# Analysis Of Farmers' Competency Levels Corn And Peanut Venue Business Inlailangga Village, Wadaga District, Muna District West

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Abstract. This research aims (1) to determine the characteristics of corn and peanut intercropping farmers in Lailangga Village, Wadaga District, West Muna Regency (2) to determine the level of competency farmer in farming overlapping sari cornAnd peanuts in Lailangga Village, Wadaga District, West Muna Regency. This research was conducted in Lailangga Village, Wadaga District, Regency Muna West implemented on month August 2022. The selection of research locations was carried out using purposive sampling, namely by consideration that Village Lailanga is Wrong One region with majorityits inhabitants Work in sector agriculture specifically farmer overlapping sari corn and peanuts. The population in this study were farmers cultivating corn intercropping and peanut land as much 372 person. The results of the research show that the characteristics of intercropping corn and peanut farmers in Lailangga Village, Wadaga District, West Muna Regency are on productive age category with presentation 100%. Study Which done To use know the level competence farmers in intercropping corn and peanuts in the village Lailanga Muna Regency West can state that competence farmer overlapping sari corn And peanut land is at in high category seen from the competency in using agricultural production facilities, technique cultivation and use technology and information.

Keywords: competence, intercropping, corn, peanuts

### 1 Introduction

Intercropping cultivation is a planting business several types of plants on the sameland and time, which are arranged in such a way appearance in rows of plants. Planting this way can be done on two or more type plant Which relatively age, for example corn And peanut land. Job as a farmer intercropping corn and peanuts source eye livelihood principalon part big public in Village Lailangga, Wadaga District, West Muna Regency. Increasing farmer production in

managing farming (input-output)influenced by competence from farmer the. Matter This because competence become Wrong One factor important in manage farming. Competence is a skill, knowledge, basic attitudes and values there is in self somebody Which reflected from ability think And act consistently. In other words, competence is not just about a person's knowledge or ability but the willingness to do what is known so it produces benefit. Competence Which owned farmer must tall for industry agriculture because competence will be able to influence the level of farmer productivity. If competence Which owned farmer tall so productivity will follow tall (Wibowo, 2014).

Based on the results of researchers' observations regarding farmers in Lailangga Village, Wadaga District, West Muna Regency, found that the phenomenon that occurs regarding farmer competence is the farmer's ability to manage his farming business, both from the input process and the output Which Not yet fully modern or Not yet adapt with agriculture 4.0. So that management results his farm Still Not yet maximum. The process of intercropping corn and peanuts is carried out by farmer in Village Lailanga Also not yet completely follow standardization intercropping of corn and peanuts recommended by the Ministry of Agriculture, like processing land in a way maximum, election seed, planting, maintenance, And harvest. In practice, farmers in Lailangga Village choose the planting season based on past traditions. so there are farmers who choose the planting season when enter season raining And there is farmer Which not enough pay attention with placement planting season. Matter This because exists the idea that when the harvest is finished and post-harvest with a certain time interval short, farmers will replant. So that gives efficiency in units of number of harvests/year. However, this has a negative impact on ground frequency Which experience decreased fertility. Knowledge defined as information stored in memory.

Competence can give encouragement for farmer For Keep going improving the farming process carried out by corn intercropping farmers And peanut land. Based on this description, it can be concluded that Competence has a relationship in intercropping farming corn and peanut juice in Village Lailanga, Subdistrict Wadaga, Regency Muna West. This research aims (1) to determine the characteristics of corn and peanut intercropping farmers in Lailangga Village, Wadaga District, West Muna Regency, (2) to determine the level of competency farmer in farming overlapping sari cornAnd peanuts in Lailangga Village, Wadaga District, West Muna Regency.

#### 2 Method

This research was conducted in Lailangga Village, Wadaga District, Regency Muna West implemented on month August 2022. The selection of research locations was carried out using *purposive sampling*, namely by consideration that Village Lailanga is Wrong Oneregion with majority its inhabitants Work in sector agriculture specifically farmer overlapping sari corn and peanuts.

The population in this study were farmers cultivating corn intercropping And peanut land as much 372 person, Because sample in study This numbering more than 100 intercropping corn and bean farmers land So the sample determination according to Arikunto in Hatmoko (2015) explains that if the subject not enough from 100, more Good taken all so the research is population research. But if the subject is large (more from100 people) can taken between 10-15% or 20-25% or more.

