

## **The Problem of Gender Sensitivity in Food Safety Enhancement of Rural Communities<sup>1</sup>**

Imam Santosa<sup>2</sup>, Dumasari, Dumasari<sup>3</sup>, Rili Windiasih<sup>4</sup>, Dindy Darmawati Putri<sup>5</sup>

### **Abstract**

The purpose of the study is aimed to examine the reasons behind the condition of weak gender sensitivity of poor households in the process of improving food safety in rural areas. Based on the research's results of the study revealed that gender sensitivity was still dominant for peasants than male peasants in improving food security. According to the informants, eating rice once and or twice with limited portions is not yet filling, therefore they supplement it with complementary staple ingredients. Informants are able to do the process of processing complementary foods (cassava and corn), but it has not provided a taste that appeals to peasants' appetites to replace staple foods (rice/rice), rising rice prices reduce farmers' purchasing power. Recommendations that can be conveyed are the need to increase gender sensitivity in enhancing food security. Furthermore, it is necessary to increase the use of non-rice local resources in improving food safety.

**Keywords:** Gender, sensitivity, food safety enhancement, rural, community

<sup>1</sup> The results of the study prove that the food safety conditions of poor households in rural areas are still lacking in gender sensitivity. The output of the research results is valuable for developing the concept of food safety in gender sensitive at poor households.

<sup>2</sup> Professor. Faculty of Social and Political Sciences, Jenderal Soedirman University, Purwokerto, Central Java, Indonesia. Corresponding Author: [Scokronegoro@yahoo.com](mailto:Scokronegoro@yahoo.com)

<sup>3</sup> Lecturer. Faculty of Agriculture, Muhammadiyah Purwokerto University, Purwokerto, Central Java, Indonesia.

<sup>4</sup> Lecturer. Faculty of Social and Political Sciences, Jenderal Soedirman University, Purwokerto, Central Java, Indonesia.

<sup>5</sup> Lecturer. Faculty of Agriculture, Jenderal Soedirman University, Purwokerto, Central Java, Indonesia.

## **Gıda Güvenliğinde Cinsiyet Duyarlılığı Sorunu Kırsal Toplulukların Geliştirilmesi**

### **Öz**

Çalışmanın amacı, kırsal kesimde gıda güvenliğini iyileştirme sürecinde yoksul hanelerin toplumsal cinsiyet duyarlılığının zayıf olmasının altında yatan nedenleri incelemektir. Araştırmanın sonuçlarına göre, gıda güvenliğinin iyileştirilmesinde köylüler için cinsiyet duyarlılığının hâlâ erkek köylülerden daha baskın olduğu ortaya çıktı. Bilgi verenlere göre, sınırlı porsiyonlarda bir veya iki kez pirinç yemek henüz doyurucu değil, bu nedenle tamamlayıcı temel bileşenlerle tamamlıyorlar. Bilgi verenler tamamlayıcı gıdaları (manyok ve mısır) işleme sürecini yapabilirler, ancak köylülerin temel gıdaları (pirinç/pirinç) değiştirme iştahına hitap eden bir tat sağlamamıştır, yükselen pirinç fiyatları çiftçilerin satın alma gücünü azaltmaktadır. Aktarılabilecek öneriler, gıda güvenliğinin artırılmasında toplumsal cinsiyet duyarlılığının artırılması gerektiğidir. Ayrıca gıda güvenliğinin geliştirilmesinde pirinç dışı yerel kaynakların kullanımının artırılması gerekmektedir.

Anahtar Sözcükler: duyarlılık, gıda güvenliğinin artırılması, kırsal, topluluk, toplumsal cinsiyet

### **Introduction**

The issue of food insecurity in poor households in rural areas needs to be considered intensively and seriously. The 2019 Indonesian poverty data report by the Bureau of Central Statistics showed that the number of poor people in rural areas was recorded at 17.94 million people (14.21 percent) or an increase of 570,000 people from September 2014 which was 17.37 million people (13,76 percent). The majority or > 50 percent of the total number of poor people living in rural areas. Poor households are vulnerable to the threat of food insecurity, especially during the famine season (Tong, W., Zhu, L., Lo, K., 2019).

