107**	**100.00**

Source: *LEM Sejahtera* Atolanu Village Profile

Based on the data above, 68.18% of the education level of LEM Sejahtera Atolanu Village members is 68.18%. Tinette elementary school educated. Meanwhile, LEM Sejahtera Atolanu members' Elementary school education level was 85.98%. This condition certainly influences the low ability in management farming and affects the ability of management groups as A organizations and institutions. Low level of education cause the existing membership condition still exists no significant progress yet.

A person's level of education influences knowledge transfer and adoption of technology. If one's education is well, then sure adoption of technology and knowledge transfer carried out through training and education will be easier; otherwise, if his education is low, the adoption and transfer of technology and knowledge will be slow and constrained.

Activities in integration plant cocoa and cow livestock-related cows with enhanced capacity and capability human resources are the accompaniment and empowerment of farmers. Assistance is carried out by the extension workers in the Tinete Village and the Atolanu Village. The task including control every implementation activity, integrating plant cocoa and cow livestock cow and growing, and developing institutional farmers. Empowerment of farmers done with training Good technical cultivation plant cocoa nor training making feed cow livestock.

Training process designed and implemented by the committee executor with indoor adult training model and practice roomy. The training was conducted in a demonstration, i.e., showing the procedure maintenance of cow livestock cows that will be integrated later with plant cocoa as material feed cow livestock.

Empowerment farmers implemented in training feels huge benefits for group farmer cocoa. Training farmers and cow livestock cows shaped the group's first training since East Kolaka was formed. The immediate impact perceived by the group is increasing knowledge for members who at least understand the procedure to integrate plant cocoa and cow livestock cow. Besides That ability, they organize and arrange plan work and finance the group better with material and game simulations provided by the coach. Atmosphere training made in atmosphere familiarity help melt stiffness between participants and trainers.

Given motivation trainer for LEM members in fostering and strengthening institutional seen in LEM Sejahtera Desa Tinette. After training, administrators meet with members, and training outcomes help deliver an understanding of members. Another case was with LEM Sejahtera Atolanu Village, Where group This has not applied the knowledge gained in training. Impact period possible length felt by the group farmer from training this is an improvement in technical cultivation. It will affect the increased production of cocoa member groups and the reinforcement institutional. Communication is built and maintained during training between fellow administrator groups. Of course, give the inspiration to do more good in the group. The social value of the interaction between fellow group farming in training is the existence of

introduction to each other administrator group farm and each other share helpful information in fostering and developing the group. It is possible with the dynamics given group help build exemplary communication and interaction between fellow participants.

CONCLUSION

Based on the results of the research conducted, the implementation of the development program area cocoa-based corporation on integration plant cocoa and cow livestock, it can be concluded that the output of the integration program activities plant cocoa and cow livestock, namely: (1) the amount of aid cow to the second group reduced and there is no addition to the activity integration plant cocoa and cow livestock No sustainable as expected by this program; (2) the LEM Sejahtera Tinete group utilize potency waste dirt cow livestock cow become product form fertilizer organic as fulfillment need fertilizer members of LEM Sejahtera so that they become one of the sources income for LEM Sejahtera Tinette Village. Benefit (outcome) from integration program activities plant cocoa and cow livestock Not yet felt maximum benefits by LEM Sejahtera Tinete Village members and LEM Sejahtera Atolanu Village. This was caused for several reasons, namely: (1) there was no assistance or intensive counseling for the LEM Sejahtera group; (2) institutional these two LEM Sejahtera No walk so much members who don't act or involved in participating in activities integration plant cocoa and cow livestock; (3) not yet a technical change cultivation plant cocoa Where member LEM group still do practice cultivation plant conventional cocoa. Overall, the integration of cocoa and cattle farming activities carried out in Tinete Village and Atolanu Village did not have an impact on improving the welfare of LEM Sejahtera members where there was no increase in the cocoa farming business and institutional management was not yet optimal.

