

Increasing Entrepreneurship and Local Food Security Through Optimising Taro Based on An Integrative Agribusiness System

(Meningkatkan Keusahawanan dan Keselamatan Makanan Tempatan Melalui Pengoptimuman Taro Berasaskan Sistem Perniagaan Tani Bersepadu)

ALDA DERIA, RENDI PRAYOGA, AUFA RAFIQI, AMANDA ELZA PRATIWI, MUHAMMAD ZIKRI & SISKALICIA FARMA*

ABSTRACT

Mentawai is an area where the majority of the population works as fishermen and farmers. The superiority of the agricultural sector in Mentawai is supported by the soil conditions that are fertile enough to be planted with various types of plants. One of the crops is the taro plant, which the Mentawai people utilise as a staple food. People tend to prioritise imported rice in Mentawai because local rice production is insufficient to meet basic needs. The scarcity of staple food becomes apparent when the ship that transports goods to Mentawai docks only once a week. To address these issues, a program was developed to empower Dasawisma women, who act as cadres for family entrepreneurship and local food security, through training and mentoring activities. This program focuses on optimising taro through an integrative agribusiness system. The participatory observation method used involves students going directly to the field and participating in the implementation of the program, which includes training, mentoring, and collaboration with taro farmers. The program provides support for product processing and marketing diversification. Additionally, the community gains knowledge and skills in processing taro into various products such as taro chips, flakes, jam, cakes, and flour.

Keywords: Agribusiness, cultivation, taro

ABSTRAK

Mentawai merupakan kawasan yang majoriti penduduknya bekerja sebagai nelayan dan petani. Keunggulan sektor pertanian di Mentawai disokong oleh keadaan tanah yang cukup subur untuk ditanam dengan pelbagai jenis tumbuhan. Salah satu tanamannya ialah tanaman talas yang digunakan oleh masyarakat Mentawai sebagai makanan ruji. Orang ramai cenderung mengutamakan beras import di Mentawai kerana pengeluaran beras tempatan tidak mencukupi untuk memenuhi keperluan asas. Kekurangan makanan ruji semakin ketara apabila kapal yang mengangkut barang ke Mentawai berlabuh hanya seminggu sekali. Bagi menangani isu ini, satu program telah dibangunkan untuk memperkasakan wanita Dasawisma, yang bertindak sebagai kader untuk keusahawanan keluarga dan keselamatan makanan tempatan, melalui aktiviti latihan dan bimbingan. Program ini memberi tumpuan kepada mengoptimumkan taro melalui sistem perniagaan tani integratif. Kaedah pemerhatian ikut serta yang digunakan melibatkan pelajar turun padang dan mengambil bahagian dalam pelaksanaan program yang merangkumi latihan, tunjuk ajar dan kerjasama dengan petani keladi. Program ini menyediakan sokongan untuk pemprosesan produk dan kepelbagaian pemasaran. Selain itu, masyarakat memperoleh pengetahuan dan kemahiran dalam memproses taro menjadi pelbagai produk seperti kerepek talas, kepingan, jem, kek, dan tepung.

Kata kunci: Perniagaan tani, penanaman, keladi

INTRODUCTION

Mentawai is an area where most of the population works as fishermen and farmers (Erwin, 2015). Due to this area's lack of fertile soil nutrients, only a few plants can be planted (Rafnel Azhari et al., 2017; Badan Pusat Statistik Kabupaten Kepulauan Mentawai, 2019). One type of plant is the taro plant, which the Mentawai people used as a staple food in ancient times (Ade Irwandi & Erwin, 2022). Currently, people prioritise rice imported from outside Mentawai (Badan Pusat Statistik Kabupaten Kepulauan Mentawai, 2019). Rice production in Mentawai is insufficient to meet basic needs. This shortage is caused by the failure of rice harvesting in Mentawai (Rafnel Azhari et al., 2017). Anxiety about the scarcity of basic needs is increasingly felt when ships transporting goods to Mentawai only dock once a week. Another problem or obstacle is the high poverty rate in Mentawai, the lack of productivity of 12 Dasawisma in this area, and the lack of public knowledge about food processing from taro plants (Ade Irwandi & Erwin, 2022). Based on these problems, efforts were made to empower Dasawisma women who act as family entrepreneurs and local food security cadres through training and mentoring activities to optimise taro-based taro utilisation in integrative agribusiness systems (Kementerian Pertanian Inspektorat Jenderal, 2021). This program can increase community knowledge about food processing so as to optimise the economic welfare of the community through the abundant taro commodity.

