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The Role of Women to Program Agribusiness Driving in Air Talas Tourism Village (ANGGREK DEWATA)

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KEYWORDS

ABSTRACT

impact; women; anggrek dewata

This research method takes the form of a qualitative field study or field research. The data collection techniques were carried out using observation with active participation, indepth interviews. documentation and focus discussions. The research results show: In the Agribusiness Program Driving Talas Air Tourism Villages (ANGGREK DEWATA) there are 3 (three) programs carried out by PT Pertamina EP Limau Field, namely: BU JUSI (Organic Cultivation of Siamese Oranges), BUDE ARTA MAJU (Women of Air Talas Village Managing Oranges) and PUTERI JELITA (Liquid Fertilizer from Air Talas Orange Waste. The economic impact of this program for women is increase in family income bv 2,500,000/person/month or 20% from the previous year from product sales. This program also has a positive social and environmental impact. This is in line with the fifth SDG goal, gender equality Talas (DEWATA namely ORGANGREK) from the Social Return on Investment (SROI) Report shows that the calculated SROI value of the program is 1.66, indicating that every rupiah of program costs produces a positive change worth IDR 1.66. Meanwhile, from the results of the Community Satisfaction Index assessment, the Anggrek Dewata Program obtained Community Satisfaction Index (IKM) results with the predicate "Very Good", with an index value of 3.44 with a conversion value of 86.07%. The Commitment aspect received an average SME score of 3.80 and is included in the Very Good category. And the community has optimism to continue the program after the intervention is carried out.

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Introduction

Air Talas Village, Rambang Niru District, Muara Enim Regency is one of the locations of the Community Empowerment Program (PPM) of PT Pertamina EP Limau Field (Saputra, 2020). This village consists of 320 families who are all transmigrants from the island of Bali and among them there are 61 female heads of families. Even though they have lived on the island of Sumatra for decades, the residents of Air Talas Village still have special characteristics of the indigenous Balinese people. This can be seen from the house buildings that are built like Balinese houses, the community adheres to Hindu religious teachings, to other customs that are still thick with the barbarism of the island of Bali (Pertamina, 2024).

Many women in Air Talas Village work as orange farmers, they are also members of the Agribusiness Program for Driving Water Talas Tourism Village (Anggrek Dewata). The implementation of the Gods Orchid program which focuses on citrus cultivation began with the potential of an orange plantation covering an area of 150 hectares (Supriyatno et al., 2018). Orange cultivation has been carried out by the community since the beginning of the move from Bali to Sumatra, namely in 1987. A total of 100 heads of families (KK) at that time brought Original Siamese Orange Seeds from Bali which turned out to be suitable for planting and managed to become a typical commodity of the village (Indrawati et al., 2012). However, over time various problems occurred, including: 1) The existence of CVPD plant pests that cause crop failure; 2) Reduced competitiveness in the sale of harvested oranges because of their very sour taste; 3) The emergence of processed citrus products that are more in demand by the market.

PT Pertamina EP Limau further examines the potentials that exist in the community that can be used to overcome these problems, namely by involving women in Air Talas Village, especially those who are Underprivileged families to increase income from the citrus cultivation sector. The company's strategy in implementing the program is the transfer of company knowledge to the community so that shared value is created between the community and the company. The implementation of the Orchid Dewata program of PT Pertamina EP Limau is carried out with the company's vision and mission as stated in the program roadmap, namely in 2026 the realization of a community in Air Talas Village that is independent and empowered through the development of an agribusiness-based creative economy (Prayoga et al., 2023). To support the sustainability of the program, the company also involves relevant stakeholders such as the Air Talas Village Government, Rambang Niru District Government, Muara Enim Regency Cooperatives and MSMEs Office, and the Institute of Agroecology Foundation (INAgri). The results of stakeholder involvement resulted in the innovation of Trichoderma Fungicide to overcome CVPD disease and diversify orange products into Orange Pie, Orange Syrup and Orange Jam.

Of the many activities that have been carried out by PT Pertamina EP Limau Field in assisting the Agribusiness Driving Water Tourism Village (ANGGREK DEWATA) program, it is necessary to conduct a study to see the effectiveness of the program. In this case, the researcher raised a discussion in the form of the Role of Women in the Agribusiness Program of the Taras Water Tourism Village (ANGGREK DEWATA).

Research Methods

In carrying out the Agribusiness of Driving Taras Water Tourism Village (ANGGREK DEWATA), PT Pertamina EP Limau Field carried out various activities, including: Development/diversification of citrus products, Optimization of marketplace to increase product sales, Capacity building for Subur Makmur Members, Field study

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program for elementary/junior high schools in Muara Enim Regency, Imitation study/sister village to the Buleleng Regency Orange Center, and various activity publications.