The existence of gender participation is also taken into account in understanding poor households, including in maintaining food security (Jost et al., 2015). Food insecurity among the poor is correlated with sociodemographic factors (eg age, education, migration) and asset ownership (Alpizar et al., 2020). Factors affecting food insecurity differ between types and prevalence of food insecurity. Porter et al., (2014) suggest that climate change is one of the most decisive factors for the food security conditions of poor households worldwide. The vulnerability of poor households to the threat of food insecurity is also determined by several factors, namely high dependence on rainfed agriculture, small land ownership, high poverty, low education level, limited access to technical assistance, and lack of capital to implement adaptation strategies, among other factors. other factors (Tong et al., 2019; Alpizar et al., 2020).

Opportunities to save some of the harvest (rice, corn, or cassava) as food reserves during the famine season are increasingly limited. Based on the results of previous studies, it was revealed that various forms of food coping strategies have been carried out by poor households

to anticipate the threat of food insecurity (Timler et al., 2020). Management mechanisms in the form of food coping strategies tend to be based on local resources with the face of social capital, especially mutual trust, networks, values, and norms that are shared and attached to social institutions among residents in rural areas.

Poor households also began to develop diversification of local non-rice food ingredients. However, the behavior of poor farmer household members with farm labor status tends to be fragile in overcoming the threat of food insecurity, especially the management of non-rice food diversification (Santosa et al., 2019). One of the factors causing this fragile behavior is related to the low and unequal gender participation of family members in maintaining food security. The behavior of poor households that tend to be fragile in the development of food diversification, especially non-rice in rural areas with marginal land, cannot be separated from the division of roles and concerns of family members in preparing various types of food with conditional arrangements. menu for the morning, afternoon, and evening.

The contribution of the role that dominates the efforts of poor farmer households in maintaining and strengthening food security every day is the role of women as wives and housewives. Women in poor households do not only try to prepare various foodstuffs from various sources including agricultural products, the results of soft loans from social relatives, and arrange makeshift food menus. However, they also play a productive role in earning wages as an allowance for consumption cost (John Roy Porter, JR. Liyong Xie, Challinor, AJ. Hawden, S.M. Iqbal, M.M. Lobell, 2014). Meanwhile, the role of men as husbands or heads of households tends to earn a living outside the home to participate in maintaining and developing family food security. This gender participation shows that poor households in rural areas in building food security are indeed dominated by women compared to men.

### **Literature Review**

Food safety is a vital need for all human beings. Ability to meet food needs is an important requirement for achieving decent health status. However, it is targeted that not all community households are able to easily meet food safety (Estrada-Carmona et al., 2020). If food safety is met, then distribution to all family members also needs to be considered according to gender sensitivity.

The issue of unequal distribution of food is shared among all family members due to minimal gender sensitivity can disrupt food security. Cultural social values are often considered as one of the sources of food distribution inequality. The problem of economic urgency also has the potential to lead to minimal gender sensitivity. The problem is prone to occur in poor

households, including farmers in rural areas. Therefore, there is a need for empowerment and the development of the diversification of productive livelihood patterns, the development of local resource -based micro –enterprises (Timler et al., 2020; Dumasari et al., 2020; A. Chaudhuri, 2016). . Gender sensitivity awareness socialization activities are also needed to improve the food security of poor farming households in rural areas.

Differences in gender participation in the development of food security for poor households are essentially determined from the ownership of gender sensitivity. Referring to the thought of Mudege et al., (2015), it is known that the notion of gender sensitivity is an important part of moral behavior, which functions as a determinant in making fair decisions by considering environmental factors other than personal abilities.

