

Realizing Biring Ere Village as an Agro-Industry Based Tourism Village

Suardi Bakri^{3,a)}, Ahmad Hanafie^{1,b)}, Eka Lestari Aryanti^{2,c)}, Mardiatul Jannah^{3,d)}, Kisman Awaluddin Arsyad^{5,e)}, Qurniasty^{4,f)}

¹Industrial Engineering, Faculty of Engineering, Universitas Islam Makassar, Makassar, Indonesia

²Agrotechnology, Faculty of Agriculture, Universitas Islam Makassar, Makassar, Indonesia

³Agribusiness, Faculty of Agriculture, Universitas Islam Makassar, Makassar, Indonesia

⁴Istitut Teknologi Bisnis Kalla, Makassar, Indonesia

⁵Sustainable Agricultural Extension Politeknik Pembangunan Pertanian Gowa, Gowa, Indonesia

^{a)}Corresponding author: suardibakri@uim-makassar.ac.id

^{b)}ahmadhanafie.dty@uim-makassar.ac.id

^{c)}ekalestari80@uim-makassar.ac.id

^{d)}jmardiatul@kallbs.ac.id

^{e)}kisman.arsyad@mail.com

^{f)}qurniasty1903418@students.um.ac.id

ABSTRACT

Advancing and prospering village communities is the main goal of every village government, including Biring Ere Village which is located around the Semen Tonasa industrial area in Bungoro District, Pangkep Regency, South Sulawesi by utilizing resources. The vision of Biring Ere Village is to realize Biring Ere Village as an agroindustry-based integrated tourism village and to realize this vision, the village government collaborates with various parties, including Universitas Islam Makassar. The general aim of this activity is to create independence, comfort and welfare for the community through a synergy of capability-based expertise and village government policies and community potential. The activity was carried out in Biring Ere Village, Bungoro District, Pangkep Regency, South Sulawesi for 6 months, April to September 2024. The target group for this activity was the productive economic group, namely the Women Farmers Group (KWT) and the Family Income Increase Unit (UP2K). The results of the service show that the method of producing farming and processing the results carried out by the target group has changed from a simple farming process to a farming based on smart farming. With the introduction of technology in the form of smart farming, KWT can produce efficiently and effectively, increasing the volume and variety of commodities produced. Meanwhile, for UP2K the technology introduced is results processing technology. So that the processing of agricultural products meets market standards.

ARTICLE INFO

Article History:

Submitted/Received 27 Sep 2024

First Revised 11 Oct 2024

Accepted 12 Oct 2024

First Available online 21 Oct 2024

Publication Date 21 Oct 2024

Keyword :

Agro-industri

Tourism village

Women farmer group

INTRODUCTION

Biring Ere Village, which means waterside village, is located in Bungoro District, Pangkajene Islands (Pangkep) Regency, South Sulawesi Province, located to the north of Makassar City. Biring Ere Village can be reached by car via Maros Regency then Pangkep City and entering the Tonasa Cement Factory Area, about an hour and a half from Universitas Islam Makassar. This village shows potential and has the prospect of becoming a prosperous and developing village. The potential of this village has an area of 66.00 hectares of rice fields, 70.00 hectares of dry land and 20.00 hectares of plantation land. Biring Ere Village is also supported by small and medium enterprises (MSMEs), as many as 49 MSMEs are recorded which are ready to support Biring Ere village to become an Integrative Tourism Village. This village borders the Semen Tonasa industrial area, therefore the livelihood of the residents is farmers and employees in the Tonasa cement industry (Fajriani et al., 2020; Kiki Mayasari & Dalilul Falihin, 2023).