REFERENCE

Anugrah, I. S., Sarwoprasodjo, S., Suradisastra, K., & Purnaningsih, N. (2014). Sistem Pertanian Terintegrasi-Simantri: Konsep, Pelaksanaan, dan Perannya dalam Membangun Pertanian di Provinsi Bali. *Forum Penelitian Agro Ekonomi*, *32*(2), 157–176.

Harli. (2017). Sistem Integrasi Tanaman-Ternak Kambing Untuk Produksi Kakao Yang Resilien. *Agrovital, Jurnal Ilmu Pertanian Universitas Al Asyariah*, *2*(1), 1–7.

Hasmadiana, Ginting, S., & Bain, A. (2022). Evaluasi Program Pengembangan Kawasan Kakao Berbasis Korporasi (Integrasi Tanaman Kakao Dan Ternak Sapi) Di Kabupaten Kolaka Timur. *Jurnal Perencanaan Wilayah*, *7*(2).

Jasmal, A. S., Abdullah, & Agustina. (2009). Analisis Potensi Limbah Tanaman Pangan sebagai Sumber Pakan Ternak Ruminansia di Sulawesi Selatan. *Jurnal Ekonomi Pembangunan*, *10*(2).

Kariyasa, K. (2005). Sistem Integrasi Tanaman-Ternak dalam Perpektif Reorientasi Kebijakan Subsidi Pupuk dan Peningkatan Pendapatan Petani. *Analisis Kebijakan Pertanian*, *3*(1), 68–80.

Khurniyah, H., Ilahude, Z., & Mukhtar, M. (2019). Pendapatan dan Strategi Pengembangan Usaha Integrasi Sapi Potong pada Tanaman Kakao di Kabupten Boalemo Gorontalo. *Jurnal Galung Tropika*, *8*(3), 176–189.

Muhadjir, N. (1992). *Metodologi Penelitian kualitatif: Telaah positivistik rasionalistik, phenomenologik realisme metaphisik*. Yogyakarta : Rake Sarasin.

Nappu, M. B., & Taufik, Muh. (2016). Sistem Usaha Tani Kakao Berbasis Bio Industri Pada Sentra Pengembangan di Kabupaten Luwu Sulawesi Selatan. *Jurnal Litbang Pertanian*, *35*, 187–196.

Nasrul, W. (2012). Pengembangan Kelembagaan Pertanian Untuk Peningkatan Kapasitas Petani Terhadap Pembangunan Pertanian. *Menara Ilmu*, *3*(29).

Nugraha, R. I. (2022). *Mengenal Manajemen Pakan Sistem Penggemukan Sapi*. https://dispertan.bantenprov.go.id/lama/read/artikel/329/Mengenal-Manajemen-Pakan-Sistem-Penggemukan-Sapi.html

Salman, D. (2011). *Materi Kuliah Keberlanjutan Kelembagaan dalam Pembangunan Pertanian dan Perdesaan*. Program Pasca Sarjana UNHAS, Makassar.

Santoso, A. B. (2017). Analisis Pendapatan Terhadap Karakteristik Usahatani Integrasi Tanaman Perkebunan-Sapi: Kasus Di Desa Mesa, Kabupaten Maluku Tengah. *Jurnal Ilmu Pertanian Indonesia (JIPI)*, *22*(2), 108–114.

Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.

Suherman, & Kurniawan, E. (2017). Manajemen Pengelolaan Ternak Kambing di Desa Batu Mila Sebagai Pendapatan Tambahan Petani Lahan Kering. *Jurnal Dedikasi Masyarakat*, *7*(13).

Suherman, Nurhapsa, & Irmayani. (2018). *Panduan Praktis Pembuatan Pupuk Organik Sederhana*. Pare-Pare: UMPAR Press.

Syakir, M., Karmawati, E., & Pitono, J. (2012). *Teknologi Budi Daya dan Pascapanen Kakao*. Jakarta: IAARD Press. Pusat Penelitian dan Pengembangan Perkebunan.

Winardi. (2003). *Teori Organisasi dan Pengorganisasian. Divisi Buku Perguruan Tinggi*. Jakarta: PT Raja Grafindo Perkasa.