Gender sensitivity directs decision-making in determining behavioral orientation and participation tendencies based on one's ability to identify the ethical content of a particular situation. It is undeniable that the ownership of gender sensitivity is one of the moral foundations that motivates a person, both women, and men, to actively participate in solving various problems, including food insecurity through the development of food security at the national level. household level. So far, it is known that the ownership of ethical sensitivity in poor households is different from gender participation which is dominated by women compared to men.

The participation of women and men in improving the food security of poor households can be further optimized through the management of ethical sensitivity (Bouris et al., 2006). The ownership of gender sensitivity comes from the awareness and understanding that arises when beliefs, values , and social norms about the good and bad of food problems are inherent in everyone. The potential for gender sensitivity raises concern and responsibility so that family members are protected from the threat of food insecurity that has an impact on hunger, malnutrition, and other health problems, which then weakens the quality of human resources. Increasing women's participation in food security needs to pay attention to several factors that have a significant level of influence according to the results of research (Wright & Annes, 2016; Mudege et al., 2015), namely the intensity of informal education, income level, and length of time attending formal education.

Other factors are social interaction, communication, openness of attitude, job opportunities, and life experiences. Departing from the urgency of the problem, in the end, the background for determining the theme of this research, which focuses on the study of the mechanism for managing the ethical sensitivity of gender participation in increasing food security for poor rural households '(Mudege et al., 2018). Research on this theme is relatively

rarely done in-depth. In addition, the selected themes are relevant and support sustainable national development goals, especially in the agricultural sector, namely increasing food security at the micro-level through the use of local resources. The problem formulation can be drawn: why is the gender sensitivity condition of poor household members weak in the process of improving food security?

### **Research Methods**

The research design used a cross sectional study. The research method used is a descriptive case study. The research was conducted in village of Limpakuwus, the District of Sumbang, Banyumas Regency, Central Java Province. The location of this study was determined intentionally purposive sampling area with some criteria: 1) the relevance of the research problem, 2) there are local resources that have not been used optimally, 3) there is a gender sensitivity problem found. Data was collected by means of in-depth interviews with informants. Another primary data collection technique is observation or active observation of several food safety improvement activities.

The technique of determining the data source is done by purposive sampling technique. Some of the criteria that became the basis for consideration of selecting informants; (1) households with a total income of < Rp 700,000 per month, (2) the main income pattern of the head of the household (can be small farmers, labor farmers or non-farmers with a narrow area (<0.1 hectares) , (3) households registered as recipients of government assistance in connection with poverty alleviation programs (Direct Cash Assistance (BLT), Poor assurance, Poor Rice Assurance (Jamkeskin), Poor Rice (Raskin), food security credit and others) (4) Households with married couples who are still complete (5) live have lived in Limpakuwus Village for more than 3 years. All data collected in this research activity was processed using qualitative techniques with a cross-sectional study design and descriptive quantitative. Qualitative data processing techniques were carried out through the stages: data entry, data filtering, data grouping, data categorization , conclusions, retest and data presentation. Meanwhile, quantitative data processing techniques are carried out n through the stages: editing, coding, and data entry which is done manually. After the qualitative data was processed, it was immediately analyzed using the interactive model of analysis (M.B. Miles and A.M. Huberman, 1991).

### **Result and Discussion**

### **The social setting of Limpakuwus Village**

Banyumas Regency consists of 27 sub-districts, 331 villages (BPS Central Java Province, 2019). One of them is the Village of Limpakuwus. This village is located in the District of Sumbang, its position is at an altitude of about 750 meters above sea level. Limpakuwus village is 9 km from the sub-district government, 15 km from the city, and 17.5 km from the district. The land in Limpakuwus Village is generally hilly, rice fields are only 30% of the village area of 1,098,173 ha. The rest are schools, roads and football fields. Based on the Village Monograph Book, the population of Limpakuwus Village is 5,521 people and 1,749 families. With the number of men as many as 2,790 people and women as many as 2,731 people. With this data, it can be seen that the population growth of Limpakuwus Village tends to increase, from 5,122 people in 2018 to 5,521 people.