Biring Ere Village is located in a green hilly area, also surrounded by rivers which are sources of agricultural water. This condition displays amazing natural attractions and dynamic community life. In recent years, Biring Ere Village has shown substantial growth in the tourism sector and local economy. The main focus of Biring Ere Village is the development of an integrative tourism village, which is expected to attract and grow diverse and integrated group businesses. Vision of Biring Ere Village as an advanced, competitive, religious, cultured village leading to a civil society. To realize this vision, one of the village programs is agro-industry-based Integrative Tourism as stated in the Development Directions in the Biring Ere Village medium-term development plan (RPJMDes), that the tourism that will be developed is integrated with various sectors, especially food agriculture and plantations. and livestock. Likewise education, health and culinary businesses. The identity of Biring Ere Village is reflected in various agricultural products, from plantation products to local food products, both fresh and processed. The development of Biring Ere Village as an integrative tourism village promises great potential in utilizing natural and cultural riches to improve community welfare and expand local economic opportunities. However, like many villages in Indonesia, Biring Ere Village also faces various challenges and problems that require resolution so that the vision and mission of developing an advanced, competitive, religious and cultural village can be achieved (Kiki Mayasari & Dalilul Falihin, 2023).

Biring Ere Village is faced with a number of challenges and problems that must be overcome in order to achieve an integrative tourism area, especially in terms of agricultural tourism, educational and health tourism. One of the main problems that requires addressing is the lack of support for facilities and infrastructure to develop productive community businesses, especially the agricultural sector. Apart from that, Biring Ere village is also faced with management and networking problems to develop tourism. Therefore, when a Focus Group Discussion (FGD) was held with the village head and staff, the community and business groups, two community groups were proposed that could become pilot activities that were expected to develop and trigger the growth of other community groups. The two community groups are the women's civil society farming group (KWT) and the family income increasing business group (UP2K) which are interrelated and collaborate. KWT as a group produces agricultural and fishery products while UP2K as an offtaker carries out processing so that they have added value before being marketed to the public or village visitors (Sumarni & Sahidah, 2018)

The village government's first step in developing an integrative tourism village is to start by growing the business groups mentioned above with the hope that these two business groups can trigger other businesses such as culinary and entertainment. This is also based on consideration of the village's potential in the agricultural sector, the fertile river coastal area is currently planted with various potential crops such as vegetables which are managed by KWT Madani. However, the management of KWT's farming business as a producer is still very simple and still has the potential to be improved through partnership with Makassar Islamic University. The following is documentation that describes the potential of Biring Ere village as an Integrative Tourism Village based on upstream to downstream agriculture (Agroindustry). In Biring Ere

Village there is a river in the middle of which there is a boulder that resembles an umbrella, that's why it is called umbrella rock. According to information from residents, previously this rock and river were sacred, but after being properly landscaped, this location became an attraction for the village to be developed into a tourist location. Along the river coast there are fertile soil deposits for agriculture. This is where KWT cultivates horticultural plants. There is also a fish pond which, if managed well, can provide supplies to village communities and meet the needs for culinary-based tourism support (Ramli et al., 2020).

The UP2K group, which is an economic unit from the PKK, is the offtaker of the KWT. The UPK buys the results of the KWT farming business and then processes them into ready-to-eat foods such as bon chili, shredded catfish, spicy breem and others.

The problem with KWT is the production method, where due to the lack of technological application, the quantity and variety of production is still limited. Likewise regarding the limitations of cultivation skills. Apart from that, UP2K's problem is a lack of ability to manage production results and a lack of assistance in marketing products. Efforts to strengthen MSMEs and community business groups in Biring Ere Village require collaboration between the village government, local communities and educational institutions such as Universitas Islam Makassar (UIM)(Bakri, Prabu Setiawan, et al., 2023).

Collaboration between various parties is the key to overcoming existing problems. Universitas Islam Makassar plays an important role in this effort. As a higher education institution committed to community development, UIM provides the knowledge, skills and resources needed to realize Biring Ere Village as an Integrative Tourism Village, increasing economic independence and community health. By doing so, UIM can provide valuable insight into various strategies and innovations that can be applied to resolve complex challenges for village governments, such as the problem of increasing agricultural production, managing natural resources into tourist attractions, managing productive groups, improving education. citizens, increasing access to product marketing which all leads to improving community welfare (Ramli et al., 2020).

