



# Community Economic Empowerment With Maize Cultivation In Nagari Tuik Iv Koto Mudiek, Batang Kapas District, South Coast Regency

## Pemberdayaan Ekonomi Masyarakat Dengan Budidaya Jagung Di Nagari Tuik Iv Koto Mudiek Kecamatan Batang Kapas Kabupaten Pesisir Selatan

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Article History:	Abstract			
Received:	The community service carried out by the Ekasakti Padang University Team is in the			
1-8-2022	Nagari Tuik area, Batang Kapas District. the northern part of the South Coast District.			
Revised:	The community in general is farming, because the agricultural land is very large,			
23-11-2022	namely 256 ha. There are still many people who cultivate rice fields, not many have			
Accepted;	cultivated corn which further increases income. Because the base price of corn is more			
20-12-2022	stable than the base price of grain. The base price of flat corn alone is between Rp.			
Published:	2500 – Rp. 5000 a kilo. In addition, corn can be processed into various products such as			
29-12-2022	steamed brownies made from corn and sweet corn pudding. This service socializes the			
	cultivation of sweet corn plants and their processing so that they can increase people's			
	income and increase knowledge about corn cultivation. Knowledge increased from			
	24.6% to 80.6%. And people's income also increased with the production of steamed			
	brownies with a selling price per unit of Rp. 2,500. BEP will be achieved only when			
	123 pieces are produced. So that if it is produced more than that, it has already			
benefited. With this sweet corn cultivation program, it can be a com empowerment program				
	Abstrak			
	Pengabdian masyarakat yang dilakukan oleh Tim Universitas Ekasakti Padang adalah			
di daerah Nagari Tuik, Kecamatan Batang Kapas. daerah bagian utara dari				
Pesisir Selatan. Masyarakat pada umum nya Bertani, karena lahan pertanian				
	luas yaitu 256 Ha. Masyarakat masih banyak yang mengolah sawah, belum banyak			
	yang mengusahakan budidaya jagung yang lebih meningkatkan penghasilan. Karena			
	harga dasar jagung lebih stabil dari pada harga dasar gabah. Harga dasar jagung pipilan			
	saja antara Rp. 2500 – Rp. 5000 satu kilo. Disamping itu jagung dapat diolah menjadi			
	berbagai produk seeperti brownis kukus berbahan dasar jagung dan pudding jagung			
	manis. Pengabdian ini, mensosialisasikan budidaya tanaman jagung manis dan			
	pengolahannya sehingga dapat meningkatkan penghasilan masyarakat dan			
	meningkatkan pengetahuan tentang budidaya jagung. Pengetahuan meningkat dari			
	24,6% menjadi 80,6%. Dan pendapatan masyarakatpun meningkat dengan produksi			
	brownis kukus dengan harga jual per unit nya Rp. 2.500. BEP akan tercapai hanya bila			
	diproduksi 123 buah. Sehingga bila diproduksi lebih dari itu sudah mendapatkan			
	keuntungan. DEngan begitu dengan program budidaya jagung manis ini dapat			
	merupakan program pemberdaayaan masyarakat.			
	Kata kunci: pemberdayaan, jagung manis, budidaya			

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#### PRELIMINARY

Nagari Tuik is located in Batang Kapas District which is the northern part of Pesisir Selatan Regency where 90% of the population are farmers. The area of agricultural land is 256 Ha with semi-technical irrigation. Rice farming is carried out throughout the year as much as 2 x MT/TH. This area is directly adjacent to the southern part of Pesisir Selatan Regency, Geographically it is located at 100 degrees 34.16 seconds - 100 degrees 53.62 seconds East Longitude and 1 degree 15.00 seconds - 1 degree 38.00 seconds South Latitude with an area of 395.07 km2 or 6.24% of the Regency Area. South Coast. To the north it is bordered by IV Jurai subdistrict, to the east by Solok Regency, to the south by Sutera District and to the west by the Indonesian Ocean. The topography of the area is flat and hilly with a height of 2-25 m above sea level. When viewed in terms of land use, the forest area is 68.11% of the area. Land for agricultural cultivation 21.45%. , 1.28% settlement and 9.16% shrubs. There are 3 rivers flowing through this area, namely the Batang Kapas river, the Tuik river and the Jalamu river. The average rainy day is 11.42 days and the rainfall is 347.75 mm. Nagari Tuik IV Koto Mudiek has several farmer groups, one of which is the Balakang Rumah farmer group, which has 60 members who own paddy fields and fields. The fields are located in the hills and under the hills lies the area of rice fields legality of the Rear of the House farmer group based on the Wali Nagari Decree no. 140/30/KPTS/WN.T.IV/KM/XI/2018 chaired by Mr. Basril. So far, this farmer group has focused more on processing rice fields in the form of rice farming. From an agro-climate perspective, this area has the potential for agricultural development

Based on the wishes of the group members who have a lot of vacant fields, and for crop rotation after rice. group members wish to grow corn. Economically, corn cultivation is profitable (1) due to the large demand for corn-based broiler and egg-laying chicken feed and the stable price of shelled corn, which ranges from Rp. 2,500 - Rp. 5,000/kg.

The problems faced by farmers in carrying out corn cultivation are the lack of soil processing facilities, knowledge and skills in corn cultivation (2), use of fertilizers and alternative fertilization (3), spacing of plants (4) and eradication of pests and diseases in corn plants which is still limited (5,6). When viewed from the aspect of the farmers' willingness and encouragement from the village apparatus, they want to carry out corn cultivation activities in paddy fields after planting rice and in fields that have not been used for several years.