The majority of the people come from the local area. In general, 755 people are farmers/planters, besides that, other livelihoods such as civil servants and private sector employees are 208 people, and casual daily laborers are 740 people. The rest is taking care of the household and a part of the are students. The values and norms that are followed are generally Javanese cultural values that uphold harmony and respect for older people, but because of the increasing number of educated citizens, there is a slight shift in values and norms. Poor household farmers generally still use traditional farming methods with technical and forest-fed irrigation, so that poor farmers find it difficult to develop non-rice food diversification in rural areas.

They have a certain profile in several ways that reveal their potential and personal circumstances. Most of them have developed a diversification of non-rice livelihood patterns, such as animal husbandry, ornamental plants, part-time work according to their expertise, being temporary employees at new buildings and other agencies. The selection of staple food types in poor farming households is decided by deliberation by adult nuclear family members. Deliberations are not carried out directly but are carried out in conversations when the atmosphere is free. The types of staple foods that are determined in the family environment in Limpakuwus Village are rice, cassava, and corn.

These three types of staple food are consumed according to the availability and economic affordability of poor farmers. The dependence of staple food on rice types makes it difficult for poor farming families to switch to staple food types of cassava and corn. For poor farmers in Limpakuwus Village, rice is the most ideal type of staple food to be consumed by all family members, both in terms of socio-cultural feasibility and family health nutritional feasibility.

Rice that is processed into rice or sega in the Banyumas language is a staple food that is consumed at least once a day by poor farming families. Cassava and corn tend to be used as alternative staple food substitutes when rice is not available or difficult to obtain due to the problem of expensive and scarce prices.

The three types of staple foods that are usually consumed by members of poor farming families in Limpakuwus Village differ in determining the number of daily needs. Several informants explained that the amount of rice cooked for daily consumption does not only depend on the needs of the number of family members. For the informants, the availability of rice as a staple food is more determined by purchasing power and the ease of obtaining it from various parties. However, every poor farming household said that the daily demand for rice processed into rice amounts to between 0.25-2.5 kilograms. The availability of rice in relatively small quantities from time to time is divided sufficiently so that all family members get their share. For poor farming families in Limpakuwus Village, each type of staple food has a specific function. In Figure 1, it is observed the division of functions of the three types of staple food consumed by poor farmer households in Village of Limpakuwus.