The results of research conducted by Makassar Islamic University lecturers became the initial capital to be implemented in Biring Ere Village, especially in solving environmental, economic, food and health problems. Some research results that support this activity include research by Rahman, Bakri et al (Rahman et al., 2023) on marketing strategies for bakery businesses and research on youth interest in farming entrepreneurship through certified agricultural internships(Bakri, Ekasari, et al., 2023), as well as research from Mardiatul Jannah regarding the implementation of local wisdom values in creating opportunities and motivation in Bugis-Makassar migrant entrepreneurship. The experience and expertise of experts in the field of marketing makes a significant contribution in helping Micro, Small and Medium Enterprises (MSMEs) to market their products. Apart from that, research innovation was carried out by Ahmad Hanafie regarding the ergonomic evaluation of anthropometric-based hydroponic plant watering automation systems. Expert experience in developing agricultural technology is an important key in helping the people of Biring Ere village increase their agricultural production. In this way, the harvests obtained independently can influence the availability and prices of vegetables in Biring Ere Village, making them more affordable for the local community (Hanafie et al., 2022).

Through a well-planned and comprehensive development approach, as well as a partnership that exists between Makassar Islamic University and Biring Ere Village and two community groups, the vision and goals of Biring Ere Village to become an Agro-industry-based integrative tourism village can be realized. The existence of assisted village empowerment activities carried out with programs to increase food production, group management and marketing can increase income and welfare in Biring Ere Village. Consuming healthy and nutritious food can improve health status, especially in preventing stunting, which is one of the main objectives of the RPJMDes (Basir & Andi Rifka Kivaya R, 2023).

METHOD

This Assisted Village Empowerment activity was carried out in Biring Ere Village, Bungoro District, Pangkajene Regency, Islands, South Sulawesi Province. Activities will be carried out for 6 months starting from April-September 2024. The target groups for this activity are the Berkah Madani Women Farming Group (KWT) and the Family Income Increasing Business Group (UP2K). These groups each have 29 members and 20 members respectively. The KWT group operates in the horticultural farming sector, while UP2K operates in the agricultural product processing sector. The implementation of activities is based on 5 activity stages which are explained as follows:

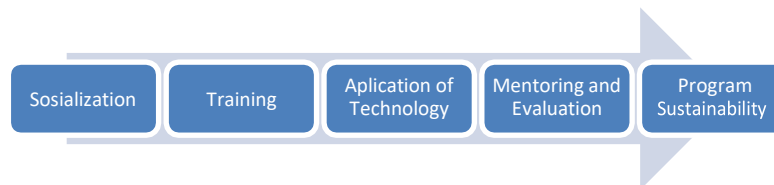


FIGURE 1. Activity method flow

RESULT AND DISCUSSION

Problem Identification and Intervention

Regionally, the problems of Biring Ere Village in creating an Integrative Tourism Village can be categorized into 1) Ecological Problems, 2) Technology Problems, 3) Economic Problems and 4) Socio-Cultural Problems. These problems can be broken down into problems of utilizing natural resource potential. Where the natural resources can be utilized as an attractive and integrated tourist attraction. Considering that most

of the population in this village works in the agricultural sector, the focus of this activity is to start from the agricultural sector. Therefore, this activity was given the topic of realizing as an Agro-industry-based Integrative Tourism Village. This is in accordance with the Vision and Mission of Makassar Islamic University as a university that manages the Faculty of Agriculture. Second, technological problems, mainly the application of technology in carrying out production processes according to the natural potential of Biring Ere Village, namely the production of agricultural products from upstream to downstream. Third, economic problems, as a result of the natural resources of Biring Ere village not being properly utilized, supported by the use of technology that is not yet optimal as well as socio-cultural problems, namely human resources that are not yet skilled and have sufficient knowledge to develop the village. Therefore, by collaborating with two community groups, namely KWT and UP2K, it can be a trigger for resolving the problems in Biring Ere Village (Rokhana Dwi Bektı et al., 2024).