RESEARCH SIGNIFICANCE

The objectives of this program are a). Forming a cadre of family entrepreneurs and local food security through optimising taro plants based on an integrative agribusiness system. b) Increase partner knowledge in diversifying processed foods from taro c) Increase local food security by utilising the potential of taro commodities and increasing land productivity in Sipora Jaya Village.

MATERIALS AND METHODS

The method used is participatory observation, where students go directly to the Sipora Jaya Mentawai islands field and are involved in implementing the programs. Involved in the process of implementing programs such as training, mentoring and cooperation for taro Handling, taro processing, packaging elements, packaging design, product packaging, product photos and online Sales conducted with Sipora jaya PKK mothers with training in making products such as chips, serundeng, sponge, jam and flour from taro.

RESULTS AND DISCUSSION

Based on the results of the training program given taro processing and marketing products in the village of Sipora Jaya Mentawai island.



FIGURE 1: Taro Processing and Marketing

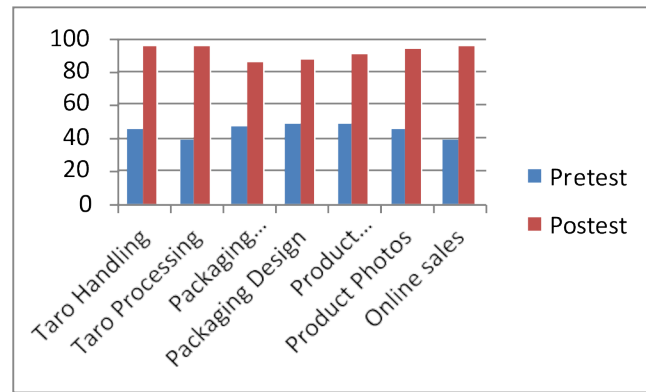


FIGURE 2. Taro Processing and Marketing

Taro processing and marketing, based on the results of the pretest and posttest above, namely the provision of training to PKK mothers in one of the villages in the Mentawai islands, shows an increase in the knowledge of PKK mothers about product processing and marketing which was initially 44.28% to 90.56%. processing and marketing of taro products that have progressed in terms of various aspects, starting from taro handling, taro processing, packaging elements, packaging design, product packaging, product photos and online sales, each of these aspects has increased knowledge for the Mentawai community.

The provision of product processing and marketing training starts from preparation pre-production, production and preparation for production distribution, before producing a food to the wider community, what needs to be known first is the importance of following the SOP of product processing before producing a product for distribution and need to pay attention to what are the considerations that have a big impact after production such as when using raw materials, namely taro, choosing the type of taro used, the need to know the peculiarities of taro, one of the peculiarities of taro in the Mentawai islands is that it should not be washed or processed immediately after peeling, this is done so that the taro produced and to be processed does not cause itching for the consumer, namely the progress of public knowledge about handling taro before processing as evidenced by the percentage of knowledge which was originally 44% to 94%.

Production process, the production process is one of the processes or parts of training that is no less important or the center of activities that need to be considered, namely determining what products will be marketed. Taro processing and marketing training in the Mentawai islands is starting from the production

of taro chips, taro flakes, taro jam, taro cakes and taro flour from taro commodities there in addition to determining the product other things that support is labeling packaging, attractive packaging design and product packaging. Each of these points is important to consider when wanting to market products to the wider community because in addition to delicious products, consumer interest and attraction also need to be considered. This series, there is also progress in the understanding and knowledge of PKK mothers as evidenced by the increase in percentage increases, starting from product processing from 38% to 94%, packaging elements from 46% to 84%, packaging design from 48% to 86%, how to package products from 48% to 90%.