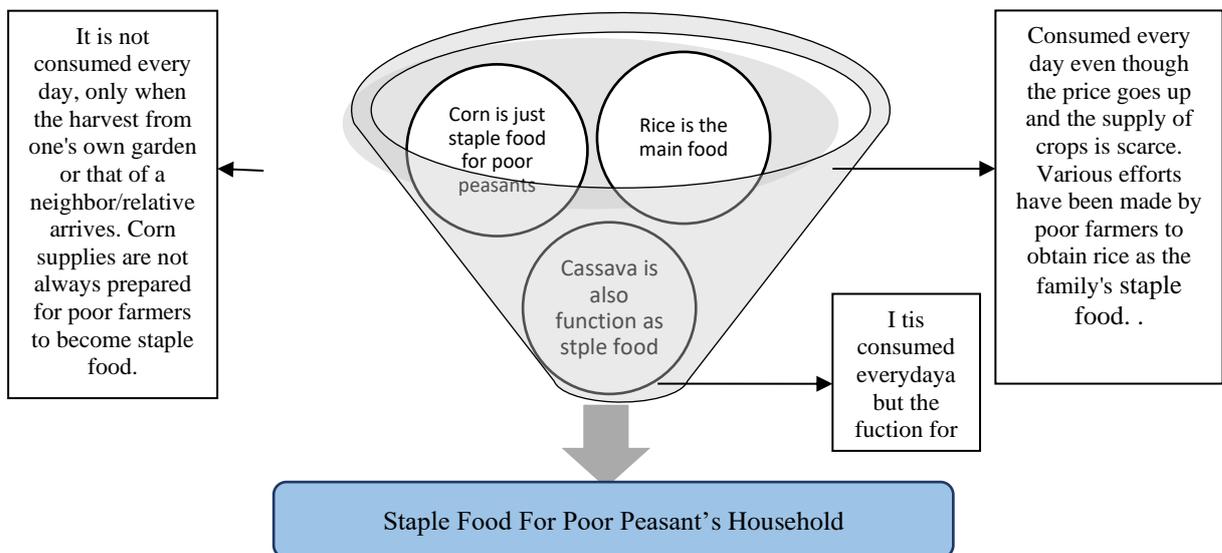


Figure 1. Functions of Staple Foods for Poor Farmers' Households in the Village of Limpakuwus

### Various Socio-Economic Factors

Poor farmer households in Limpakuwus Village have a tendency of behavior that is still fragile in developing non-rice food diversification. The fragility of behavior is reflected in the pattern of attitudes and knowledge as well as actions that stick to the principle of basic food ingredients needed to fulfill the daily consumption of all family members depending on rice. When facing a period of food insecurity, especially in the famine season, decisions and actions taken by poor farming households continue to maintain rice as a staple food. Likewise, when facing an increase in rice prices, decisions and actions taken always persist in meeting the needs of food made from rice. Even in conditions of economic urgency, poor farming households always find it difficult to diversify their food to non-rice (Memon et al., 2019; Khoshroo et al., 2018) Several socio-economic factors apparently influenced the behavior of poor farmers in developing non-rice food diversification at the research site. Some socio-economic factors have a supportive influence and some hinder the behavior of poor farmers to become fragile. Figure 2 shows the bond of influence of the various socio-economic factors in question.

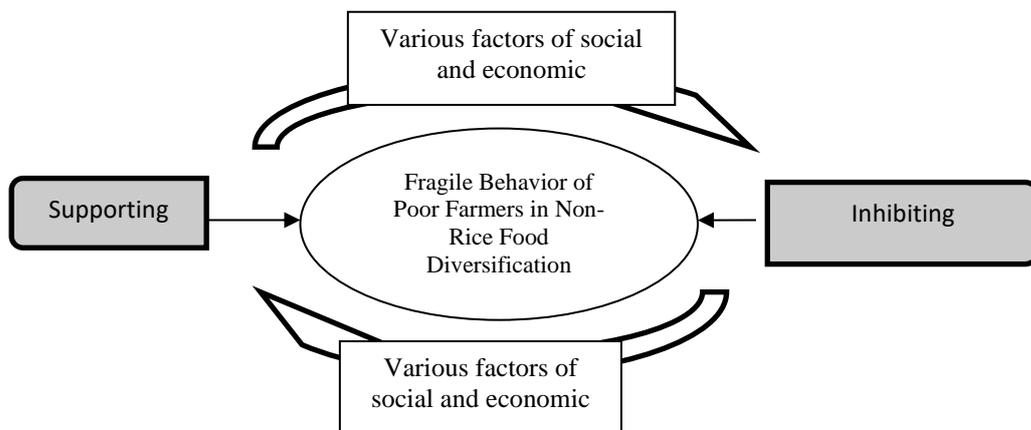


Figure 2. The Relation of the Influence of Various Socio-Economic Factors on Fragile Behavior Poor Farmers in the Development of Non-Rice Food Diversification

Several determinants that influence the behavior of fragile poor farmers in developing non-rice food diversification. Various factors analyzed have a socio-economic dimension and show the effect of encouraging the behavior of poor farmers to become more vulnerable to developing non-rice food diversification. Meanwhile, some other factors have the inhibiting effect. Table 1 lists several factors that encourage the behavior of fragile poor farmers in developing non-rice food diversification in Limpakuwus Village.