Two community groups were selected considering the potential of women in this village. KWT and UP2K are expected to have a significant impact on economic progress and welfare of local communities as well as the realization of an Integrative Tourism Village. The problem with KWT is the lack of production quantity, even though natural resources are abundant. This lack of production quantity indicates a problem that needs to be resolved immediately (Tanjung et al., 2022).

Likewise, with UP2K which processes agricultural products from KWT and other community groups, the main problems are management and social affairs. Identifying specific problems and formulating appropriate solutions, KWT and UP2K are directed at increasing production and marketing. The action plan prepared within a three-year time frame includes skills development, training, mentoring, strategic partnerships (Alpian Muhtar et al., 2022; Bakri et al., n.d.; Ramli et al., 2020; Rokhana Dwi Bektı et al., 2024). This collaborative effort will have a significant positive impact on the economy and community welfare.

TABLE 1. Main Problems Target Group

No	Target Group	Activity	Main Problems
1	KWT	Farming production process	Using simple technology. Only use mulch and wooden stakes, use manual watering
		Aspects of Community Social Empowerment	Skills in farming are not yet optimal. Understanding cultivation through generations
2	UP2K	Management	Management capabilities are still lacking. The application of management elements such as planning, organizing, staffing and controlling has not yet been implemented
		Marketing	marketing area is still limited. Marketing is still in village and sub-district areas and still depends on exhibitions held by the government

The first problem is related to ineffective production management. KWT has difficulty implementing efficient agricultural practices, such as the use of modern agricultural technology or optimal resource management. Therefore, the right solution is the application of smart farming technology, modern agricultural training and assistance and sustainable resource management, so that production problems are resolved.

The second problem with KWT is the lack of market access. Even though it has production results, KWT has difficulty marketing its products. The solution to this problem is to provide marketing training and build partnerships with local markets or distributors to ensure better access (Sri Anik & Wasitowati, 2024).

**FIGURE 2.** KWT farming location

Furthermore, UP2K faces challenges related to production and marketing management. Lack of ability to manage production. Lack of product marketing assistance also hinders increasing people's income and welfare. Therefore, the resolution of this sub-problem needs to be implemented through concrete steps including group management training, digital marketing training to expand market access. (Sari et al., 2024; Sri Anik & Wasitowati, 2024)

UP2K's first problem was a lack of production management knowledge and skills. Intensive training and mentoring can provide UP2K with the skills necessary to manage production more effectively. This solution is prepared within a clear time frame by holding a series of training. The second problem that UP2K needs to solve is the lack of marketing and distribution networks. UP2K faces difficulties in reaching the market for their products. The right solution is to help UP2K build a strong marketing network through partnerships with local traders, supermarkets or restaurant suppliers. Continuous assistance and guidance in building relationships with various parties will be the key to success in overcoming problems ((Ramli et al., 2020).

Therefore, implementing research results such as marketing strategies, implementing local wisdom values in creating opportunities and motivation in entrepreneurship, becoming a reference in the marketing field can make a significant contribution in helping Micro, Small and Medium Enterprises (MSMEs)(Sri Anik & Wasitowati, 2024). Apart from that, research into the ergonomics evaluation of the hydroponic plant watering automation system based on anthropometry, expert experience in developing agricultural technology is an important key in helping Biring Ere Village increase production.