The sample determination in this research was carried out using method *simple random sampling*. Simple random sampling is method Random sampling actually provides that chance The same. Therefore, the sample in this study was 41 farmers Which taken from 15%

of the population.

The data collected consists of primary data and secondary data, that is:

- 1. Primary data in this research was obtained through interviews and direct observation for farmers who carry out intercropping of corn and beans land. Primary data includes the characteristics of respondents at the research location as well as the level of competency of farmers who have the ability to do so use of inputs, cultivation techniques, and use of technology and information
- 2. Secondary data in This research was obtained from previous research theses, books related and other sources related to the discussion. Source others obtained from journals or the internet or other sources Which related with research.

This research will use a qualitative approach to determine the characteristics of farmer respondents in farmingintercropping corn and peanuts. Furthermore explained Azwar (2010), study with using approach quantitative, that is something approach Which emphasize analysis ondata numerical (number) Which processed using statistical methods. Data analysis to determine the level of farmer competency in farmingintercropping corn and peanuts in Lailangga Village, Wadaga Districtbe measured with use analysis descriptive quantitative with using a frequency distribution table based on scoring (score). As for The measurement scale for respondents' answers uses a Likert scale determined by five choice answer that is: Very Agree (SS) score 5, Agree (S) score 4, quite agree (CS) score 3, Disagree (TS) score 2 and Strongly Disagree (STS) 1 which is processed using the class interval formula (Sugiyono, 2008).

Table 1. Indicator Parameter Competence Farmer

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Variable	Sub Variable	Indicator	Category
Competence	ee Use productionin puts	Abilitymatter: in  1. Use cultivation seed as choose well as superior seed	-Tall -Currently -Low
		2. Choose the type as well accuracy time fertilization	-Tall -Currently -Low
		3. Choose types as well accuracy usepesticide	-Tall -Currently -Low
		Choose type Anddo spraying herbicide -C	

Technique cultivation	: -(	Fall Currently Low
	Correct in a way effective -C	Call Currently Low
	weeding weed maximally -C	Call Currently Low
	4. Determining harvest maximum	
Use technology and information	Internal capabilities matter: : 1. Usetelephonemobile	-Tall -Currently -Low
	2. Delivery related information farming business executed	-Tall - Current y - Low
	3. Operation machine sprayerweed or grass	-Tall -Currently - Low
	4. Operation machine sheller seedcorn	-Tall -Currently - Low

# 3 Results And Discussion

# 3.1 Characteristics of Corn and Peanut Intercropping Farmers

The identity of the respondents referred to in this research is data or information that describes or depicts the respondent who is subject study including: age, level education

respondents, land area, experiencefarming, And amount dependents family.

Table 2. General description Respondent in Lailangga Village, Wadaga District Year 2022

NO.	General Description Respondents	Category	Amount (soul)	Presentation (%)
1	Age	Productive (15-64)	41	100.00
		Non Productive(>64)	0	0
2	Education	Education Low	15	36.56
		Education Intermediate	25	60.97
		Education Tall	1	2.43
3	Wide Land (Ha)	Average Land Area(0.0	8 Ha) 41	100
4	The number	oSmall Family (1-4)	32	78.05
4	dependents	Medium Family (5-6)	9	21.95
		Large family (>7)	0	0
		Small Family (1-4)	32	78.05
5	Farming experien	nce (<5 years)	2	4.88
		(5-10 years)	3	7.32
		(>10 years)	36	87.80
		(<5 years)	2	4.88

Source: Secondary Data, 2021

Table 2 shows that 41 respondents is at on productive age category with presentation 100%. With thereby, so farmer in Village Lailangga is classified as a productive farmer. They are usually of productive age have Spirit Which more big compared to age Which nonproductive, so that the productive age has the potential to further increase their participation in every farming activity. Strengthened by the opinion of Ryan, et al (2018) stated that farmers of productive age will work better and more maximum compared to farmer Which non-productive.

Table 2 shows that 25 (60.97%) respondents were classified as in secondary education followed by lower education as many as 15 (36.56%) respondents. Matter This showing that level education respondents is at on category currently Because generally level education respondents only until on level School Intermediate First. Farmer do farming due to hereditary factors, so that in the past the respondents were farmers more important help person old in land compared to by continuing school to the next level. However, farmers' competence in farming

is quite high, although deep process transfer innovation walk slow. Matter This strengthened with opinion Saparyati (2008) Which put forward that level education own influence Which No real to results production plant Because level education formal influence change behavior farmer in activity cultivation plant. The low education formal can reduced with follow informal education.