Table 1. Various Socio-Economic Factors that Drive Poor Farmers to Have Fragile Behavior in the Development of Non-Rice Food Diversification

Various Driving Factors	Dimension	
	Social	Economy
The general habit of the residents from Limpakuwus Village, that believe rice is the best staple food for their family.	√	
The social value of residents who think that if they don't eat rice they feel like they haven't eaten yet.	√	
The poor farmer's strong appetite for rice makes it difficult to replace it with other staple foods	√	
Although the price tends to be expensive, the informants are still relatively easy to obtain rice as a staple food for the family, namely through the following ways: Buy using partial payment or installments Loans without installments (pay at harvest) Provision of government assistance (Raskin).		√
The assurance of supply from other staple foods (cassava and corn) is uncertain because it depends on the yield of the crop.		√
The ability of poor farmers is weak in processing cassava and corn into good tasting food.	√	
The problem of economic urgency causes poor farmers to immediately sell all their harvests (cassava and corn) to stalls/traders.		√
The income from selling cassava and corn can be used by poor farmers for the purpose of buying or paying off rice debts at the food stall		√
Local social values view rice as a determinant factor of the socio-economic status of residents. People who can't eat rice are seen as very poor (destitute).	√	
Most of the land allocation (> 50 percent) is used for the cultivation of chili, tomatoes, long beans, grass and others. Meanwhile, the land area for the cultivation of cassava and corn tends to be small.		√

Poor farmers grow cassava and corn as intercropping which are not managed intensively.		
Proses pengolahan ubi kayu dan jagung menjadi berbagai jenis pangan a		

Source: Processed from primary data in 2021

The various driving socioeconomic factors described in Table 1 color the lives of poor farmer households in Limpakuwus Village as a whole. Habits and socialization factors that have long been absorbed form a behavior pattern that is reluctant to develop non-rice food diversification. The majority of poor farming households admit that they feel ashamed to consume other types of staple food (cassava and corn). Some social values that have long been attached to the lives of local villagers have shackled the behavior of poor farmers so that they seem to think that if they can no longer eat rice, their socioeconomic status is classified as very poor. In essence, the label of very poor status for the people in Limpakuwus Village is a disgrace and a social burden that should be avoided as much as possible. Poor farming households try to cover up their inability to consume rice as a staple food in various ways: borrowing rice, buying it by installments or seeking opportunities to get a share of the poor rice allotment from the government. It can be seen from the informan, namely DT stated that

*“It’s true that most people in this rural community have an opinion that someone havent completely eat if he/she have eaten rice yet”*

Based on the explanations of the informants, it is known that when the economic conditions of poor farmers' households are in crisis in economic problems, inevitably the decision to take action to fulfill basic food needs through diversification of non-rice food (cassava and corn) with rice simultaneously. Cassava and corn were chosen because these two types of staple food are always available in the gardens or yards of some of the informants. However, availability at the household level is often seasonal. Poor farming households who need cassava and corn as a complement to the staple food of rice tend to ask their neighbors or closest relatives without going through a loan. Once, during harvest time, a poor farming family who asked for this consciously gave cassava and corn to other residents in need. The gift is a form of return for the assistance received previously. The ease of obtaining cassava and corn is one of the social factors that prevent poor farmers from being vulnerable in developing non-rice food diversification in Limpakuwus Village.

The use of cassava and corn as a complement to staple food at certain times among poor farming families has been socialized for a long time. These two types of staple foods are seen as snacks that are suitable for consumption in the afternoon and evening. Cassava and cassava are considered filling quickly so they are chosen as alternative complementary foods. The processing process is also simple so that adult members of the farming household community are able to process it.