TABLE 2. Problems Solution

No	Target Group	Activity	Main Problems
1	KWT	Farming production process	Efficient Use of Technology (Smart Farming). Build 1 smart farming unit so that farming can be carried out efficiently and effectively
		Aspects of Community Social Empowerment	Training to improve the skills of group members in farming.
2	UP2K	Management	Training to improve management skills. Group management is carried out Professionally
		Marketing	Training and Assistance to Increase Marketing Reach between Districts/Regions

Socialization

Socialization is carried out so that the program can be well understood by all related parties so that activities can run well and achieve goals. Socialization is carried out using meetings with village officials, community leaders, youth leaders, women's leaders and members of the program target group. This socialization is also intended to maximize village and target group participation in this program. During this socialization, the activities that will be carried out during the program are explained.

Training

The training carried out to support the success of the program consists of 3 types, including: group management training so that the group can function as it should, as a means of production, a means of marketing and a means of learning and a means of information and technology. Group management training is also intended so that the group is managed professionally, has good financial records and is able to plana business that has prospects (Sari et al., 2024).

Considering that this activity is focused on agricultural activities and processing to support the Integrative Tourism Village, production training is carried out, both for farming and processing products. Production

training is intended so that community groups, especially KWT and UP2K, can farm efficiently and have market prospects. Likewise, to provide knowledge related to digital marketing techniques. so that market reach is wider (Ramli et al., 2020)



FIGURE 3. Socialization and Training

Technology Implementation

Before applying the technology to community groups, preparations are made, including preparing the land that will be the location for the smart farming technology. In accordance with production, management and marketing problems, the results of the analysis have shown that in general the people of Biring Ere Village, both individually and in groups, carry out the production process simply. This can be seen, for example, in agricultural production where it is known that the farming carried out by the community is generally farming of food crops and horticulture. This farming activity is carried out on limited land because Biring Ere Village is located between a river and a mountain. The community cultivates food and horticultural crops by planting these plants on river shores or available yard land using simple methods, watering them with water pumps and sprinklers, using mulch as a ground cover and also bamboo as a fence and plant protector. Meanwhile, in this village there are also people who try to keep fish using a bioflog system.



FIGURE 4. Smart Farming Technology

Apart from mentoring, an evaluation is carried out after each activity is carried out, so that the deficiencies that existed during the implementation of the activity and its achievements are discussed and solutions are found to achieve the activity objectives.

CONCLUSION

The collaborative activities of the village government and universities in the assisted village empowerment program in Biring Ere Village are very beneficial, both by the village government in supporting the realization of the village vision, mission and programs contained in the Village RPJM. The community, especially those who are members of the Program's target partner groups, namely KWT and UP2K, have increased their knowledge and skills, are able to use technology, so that their farming production increases.

ACKNOWLEDGMENTS

We would like to thank the Directorate General of Research, Technology and Community Service (DRTPM) of the Ministry of Education, Culture and Research, Technology and Higher Education for funding this program in the 2024 fiscal year. We also express our thanks to the Biring Ere village government and the entire community, especially the target groups who have building cooperation in realizing Biring Ere village as an agro-industry-based integrative tourism village and becoming a Science and Technology Park at Makassar Islamic University.

