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To cite this article: I P Tamburaka *et al* 2020 *IOP Conf. Ser.: Earth Environ. Sci.* **454** 012022

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The role of institution on corn-based food diversification in Konawe District, Southeast Sulawesi

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Abstract. This study aims to determine the institutional role of corn-based food diversification in Konawe Regency. This research was conducted in several areas of corn production centres in Konawe District, Consideration of location selection was determined based on the criteria of the largest corn production centre and marketing centres. The number of respondents determined purposively each location, the total number of 80 respondents. Types and sources of data are secondary data and primary data. Qualitative analysis is used to explore the role of community organizations in the application of corn-based food diversification research results to social capital theory. Community group organizations are represented by farmer groups and PKK (family welfare empowering) women groups. The existence of social capital in the two groups is approached through understanding their mindset and actions in every activity carried out in the group. The results of the study concluded that the role of institutions (farmer groups and women's PKK) on maize processing as an alternative to rice needs to be improved through counselling and assistance from relevant agencies.

1. Introduction

The national food of policy has a tended to be biased towards rice, resulting in changes in the direction of food patterns in the community which so far have been sourced from local food. The conditions require the need for community food development strategies aimed at product development through local resource-based food diversity. The local food commodities such as corn, cassava, and sago and tubers have long been the backrest for meeting the needs of carbohydrates for the community. Corn as one of local food sources has the potential to continue to be developed and become a source of food diversification that supports national food security efforts.

Along with the national food diversification policy, the government of Southeast Sulawesi Province has planned for regions to develop various leading commodities, one of which is corn commodity. Konawe Regency is one of the districts in Southeast Sulawesi that has carried out the development of corn commodity. Corn is a leading agribusiness commodity in Konawe Regency, especially in the use of potential dry land. Potential corn harvest area in Konawe Regency reaches 1,488.5 ha, corn production and productivity in Konawe Regency over the past five years can be seen in Table 1.



Table 1. Area, production, and productivity of corn in Konawe Regency Year 2013—2017

Year	Area (Ha)	Production	Productivity
2013	364.84	254.44	1.43
2014	311.29	239.96	1.30
2015	232.44	280.74	0.83
2016	309.67	346.81	1.07
2017	587.54	409.76	1.44

Table 1 shows the fluctuations of corn area and production but with an increase trend. The corn tends productivity is still far lower than the potential production (> 3 tons / ha), indicating the great opportunity to be improved through intensification. In addition, the difference between corn prices at the farmgate still big indicating high cost and profit margin of the middlemen.

Corn is a potential crop because of its high productivity, potential land suitable for planting corn is very broad and the benefits are diverse both as food, food and energy. Therefore, corn is a food, energy and industrial crop that deserves priority development [1]

An increase in corn production does not have a significant impact if it is not matched by an increase in farmer's income. The price as a production incentive is crucial to the achievement of increasing corn production. If farmers do not get a favourable share of the sale price will result in the participation of farmers producing corn. Therefore, it is necessary to make efforts to increase the added value of corn commodities through the processing industry at the production centre level, so that farmers receive additional income.

So far, the parties that obtain the most added value from the corn processing are the livestock industry. For the use of corn as food can provide quite high added value (30-70%) compared to corn as animal feed [2]. The results of research on food diversification from corn commodity in the last five years are quite available. Developed corn preparations into corn chips [3]. Process corn into instant corn rice [4]. Developed bread fillers from corn starch and various pastries from corn [5]. Also developed corn marning. This study aims to determine of institution role of corn-based food diversification in Konawe Regency.

2. Research methods

This study was conducted in several centres of corn production in Konawe District, including Pondidaha District, Wawotobi District, Unaaha District, and Wonggeduku District. The selection of production centres is based on the large number of production centres in the region.

The number of respondents determined by intentional sampling as many as 20 people in each location. Qualitative analysis is used to explore the role of community organizations in the application of corn-based food diversification research results to social capital theory. Community group organizations are represented by farmer groups and PKK groups. The existence of social capital in the two groups is approached through understanding their mindset and actions in every activity carried out in the group.

