

Empowering Farmers Community: Science And Technology (IbW) for The Region in District Suppa Pinrang South Sulawesi, Indonesia

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ABSTRACT— *Science and technology for the Region (IbW) in District of Suppa Pinrang aims to: a) gaining their knowledge and skills in improving agricultural and post-harvest processing of the agricultural products; b) implementation of government programs that "picking, process and sale ", and c) find solution to the problems faced by the district government or community and directly affect people's quality of lives. The problems are: a) low level of social welfare in the IbW region especially farmers community, b) the government has not implemented the program "picking, process and sale ", and c) lack of knowledge and skills in the post-harvest processing of agricultural products. The method used is "demplot" done through education, training, mentoring, and service to the farmer community. Education and training are carried out to the group consist 15 persons for 5 days and mentoring regularly every month for 10 months (March-December 2012). The Outputs are: 1) improved skills and changed insight in farming that other crops process can be done as well, and 2) other agricultural products such as: rice flour and "baruasa" traditional cakes.*

Keywords—Science and Technology for The Region(IbW), District of Suppa, Community Empowerment, and Farmers Community

1. INTRODUCTION

Science and technology for the Region (IBW) in District Suppa Pinrang is one of manifestation that carried out by the vision of Directorate of Research and Community Service, the Directorate General of Higher Education (DP2M Director General of Higher Education, 2011), as follows: a) create independence, comfort, and public welfare through the synergy of expertise, community colleges (PT), and the ability and policies of local government (district government) as set out in RPJMD, non RPJMD and potential community and b) find solution to the problems faced by the district government or community and potentially directly affect the quality of people's lives. Therefore, the implementation of this program is a synergy between the Institute of Community Services of The State University of Makassar (UNM LPM) as an extension of DP2M and district government of Pinrang.

IbW target are able to make the local government program and non-year plan based RPJMD to be successful and empower potential areas. Some of the Medium Term of Pinrang Plan Development year 2009-2014, which became the priority are: to increase the effectiveness of poverty reduction plan through poverty movement program include: marketing and trading agricultural products, construction management and marketing of the post-harvest agricultural products, and fostering partnerships in businesses owned by farmers, namely: 1) Agribusiness Revolution, Agro-Industry and Cultural Living program include: developing agribusiness process and products marketing, development and marketing of Forestry products, developing product manufacture industry either in small-scale or medium and large scales, and 2) improving marketing ability in agricultural production include: information management in market demand for agricultural community production.

Referring to RPJMD, the local government agreed with the LPM UNM to chose Pinrang District Suppa as the location for the implementation of Pinrang IbW program, located approximately 185 km from the provincial capital of South Sulawesi.

The District Suppa was chosen supported by several factors, including: 1) the region is one of the areas with population remain below the poverty line (Central Bureau of Statistics (BPS) Pinrang, 2010) and 2) District Suppa has a variety of resources with huge potential to be developed as agricultural, plantation and marine fisheries.

The potential of agricultural sector in District Suppa especially with crops commodity is very large so it can be relied upon as a stimulator of the local economy. The potential and the superiority supports Pinrang as one of the major production centers of rice cultivation in South Sulawesi. The harvest area for rice production in 2008 covered an area of 25,259 ha and production capability as much as 90,115 tons. In addition, they are also produced 4.003 tons of cocoa and 1,987 tons of coconut hybrids. Corn can be their potential commodity as well amounted to 3,718 tons with in area of 904 ha in 2008. All these are in reason processing of agricultural products particularly rice is one of aspect that was developed in the IbW program in District Suppa.

2. REGIONAL ISSUES

Based on our analysis on the situation, it is known that the major income level of the population in the district is still below standard. Although surrounded with a variety of potential natural resources but not significantly affect income and improve quality of living standards for people in the region. Community in the region has less received counseling and training.

Based on this, the team partner with local government classified major issue priorities that can be solved together. Some of the main problems to be dealt with in IbW program for agriculture are: a) low level of social welfare especially the farming community, b) they don't implement the government "picking, process and sale" program yet, and c) lack of knowledge and skills in increased post-harvest processing of the agricultural products.

Science and technology for the Region (IbW) in District Suppa Pinrang aims to: a) gaining their knowledge and skills in improving agricultural and post-harvest processing of the agricultural products; b) implementation of government programs that " picking, process and sale ", and c) find solution to the problems faced by the district government or community and directly affect people's quality of lives

3. ACTIVITIES AND METHODS

- a. Collecting data about: potential of natural resources, knowledge and community skills, business motivation and behavior. The used method is directly observation on-site.
- b. Collecting data: agricultural potential and the results on field observations method.
- c. Undertake action:
 1. Counseling and training to the target audiences to cultivate rice into rice flour.
 2. Counseling and training for mothers and drop-out young girls about traditional baking from rice flour.
- d. Mentoring, follow up the activities that carried out in the training, hence knowledge and skills applied to remain produce rice flour or baruasa cake.

4. IMPLEMENTATION OF ACTIVITIES

Training activities and price flour production held for seven days, April 27th to May 2nd, 2012. This event was attended by 15 peoples consist of 2 men and 13 women. The main tool was a set of flour mill, while its main ingredient was rice. The method used was lecturing, discussion and demonstration. First to second day was equipment introduction and provision of theory, then on the third day until the seventh conducted demonstrations and practiced start from

prepare the rice and the machine, then followed by milling the rice. After that, drying the flour until it reaches about 14% moisture to have a durable and good quality product. Lastly, the dried rice flour was packaged and ready to sale.

To compensate for production of flour that much, then on the 7th until May 11, 2012 continued by training and mentoring for produce traditional cake using rice flour as a basic ingredients named "baruasa". This type of cake is rarely found in the community nowadays, and pretty much tasty such like cakes in supermarket or mall.

The main tool used are a gas oven and stove, while its main ingredients are rice flour, granulated sugar, brown sugar, and eggs. The products are baruasa cake white sugar flavor and brown sugar flavor with fine packaged. The next step is assistance to maintain the continuity of the program thus they still produce it from time to time.

5. OUTPUT

Outcomes in terms of the management aspects:

1. Increasing knowledge, abilities, skills, and behavior in the process of agricultural resources.
2. Create community which able to manage agricultural resources productively in a purpose to increase household incomes and revenues through mentoring and training activities as an IbW program implementation.

Outcomes of the aspects of the product are:

1. Rice flour, and
2. "Baruasa" Traditional cake (Figure 1)



Figure 1: Produc rice flour and "Baruasa" Traditional cake

6. CONCLUTIONS

This activity is mandated by the Directorate General of Higher Education, Indonesia, to the executor of activities (lecturer Makassar State University). Implementation of activities is based on the potential fields supported by technology from universities. Therefore, the chances of this activity must be enormous because of the potential of natural resources, especially in Sub Suppa is abundant. In addition, population growth leads to high enough human resources or manpower that much. Furthermore, the products produced in the form of typical foods that taste bad to have broad market opportunities both locally, nationally and even be exported. However, the challenges faced is the low quality of labor, or not trained, relaxed cultural community, and the technology is still lacking. Therefore, the sustainability of activities require attention from both private and government, especially local government

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8. REFERENCES

- [1] Bureau of Statistics, 2010. Pinrang in Figures. Not published.
- [2] Direktorat Research and Community Service, the Directorate General of Higher Education, 2011. Free Community Service.
- [3] Government Pinrang, 2009. Medium Term Development Plan 2009 - 2014. Not published.