REFERENCES

- Alpian Muhtar, Fatmawati, & Samsir Rahim. (2022). *Kerjasama Pemerintah dan Masyarakat Dalam Membangun Desa di Desa Paria Kabupaten Pinrang*. <https://journal.unismuh.ac.id/index.php/kimap/index>
- Bakri, S., Ekasari, K., Arsyad, K., & Muis, M. (2023). Mendorong Minat Pemuda Berwirausahatani Melalui Magang Bersertifikat Bidang Pertanian. In *Jurnal Pengabdian Masyarakat* (Vol. 2, Issue 1).
- Bakri, S., Prabu Setiawan, I., & Kamal, A. (2023). *Kolaborasi Bangun Desa: Panduan KKN Universitas Islam Makassar* (Vol. 2).
- Bakri, S., Yunus, A., Abdul, A., & Syafa, R. (n.d.). *KKN-PPM Sebagai Akselerator Pemanfaatan Potensi Sumberdaya Alam Desa*
- Basir, & Andi Rifka Kivaya R. (2023). Peningkatan Pengetahuan Ibu Melalui Penyuluhan Pentingnya Imunisasi Dasar Lengkap di Desa Biring Ere, Kecamatan, Bungoro, Kabupaten Pangkajene dan Kepulauan. *ABDIMAS MULAWARMAN*, 2, 42–51. <http://e-journals2.unmul.ac.id/index.php/abdimasfkm/article/view/530/357>
- Fajriani, S., Fatmawati, & Abdi. (2020). Tata Kelola Kemitraan Corporate Social Responsibility PT Semen Tonasa Dalam Penyediaan Air Bersih di Desa Biring Ere Tonasa II Kabupaten Pangkep. *Journal of Public Policy and Management*, 2(2), 93–100.
- Hanafie, A., Haslindah, A., Suradi, Bora, M. A., & Baco, S. (2022). Ergonomic Evaluation of Anthropometry Based Hydroponic Plants Watering Automation System. *Journal of Engineering, Technology, and Applied Science*, 4(3), 122–130. <https://doi.org/10.36079/lamintang.jetas-0403.463>
- Kiki Mayasari, & Dalilul Falihin. (2023). Tradisi Pemakaman Keturunan Karaeng (Puang) Di Desa Biring Ere Kecamatan Bungoro Kabupaten Pangkep. *UNM Geographic Journal*, 6(1), 10–15. [https://doi.org/Doi: 10.26858/ugj.v6i1.44769](https://doi.org/Doi:10.26858/ugj.v6i1.44769)
- Sari, M. D., Sudyantara, S. C., Dewi, S., Rahmawati, R., Yuwono, A., Rofi Tectona, M., Merdeka, U., & Pdku Ponorogo, M. (2024). Improving Business Management Through Financial And Marketing Training For Homestay Business Owners. In *Community Engagement & Emergence Journal* (Vol. 5).
- Ramli, H., Malik, A., & Abbas, I. (2020). Community Participation and Impact of Tourism Objects on Community Economic Activities in Leang Kassi (Study in Biraeng Village, Minasatene District, Pangkajene Regency and Islands). *UNM Geographic Journal*, 4, 10–15. [https://doi.org/Doi: 10.26858/ugj.v6i1.44769](https://doi.org/Doi:10.26858/ugj.v6i1.44769)
- Rokhana Dwi Becti, Marsailles Nipu, & Simona Iskandaria Nurak. (2024). Entrepreneurship Village Program in Sukoharjo, Sleman Through Development of Agricultural Products. *ABDIMAS: Jurnal Pengabdian Masyarakat*, 7(3), 969–975. <https://doi.org/10.35568/abdimas.v7i3.4879>
- Sri Anik, & Wasitowati. (2024). Marketplace Design Training for MSME Actors to Increase Online SMEs Sales Product in Temoroso, Guntur, Demak, Central Java. *ABDIMAS: Jurnal Pengabdian Masyarakat*, 7(2), 430–437. <https://doi.org/10.35568/abdimas.v7i2.4497>
- Sumarni, & Sriwahidah. (2018). Pemberdayaan Kelompok Tani Budidaya Udang Vannamei (*Litopenaeus vannamei*) Di Desa Pitue Kecamatan Ma'rang Kabupaten Pangkep. In *Jurnal Dinamika Pengabdian* (Vol. 3, Issue 2).
- Tanjung, A. A., Lubis, K. S., Prana, R. R., & Mulyani, M. (2022). Pemulihan Ekonomi melalui Pengembangan UMKM di Masa New Normal Covid-19: Pendekatan ANP-BCOR. *Ekonomi, Keuangan, Investasi Dan Syariah (EKUITAS)*, 3(4), 724–728. <https://doi.org/10.47065/ekuitas.v3i4.1533>