3. Results and discussion

3.1. The role of community groups

Social groups are social entities that consist of two or more individuals who carry out social interactions so that division of tasks, structures and norms can occur and have a common goal. Interaction can lead to cooperation if each member understands the goals imposed on the group. The existence of mutual respect among members. Organizations that develop community groups in the research location are farmer groups

and PKK ladies' groups. The developing social group is also a representation of social entities that are formed through two different types of approaches. Farmer groups are groups formed by all members (bottom up). Citizens who are members of farmer groups have the same background and the same goal, which is to make a living in agriculture. Whereas the PKK group of women is the group formed by the government (top down) in this case being the smallest social government entity at each village level.

The results showed that those from the two social groups, respondents from Pondidaha and Wawotobi are a combination of farmer groups (men) and PKK (women). While respondents in Wonggeduku District were members of the PKK group of women. At the stage of paying attention (attention) each group showed a fairly high level of understanding (> 60%) at each location. Respondents understand the process of making corn processed products (instant corn rice, corn sponge cakes, and other processed corn) quite well.

The PKK women group in Unaaha showed a higher level of activity in the interest in making corn-based food preparations. However, at the stage of trying out, PKK group members in Unaaha showed a lower rate, reasons for fear of failure to dominate the cause of respondents' reluctance to try this corn-based food processing. In the trial phase, most respondents (> 60%) in various locations showed that they had conducted their own practices in processing corn material. In the final stage, the level of understanding of processed corn as one of the business activities cannot be measured considering it is a long-term work. This adapted stage indicator is only represented by a plan to develop a corn processing business. Most respondents (> 66%) indicated that they planned to develop a corn processing business development plan.

It is shown that based on some experience it was reported that the analysis could be done at least 3 years after the process began with the socialization stage. Even though the team has withdrawn its members continue to play a role, namely as advisors or consultants if needed by the community.

3.2. Institutional empowerment through social capital

Indicators of institutional success can be known through performance / organizational performance. An organizational system consists of several elements: (1) institutional elements, (2) objectives, (3) participants, (4) technology, and (5) environment (natural, social, and economic). If in a certain period it is very difficult to change the technology and characteristics of participants, based on such a situation, institutional engineering is expected to be able to produce the desired performance through controlling the sources of interdependence generated by situations inherent in commodities, technology and participants that illustrate adaptability and participant innovation.

Community empowerment efforts need to be seen as a unified integrated entity. The institutional system approach is a new paradigm involving overall interdependence between subsystems. Institutional performance plays an important role in the application of new and renewable technologies through the involvement of participants (the participation of each actor) will be a key energy towards the goals set and produce optimal performance. The synergy takes place in equality and justice so that the community gets adequate benefits.

Food diversification can be well developed when there is high institutional potential, the ability to implement and the perceived use of the institution. The existence of social capital in farmer groups and PKK can be influenced by existing social structures. Social capital is a "social structure resource" that produces returns for individuals in a specific action. Coleman stresses that social capital is defined based on its function, that social capital is not a single entity, but rather various entities that are different and have two important characteristics, namely: social capital which contains aspects of social structure and social capital that facilitates certain actions of individuals in the structure.

Social groups that are able to take advantage of social structures in each of its activities then these activities can run smoothly. While the group cannot take advantage of the existence of the social structure,

the activities carried out cannot run smoothly. Thus the existence of social capital must be within the existing social structure.

Activities and dynamics within the group because of strong trusts among members, existing trusts are also supported by social experience, neighbourliness, and expectations of members. Together with other supporting factors, such as: social group goals, employment as farmers, and the existence of effective social control mechanisms, trust causes social capital of farmer groups to work. In the PKK group all activities are determined by the management, so that the manager does not understand the desires and abilities of the actual members, as a result many activities are not in accordance with the prevailing social structure. The actions taken by the management will affect the level of trust between members, as well as the existing social control mechanisms, which can be effective.

Constraints originating from the internal management are also influenced by other organizational constraints such as the number of members covering the whole village, and the objectives which are still abstract and unclear. These constraints make the supporting factors of social capital run ineffective. Furthermore, existing institutions in the community have not been able to be optimal in their role as agents of reform in adopting the results of new technology / research.

Planned, organized, measured, facilitated, and mediated long-term work is needed through the involvement of a team of assistants to ensure that new technologies and innovations can be adopted by the community to achieve the stated organizational goals.

4. Conclusion

The results of the study concluded that the role of institutions (farmer groups and women's PKK) on maize processing as an alternative to rice needs to be improved through counselling and assistance from relevant agencies.

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Acknowledgments

Thank you to the PKK Women's, Farmer Groups and the District Staff for helping to provide information for our research, we also thank our friends who have helped us in completing our research.