Table 2. Various Socio-Economic Factors Inhibiting Poor Farmers Have Fragile Behavior in the Development of Non-Rice Food Diversification

Inhibitant factors	Dimension	
	Social	Economics
Eating rice once or twice a day in small quantities is not enough to fill the stomach so that poor farming families are encouraged to consume cassava and corn as complementary staple foods (not substitutes).	√	
Although the process of processing cassava and corn into complementary foods is easy to do, the taste has not yet attracted the appetite of poor farmers to adopt them as substitute staple foods.	√	
The increase in rice prices does not match the purchasing power of poor farmers		√

Data resource: Primary data (to be analysed, 2021)

Another socio-economic factor that hinders the behavior of fragile poor farmers in developing non-rice food diversification in Limpakuwus Village is related to rice prices that tend to increase (although still to be controllod). Tho most informant stated that the increase in rice prices is not in line with the increase in the purchasing power of poor farmers who earn mediocre or even uncertain incomes every day. In Table 2, there are details of several socio-economic factors that have hindered poor farmers from behaving in a fragile manner in developing non-rice food diversification in Limpakuwus Village.

**Gender sensitivity and the Slow Improvement of Household Food Safety**

Starting from the results of data collection, it was revealed that the gender sensitivity awareness in all activities are different between man and women. In the process of crop production is also happening this gender sensitivity phenomenon (Khoshroo et al., 2018). Patriarchy culture is really influencing the distribution of food inside most of families among rural community. The process can be observed in the activities of farmers in activities of food safety as can be seen in Table 3.

Table 3. Activities for enhancing food safety – based on gender sensitivity

No	Activities for enhancing food safety	Actors in enhancing food safety	
		M	F
1	Preparation of food costs	vv	v
2	Food cost allocation arrangement	v	vvv
3	Food preparation	v	vvv
4	Food consumption menu settings	-	vvv
5	Food processing	-	vvv
6	Packaging for processed food	-	vv
7	Menu presentation	-	vv
8	Food consumption	vvv	vv

Data sources : Data Primary (2021, to be processed)

Information : v: The Little Role in activity, vv: The medium role of activity, vvv: The high role of activity

Table 3 shows that women's role activities are more dominant in increasing food security in each activity than men's. It can be explained from the informan, namely KTM:

*“Most people are still respecting their elder especially the male one, so gender equality is not fully known yet”*

The role of men that stands out is only in two activities, namely preparing food costs and food consumption (Mudege et al., 2018). There are several informants who participate in setting the allocation of food costs and food supply, but their activities are relatively small. Not all male poor farming households participated in the last two activities mentioned. Poor of woman, namely BSKR stated :

*“You see, sir, regarding household food safety, it has become a custom here, so it feels*

*like women are heavier than men, but that's the tradition, what can you do”.*

The role in finding income for the cost of food needs in the household of the informant still needs to be improved by gender. Some informant households have diversified their productive and creative livelihood patterns. The development of livelihood diversification has proven to be able to increase income, especially those using local resource raw materials such as coconut waste for handicrafts (Ju Fengfan, 2017; Dumasari et al.,2019). This additional income can be used to increase the cost of food safety for the family.

### **Conclusion and Recommendations**

Based on the results of the analysis of the entire study, it can be concluded that gender sensitivity is still dominated by women in eight activities to improve food security. Despite many limitations, women appear dominant in their role in improving food security. Eating rice in limited portions one to two times per day is still not enough to provide a feeling of satiety (not to mention its nutritional value), therefore farmers in poor (low-income) households supplement it with additional staple foods in the form of sweet potatoes and corn. For them, these foods are more of a supplement than a substitute for staple foods. The farmers are generally able to process the added food but have not felt an adequate taste image. Future recommendations that can be submitted relate to the need to increase gender sensitivity, especially for poor male peasants to play a greater role in increasing food security. To build gender sensitivity, there is still gender inequality in the form of gender stereotypes which causes women to carry a heavier burden than male peasants. It is necessary to improve food institutions that allow the role of male farmers to play a greater role concerning food security. In addition, it is also necessary to increase non-rice local food resources to increase food security in social communities in rural areas.

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