Product distribution, after production, the next thing to do is how the products we create reach consumers, how consumers know that we have produced a product, one of which is to spread the product through marketing both online and offline. Online marketing is by using or creating product photos that attract consumers by providing training in making attractive catalog photos so that even in a long distance it can circulate products widely, besides that offline distribution can be done by placing products in stores, souvenir centers and can even be distributed evenly by providing training on how to obtain production permits, distribution permits, even halal permits for a product, so that the product will be able to spread the product more widely, which answers the challenges of the surrounding community due to a lack of understanding of how to spread the product not only in one place. From the provision of this training, it can also be seen that there is progress in community knowledge, starting from product photos which were originally 44% to 92% and online sales from 38% to 94%.

CONCLUSION

The taro product processing and marketing training program can increase the knowledge and skills of the community in Sipora Jaya, Mentawai Islands, especially PKK mothers so that they can increase local food security into various kinds of processed taro production ranging from taro chips, taro flakes, taro jam, taro cakes and taro flour to increase the entrepreneurial spirit for PKK mothers there.

ACKNOWLEDGEMENTS

The authors would like to thank Program Kreativitas Mahasiswa of Learning and Student Affairs, Ministry of Education and Culture, for funding this program with a number 2383/E2/DT.01.00/2023, Rector of Universitas Negeri Padang, Student Affairs of Universitas Negeri Padang, Department of Biology, FMIPA UNP.

REFERENCES

Ade Irwandi, & Erwin, E. (2022). Pangan lokal non beras: Ketahanan pangan rumah tangga pada era pandemi Covid-19 di Mentawai. . *MUKADIMAH:*

Jurnal Pendidikan, Sejarah, dan Ilmu-ilmu Sosial, 6(1), 101-113. <https://doi.org/https://doi.org/10.30743/mkd.v6i1.5013>

Badan Pusat Statistik Kabupaten Kepulauan Mentawai. (2019, September 26). Kecamatan Pagai Utara dalam angka 2019. Badan Pusat Statistik - Kabupaten Kepulauan Mentawai <https://mentawaikab.bps.go.id/publication/2019/09/26/5352c356b50492738b135dd9/kecamatan-pagai-utara-dalam-angka-2019.html>

Erwin, E. (2015). Model pemberdayaan masyarakat Mentawai melalui penguatan kelembagaan lokal di Pulau Siberut. . *Sosio Konsepsia: Jurnal Penelitian dan Pengembangan Kesejahteraan Sosial*, 4(2), 1-14. <https://doi.org/https://doi.org/10.33007/ska.v4i2.112>

Kementerian Pertanian Inspektorat Jenderal. (2021). *Keputusan Menteri Pertanian Nomor 484 Tahun 2021 tentang Perubahan Kedua Atas Keputusan Menteri Pertanian Nomor 259 Tahun 2020 Tentang Rencana Strategis*. Kementerian Pertanian Inspektorat Jenderal Retrieved from https://itjen.pertanian.go.id/wp-content/uploads/2021/01/Renstra_itjen_2020-2024.pdf

Rafnel Azhari, Bujang Rusman, Musliar Kasim, Azar Syarif, Refinaldon, Syafrimen Yasin, Afrizal Zainal, & Junaid. (2017). Tantangan pengembangan padi dikabupaten Kepulauan Mentawai. . *Jurnal AGRISEP: Kajian Masalah Sosial Ekonomi Pertanian dan Agribisnis*, 16(1), 41-56. <https://doi.org/https://doi.org/10.31186/jagrisep.16.1.41-56>

Alda Deria, Rendi Prayoga, Aufa Rafiqi, Amanda Elza Pratiwi, Muhammad Zikri, Siska Alicia Farma*
Padang State University,
Sumatera Barat, Indonesia

*Corresponding author: siskaalicia@fmipa.unp.ac.id