The Research Method is in the form of qualitative field studies or field research. Field research is research where data is obtained directly from sources in the field, so that the data obtained is a primary source (Sugiyono, 2018). The data collection technique is carried out by observation with active participation, in-depth interviews, documentation and focus group discussion.

Results and Discussions

Description of the Agribusiness Program for Driving Taras Water Tourism Village (ANGGREK DEWATA)

Air Talas Village is one of the Balinese transmigrant villages located in Rambang Niru District, Muara Enim Regency, South Sumatra Province and is one of the villages included in Ring 1 of the Pertamina EP Limau Field Community Empowerment. Most of the residents of Air Talas Village work as fruit farmers. Therefore, Air Talas Village is famous as a fruit-producing village, one of the leading commodities of Air Talas Village is citrus fruits. Currently, there are up to 350 heads of families in Air Talas Village who grow orange plants. The citrus plants planted in Air Talas Village come from the Bali region with a fruit character that has a sweet and slightly sour taste. In one year, the orange orchards in the village can be harvested three times. Every harvest season, citrus farmers are able to harvest up to 100 tons of citrus fruits or up to 300 tons per year (Pertamina, 2023).

Although currently the quantity of crops can be said to be quite abundant, the orange harvest has not been further utilized (there is no diversified product yet) which can increase the selling price. In addition, there is a potential threat to orange plants that can reduce the production of orange plants. The threat is *Vein Phloem Degeneration* bacteria or commonly referred to as CVPD and the lack of knowledge of farmers in handling the virus. CVPD disease is still a serious threat to the sustainability of citrus farming. Symptoms of CVPD are yellowing of the leaves, the color of the leaf bones becomes dark green, the leaves are thicker, stiffer and smaller in size. According to (Melani et al., 2018) said that the symptoms caused make the growth of citrus fruits inhibited and productivity decreased (Lamdo et al., 2023).

PT Pertamina EP Limau Field strives to answer the problems faced by the community in Air Talas Village by considering the existing potential, namely as an effort to maintain the tradition of environmentally friendly agriculture that had been lost to citrus farmers in Air Talas Village and to revitalize agro-tourism also due to the decrease in productivity of citrus farms affected by CVPD disease (Tuwo et al., 2024). There are 3 (three) programs that synergize with each other in response to these problems. *First*, through the BU JUSI (Organic Siamese Orange Cultivation) program, it focuses on controlling CVPD disease with *the trichoderma fungicide* method and mitigating the discourse of citrus farmers who will convert their land into oil palm plantations. Through the BU JUSI program, the Taras Water Village Plant Pest Control Task Force was also formed which tried to replicate Balinese traditional culture by forming a special force for activities during Nyepi Day called pecalang. *Second*, the BUDE ARTA MAJU (Ibu-Desa Air Talas Managing Oranges) program which focuses on managing second-quality oranges, but is suitable for consumption into derivative products that have added value and are ready for consumption. *Third*, the PUTERI JELITA program (Liquid Fertilizer

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from Taro Water Orange Waste) which seeks to manage the third quality of oranges to be used as organic fertilizer that will be used as fertilizer for citrus plants. Through these innovation activities, it is hoped that it can help the community in Air Talas Village to strengthen the tradition of environmentally friendly agriculture through the social innovation of *the trichoderma fungicide* in helping orange farmers to overcome the problem of CVPD pests and revitalize agro-tourism that had been lost due to the Covid-19 pandemic. PT Pertamina EP Limau Field in this case is still focusing on helping citrus farmers in Air Talas Village to restore the productivity of citrus agriculture in tandem with efforts to revitalize agro-tourism activities that had been lost.

The development and implementation of the Gods Orchid Program aims to empower farmers and women in the Air Talas Village area and maximize the potential in the area. In its implementation, there are various activities, namely strengthening institutions, developing organic citrus cultivation, diversifying orange products into milk pies and syrups, establishing a pest control task force (CVPD), and so on. Until now there are 60 direct beneficiaries and 1016 indirect beneficiaries with a total of 360 families from the Orchid Dewata Program.