In addition, the average size of a farmer's land is 0.80 Ha. Each farmer in Lailangga Village has two different areas of land- different. So that one land area only measures <0.80 Ha. In line with research by Phahlevi R. (2013) that land area will influence the scale In the end, it will affect the size of a production quantity business agriculture. The number of family dependents shows that as many as 32 respondents are referred to in category family small with presentation (78.05%). Dependents family in productive age is a source of labor to help the family business. However, on the other hand, the family will become dependents at a non-productive age burden for farmer. With own dependents in on four person will the more demands to work hard to increase his income. It means, livelihood from intercropping of corn and peanuts Which done will more improved with hope results Which they can fulfil family consumption needs.

Table 2 also shows that farmer in Village Lailanga own diverse farming experience, ranging from under 5 years to more than 10 years. Farmers in Lailangga Village who have more than 10 years of experience year there were 36 farmers with a percentage of 87.80% of the total 41 respondents. MatterThis describe that farmer overlapping sari in Village Lailanga average have experience Which tall, although There is a number of respondent Which experience farming his in lower 5 year will but along walkingtime what we can be certain of is farmer will own experience Which Enough Lots in managing the agricultural input process. Farming experience is one of them factor Which influence farmer in accept something innovation. How long farming will give learning in do farming intercropping corn and peanuts. With lots of experience, then farming the more motivated For Keep going increase his farming business. Experience provides learning and positive encouragement to farmers and his family. Matter This strengthened with opinion Arifin, et al (2017) Which put forward that experience farmer in activity farming can encourage farmers to continue managing their tahi business so that it continues to be sustainable and enrich his knowledge as well as increase his skills.

#### 3.2 Competence of Corn and Peanut Intercropping Farmers in the Village Lailanga

farmers are farmers who have the ability to use of inputs, cultivation techniques, and use of technology and information. You can see and find out the level of competency of farmers in Lailangga Villageseen on Table 3 below follows:

Table 3. Level Competence Farmer Hitchhiking Sari Corn And Peanut Land in Village Lailangga in 2022

NO.	Category	Amount (soul)	Presentation(%)
1	Tall (46-60)	39	95.12
2	Currently (31-45)	2	4.87
3	Low (12-30)	0	0
Total		41	100.00

Source: Primary Data Processed, 2022

Table 3 shows that 39 (95.12) respondents have competence with category tall. It means competence farmer in aspect knowledge of the use of inputs, cultivation techniques and use of technology and high information. In terms of knowledge regarding the use of agricultural inputs, farmers already have started using fertilizer and its benefits, able to produce seeds good and ready to plant, and use herbicide to eradicate weeds on land Which Ready plant. In do or manage farming Which executed farmer Already No too difficulty Because Already have experience Which Enough Good, like in do processing land (soil loosening), planting effectively, pest control diseases and carrying out weeding and other farming input processes until harvest and post-harvest. In managing the farming business of farmers in Lailangga Village already start use a number of type technology like machine sprayer weeds and also corn seed shelling machines. Farmer respondents have also started use phone mobile For convey information related farming Which executed.

#### 3.3 Competence Use Saprodi

The use of production facilities is the materials/means used as input in the production process to produce output. Type of production facilities includes seeds, fertilizer and herbicides. Researchresults related to the use of inputs agriculture can seen on following table:

Table 4. Farmer Competency Level in Using Agricultural Saprodi in Village Lailangga in 2022

NO.	Category	Amount (soul)	Presentation (%)
1	Tall (16-20)	14	34.14
2	Currently (11-15)	27	65.85
3	Low (4-10)	0	0
Total		41	100.00

Source: Data Treated Primer, 2022

Table 4 show that ability farmers in use agricultural production facilities by intercropping farmers in Lailangga Village are located in the medium category with respondents reaching 27 (65.85%) farmers. This matter showing ability farmer related use means production agriculturein support productivity Still Not yet maximum. By knowledge Regarding the use of superior inputs, farmers already know clearly about this benefit Which obtained from use seed superior, fertilization, spraying herbicides and pesticides. However, there are limitations farmer capital in the procurement of inputs in the form of superior seeds, fertilizers, pesticides requires Most of the farmers intercrop corn and peanuts in Lailangga Village have not maximized the use of superior production inputs as a whole so farmer must maximize source Power Which There is. Matter This impact onproductivity farmer Which There is in Village Lailanga Which every harvest No has increased significantly and sometimes even decreased productivity. This is in line with the opinion of Idham (2013).that although use production inputs certified or own Lots advantages, but not all farmers want to use certified seeds in their farming business. This is due to several things including; price seed superior certified Which Still relatively tall And Not vet can accessible to small farmers, and there are still many farmers who use the results harvest Which they have for the growing season furthermore.