Based on these problems, the team from the Faculty of Agriculture, University of Ekasakti was called upon to do community service in this Nagari, especially in the Balakang Rumah group. The team collaborated with the West Sumatra Provincial Agriculture Office to get hand tractor assistance and guidance to farmers in corn cultivation by the Ekasakti University Faculty of Agriculture team. For further assistance is carried out so that corn cultivation can be carried out on an ongoing basis which in turn can increase the income of household farmers.

Based on the results of discussions with farmers who are partners in this activity as well as direct observations in the field, there are several problems related to farming in the backyard group. The problems that have been identified are as follows:

- 1. Lack of farmers' access to knowledge and skills in the technical implementation of corn cultivation.
- 2. Lack of land productivity because it has been abandoned which was used for farming.
- 3. The inability of farmers to buy machines for tillage such as hand tractors. The economic situation of farmers is uncertain, so that the ability to buy production facilities decreases.
- 4. Agricultural land that has not been planted for a long time (idle land) so that if it is planted it will have a positive impact on the farmer's economy.

From some of these problems there are some that can be overcome so that they are used as the formulation of the problem in this activity, namely

- 1. How to cultivate corn according to cultivation standards?
- 2. How can farmers be able to apply good farming management so that it has an impact on household income?

The purpose of this activity is to socialize corn cultivation techniques so that farmers can carry out these activities on their land. And socialize better business management, so that the business can generate additional income for households



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### METHOD

- The implementation method is by
- 1. Socialization that involves the maximum participation of partners in all activities. In this case the socialization of sweet corn cultivation and the socialization of sweet corn processing into steamed brownies made from sweet corn and sweet corn pudding. Likewise the socialization of calculating BEP.
- 2. Assistance in order to create independence in the sustainability of activities.
- 3. Doing partnership cooperation, between farmers and universities, and nagari guardians

### **RESULTS AND DISCUSSION**

Below is a photo of Community Service activities

Sweet corn cultivation outreach activities.



Figure 1. Corn Cultivation PKm Participants Farmers' group in Nagari Tuik.



Figure 2. Submission of socialization material for sweet corn cultivation..









Figure 3. Group photo with the Agricultural Service Assistance hand tractor

Assistance for community independence by providing skills in processing sweet corn into products that can generate income.

Steamed Brownies Products



Figure 4. Steamed brownies made from sweet corn produced by the fostered community



Figure 5. Sweet corn-based pudding made by the assisted community

The increase in the knowledge of the assisted community is measured by holding a pre-test before giving the material and a post-test when the material is finished, with the following results with a total of 15 questions:





 Table 1. Knowledge Test Results Before and After Health Education Activities (number of questions answered correctly)

No	Respondent Name	Prior Knowledge of Counseling		Knowledge After Counseling	Percentage
			Percentage		
1.	Jusma	2	13	8	53
2.	Upiak	4	26	7	46
3.	Jon	2	13	9	60
4.	Epi	3	20	8	53
5.	Irma	1	6	7	46
6.	Siti	4	26	9	60
7.	Ani	3	20	9	60
8.	Saribanun	2	13	8	53
9.	Doni	4	26	7	46
10.	Nop	3	20	7	46
11.	Edi	3	20	8	53
12.	Mul	2	13	9	60
13.	Pit	1	6	8	53
14.	Udin	2	13	9	60
15.	Pono	3	20	8	53
	Jumlah	37		121	
	Rata-rata	2,46	24,6%	80,6%	

It can be seen in Table 1 that the percentage of public knowledge about sweet corn cultivation is still low. Questions that can be answered during the pre test are only 1 to 4 questions that are answered correctly. If presented is 24.6%. But after being given socialization to them, their knowledge will increase by answering 7 to 9 questions correctly. If the percentage is 80.6%.

Making steamed brownies made from sweet corn Ingredients:

- 1 shaved, steamed briefly
- 2 eggs
- 1 sachet of white sweetened condensed milk
- 4 tbsp granulated sugar
- 5 tbsp flour
- 3 tbsp oil
- 1 tbsp Dancow powdered milk
- 1/2 sdt baking powder
- 2 tbsp water, a pinch of salt

Determine BEP Steamed Brownies. From the materials needed to make it, the capital can be estimated as follows:





 Table 2. Estimated cost of making steamed brownies

No	Material name	Price forecasts
		(IDR)
1.	1 buahjagung manis	1.500.
2.	2 butir telur	5.000.
3.	1 sachet susu Kental manis	1.500.
4.	4 sendok makan gula pasi	r 500.
5.	5 sendok tepung terigu	500.
6.	3 sendok makan minyak	500
7.	1 sendok makan susu bubuk Dancow	1.000.
8.	1 sdt baking powder	200
9.	garam	100
10.	packing	4.000.
11.	Bahan bakar	5.000.
	Jumlah	19.300
	Untuk 30 buah kue	Untuk 1 unit kue = 643

Break Even Point (BEP) Unit = Fixed Cost : (price/unit - variable cost/unit)

Variable Cost/unit = Rp. 1,643 Raw Material Cost : 643 Direct Labor Cost : IDR 5,000 Other Fees: IDR 500

Price/unit = 2500

Monthly fixed costs Depreciation Rp. 5,000. Electricity Rp. 100,000. Total Rp. 105,000.

BEP = 105,000. divided (2500 - 1643) = 122,5 unit = 123 unit

That is, it will return the investment if it has sold 123 pieces. And it will be lucky if more than 123 units are sold. So that by making more than 4 doughs, you can already make a profit. In this way it can increase people's income.

#### CONCLUSION

This community service activity can increase knowledge in sweet corn cultivation by 80.6% from the previous 24.6%. Furthermore, it can increase income by being able to process sweet corn into steamed brownies and corn pudding, so that it can increase income and increase community empowerment efforts.

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