The Role of Women in the Agribusiness Program for Driving Taras Water Tourism Villages (ANGGREK DEWATA)

The concept of Gender Equality is not only a concern in Indonesia but also a concern for the world with Point 5 in *the Sustainable Development Goals (SDGs)*. Gender equality is a human rights principle, a prerequisite for sustainable development that is community-centered and is an end in itself so that achieving gender equality at various levels is the main goal, and a concern in terms of development initiatives. The fifth goal of the Sustainable Development Goals (SDGs) calls directly to achieve gender equality and the empowerment of women and girls in all sectors of society, as well as to combat all forms of discrimination they face (Hák et al., 2016). All governments that have signed up to the SDGs declare that the achievement of SDG 5 will make a decisive contribution to other goals. So that to achieve this goal and implement it, support or collaboration from various stakeholders, both public, private and civil society is needed (Sudirman & Susilawaty, 2022).

In an effort to increase the role of women in Air Talas Village and support the SDGs, PT Pertamina EP Limau involves women in the Agribusiness Program to Drive (return) Air Talas Tourism Village (Anggrek Dewata) through the BUDE ARTA MAJU (Air Talas Village Women Manage Oranges) activity, which is a program to manage citrus derivative products cultivated in Air Talas Village. Through this activity, women in Air Talas Village not only have a role in family education but also have a role in supporting the family economy and can actualize themselves by participating in work.

The Orchid Dewata program implemented in Air Talas Village has succeeded in targeting 15 women heads of families or as many as 25% of the total number of women heads of families in Air Talas Village. The economic impact felt was an increase in family income of Rp 2,500,000/person/month or 20% from the previous year from product sales. Meanwhile, socially, this program has helped increase the role of women in Air Talas Village from those who are considered not independent and dependent on men, currently women are considered to have the same ability to earn income and work. In addition, with this program, women are also considered to have the ability to speak in public by being speakers at workshops or at product exhibitions held by several parties. Environmentally speaking, the program helps preserve the environment through the use of 1 ton of sour orange to be processed into derivative products (orange pie, marmalade, orange syrup)

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and helps reduce GHG by 3,504 tons of CO2eq. The Subur Makmur Farmers Women's Group / BUDE ARTA MAJU is also a support system for women in Air Talas Village to share experiences, learn new things, and develop together as one of the efforts to realize social welfare.

Table 1 The Impact of the Gods Orchid Program

It	Aspects	Impact	SDGs
1	Social	Recognition from the community of the ability of women in Air Talas Village in creating new products and the ability to communicate in front of the public	5 SERIERANI
2	Milieu	 The use of one ton of sour orange to become a derivative product GHG reduction due to the utilization of waste of 1 ton, namely: 3,504 tons of CO2eq 	13 PERMICHANA KUM
3	Economics	Group member's income is IDR 2,500,000/person/month	1 MERICAPIEN AND B PERFECTION AND PERFEC
4	Welfare	The formation of a forum / <i>support system</i> as a gathering place for women that contains positive and constructive activities.	3 ACCEPTATION OF THE PROPERTY

Source: PT PEP Limau Green Document

This program also contributes to several points of the sustainable development goals or SDGs, namely gender equality points because this program helps to increase the role of women in daily life, especially in Air Talas Village. In the environmental aspect, the program has helped meet the SDGs points for handling climate change through the use of oranges and their waste. An increase in income of Rp 2,500,000/person/month helps meet decent work points and economic growth. In addition, there is a positive impact on the welfare of the community in accordance with good health and welfare points.

Impact of the Agribusiness Program Driving Taras Water Tourism Village (ANGGREK DEWATA)

From the *Social Return on Investment* (SROI) Report on Agribusiness Driving Water Talas Tourism Village (Anggrek Dewata) carried out by Pertamina EP Asset 2 Limau Field, in Air Talas Village, Rambang Niru District, Muara Enim Regency. which was compiled by the SROI Social Development Studies Center (SODEC) study team, Department of Social Development and Welfare, Faculty of Social and Political Sciences, Gadjah Mada University showed the following results (Yates & Marra, 2017).

The budget that has been used to develop the potential harvest of fresh citrus fruits and their derivative products reaches Rp 169,130,315.85 and the total benefits calculated are Rp 280,000,597.32. The results of the calculation of the SROI value of the program are 1.66, showing that each rupiah of the program cost produces a positive change worth Rp 1.66. Based on the positive SROI calculation value, it can be stated that the program organized by PEP Limau in Air Talas Village is socially feasible (SODEC, 2023).