#### 3.4 Competence Technique Cultivation

Technique Budi Power plant is method for cultivate a plant so that plant can grow with Good. Technique cultivation plant is process produce material food as well as products agro industry with utilise resource plant. Results study related technique intercropping of corn and peanuts can be seen in the following table:

Table 5. Level Competence Farmer in Technique Cultivation in Village Lailangga Year 2022

NO.	Category	Amount (soul)	Presentation (%)
1	Tall (19-25)	41	100.00
2	Currently (12-18)	0	0
3	Low (5-11)	0	0
Total			100.00

Source: Primary Data Processed, 2022

Table 5 shows the cultivation technique capabilities of farmers Intercropping in Lailanggga Village is in the high category among respondents reach 41 (100%) farmer. Matter This because farming overlapping sari corn and peanut land is work Which Already long they do it as your main job. Farmers really understand intercropping cultivation techniques corn and peanuts starting from land processing to harvesting. Farmer also think that the cultivation techniques they have been using so far have been used correct and maximum even though it is still done manually. As in do weeding weed with use tembalang. With doing one farmer's work gets two benefits, namely weeding and also loosening the soil. Weeding is usually done on time age plant reach 7-10 day and during the phase flowering on plants peanut land Which assessed very effective for increase productivity. Matter This is in line with the opinion of Arafah, (2010) that good cultivation techniques is very necessary to get results that match expectations. This matter must start from the beginning, namely from planting until harvesting. In process growth plant until bear fruit This must maintained well, and especially must attempted so that plant Can spared from attack pests and disease Which often time lower production.

#### 3.5 Competence Use Technology And Information

Competence in the use of technology and information in agriculture is science in order to economically utilize natural resources with human resource assistance for welfare. Technological developments and knowledge is increasing from year to year. Agricultural technology in the field Agriculture has been discovered to produce many agricultural products overflowing. The results of research related to the use of information technology can be seen on the table below follows:

Table 6. Level Competence Farmer in Use Technology And Information in Lailangga Village Year 2022

NO.	Category	Amount (soul)	Presentation (%)
1	Tall (16-20)	30	73.17
2	Currently (11-15)	11	26.82
3	Low (4-10)	0	0
Total		41	100.00

Source: Processed Primary Data, 2022

Table 6 show that ability farmers in use technology information by farmer overlapping sari in Village Lailanga is at in the high category with respondents reaching 39 (95.12%) farmers. This matter shows that farmers are already using several supporting technologies in increase productivity. Wrong the only one like machine sprayer weed Which very efficient when used in do spraying weed on land farmer. Besides that ability farmer in look for And conveying information using a cell phone is quite good even though not through online media such as WA, FB and other social media. This is because farmers still have difficulty using social media. In line with study Which done by Kurniadi, et al (2016) suggests that low levels of education cause ability farmers in terms of using technology that can inhibit growth economy for farmers. There are many agricultural technologies in agriculture discovered but not all technologies can be learned by farmers. Although Most farmers still have problems accessing the internet, but it is available also farmers who are quite adept at using cell phones to access Internet. Based on statement from Wrong One respondents that dissemination of information related to innovation obtained on the internet via telephone mobile and then the information is disseminated fellow farmers.

#### 4 Conclusion

- 1. Characteristics of corn and peanut intercropping farmers in Lailangga Village, Wadaga District, West Muna Regency on productive age category with presentation 100%. Respondents belong to in secondary education followed by lower education. In addition, the average size of a farmer's land is 0.80 Ha. Each farmer in Lailangga Village has two different areas of land- different. So that one land area only measures <0.80 Ha. Farmer in Village Lailanga own diverse farming experience, ranging from under 5 years to more than 10 years.
- 2. Research which done to use know the level competence farmers in intercropping corn and peanuts in the village Lailanga Muna Regency West can concluded that competence farmer overlapping sari corn And peanut land is at in high category seen from the competency in using agricultural production facilities, technique cultivation and use technology and information.

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