Furthermore, from the various impacts identified in the SROI analysis, it can be said that the Orchid Dewata program has achieved its goals to a certain point although there is still room for improvement (Watson & Whitley, 2017). Efforts to handle fungi on oranges using *trichoderma* have begun to be followed up by farmers even though it has

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not yet resulted in an impact on reducing fungal attacks. The practice of using *trichoderma* by 6 members of the Tunas Hijau farmer group also indicates an increase in awareness of utilizing organic fertilizers in citrus cultivation. Meanwhile, the processing of sour oranges into various derivative products has been able to generate an increase in the group's cash and income of KWT Subur Makmur members as well as improve the group's image.

The calculation value >1 indicates that the social benefits generated by the program have a relatively large impact on the residents of Air Talas Village. However, the institutional base of KWT Subur Makmur and the Tunas Hijau Farmers Group needs to be strengthened, for example with leadership capacity building training and training on orderly group financial administration. Solid group institutional resilience is indispensable to face the challenges of the digital market and the sustainability of organic citrus development.

Based on the results of data processing and observations carried out on the Orchid Dewata Program (Agribusiness Driving Taras Water Tourism Village), there are several conclusions from the assessment of the Community Satisfaction Index of the Orchid Dewata Program. *First*, the Orchid Dewata Program (Agribusiness Driving Air Talas Tourism Village) which was carried out in Air Talas Village obtained the results of the Community Satisfaction Index (IKM) with the predicate "Very Good", with an index value of 3.44 with a conversion value of 86.07%. The implementation of this program is in accordance with the potential, opportunities, and problems faced in the region, namely related to pest control on citrus plants using trichoderma fungi, in addition to empowering women in an effort to improve welfare through the use of existing resources (diversification of products from citrus fruits which are the main commodity of Air Talas Village).

Second, the value of the community satisfaction index in the Orchid Dewata program is not only because the implementation of the program is in accordance with the needs. The opportunities, as well as the problems faced, are also influenced by the company's commitment to developing the program. This can be seen from the Commitment Aspect which received an average score of 3.80 for SMEs and was included in the Very Good category. The company, namely Pertamina EP Limau Field, seeks to facilitate beneficiaries in running the Orchid Dewata program both in terms of equipment, support by providing training, and material support.

Third, the optimism of the beneficiaries in continuing the program even though there will be no support and or facilitation from the company. Beneficiaries believe that they are able to run the program with the knowledge, skills, and capital they have gained while participating in the Orchid Dewata Program. In addition, the positive impact on increasing beneficiary income is also one of the reasons why beneficiaries are optimistic to continue the program.

Conclusion

Air Talas Village is one of the Balinese transmigrant villages located in Rambang Niru District, Muara Enim Regency, South Sumatra Province and is one of the villages included in Ring 1 of the Pertamina EP Limau Field Community Empowerment. Pertamina EP Limau Field conducts a program in Air Talas Village in the form of Agribusiness Driving Water Taras Tourism Village (ANGGREK DEWATA. In the Agribusiness Program for the Drivers of Taro Water Tourism Village (ANGGREK DEWATA), there are 3 (three) programs carried out by PT Pertamina EP Limau Field,

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namely: BU JUSI (Organic Siamese Orange Cultivation), BUDE ARTA MAJU (Talas Water Village Mothers Manage Oranges) and PUTERI JELITA (Liquid Fertilizer from Taro Water Orange Waste.

The Role of Women in the Agribusiness Program for Driving Taras Water Tourism Villages (ANGGREK DEWATA) can be seen in the BUDE ARTA MAJU (Mothers of Taras Water Village Managing Oranges) program. The Orchid Dewata program implemented in Air Talas Village has succeeded in targeting 15 women heads of families or as many as 25% of the total number of women heads of families in Air Talas Village. The economic impact felt was an increase in family income of Rp 2,500,000/person/month or 20% from the previous year from product sales. This program also has a positive impact socially and environmentally. This is in line with the fifth goal of the SDGs, namely gender equality.

The Impact of the Agribusiness Program for Driving Taras Water Tourism Village (ANGGREK DEWATA). From the Social Return on Investment (SROI) Report compiled by the SROI Social Development Studies Center (SODEC) study team of Gadjah Mada University, the results of the calculation of the SROI value of the program are 1.66, showing that each rupiah of the program cost produces a positive change worth Rp 1.66. Based on the positive SROI calculation value, it can be stated that the program organized by PEP Limau in Air Talas Village is socially feasible. Based on the results of data processing and observations from the assessment of the Community Satisfaction Index of the Gods Orchid Program. The Orchid Dewata Program (Agribusiness Driving Water Talas Tourism Village) which was carried out in Air Talas Village obtained the results of the Community Satisfaction Index (IKM) with the predicate "Very Good", with an index value of 3.44 with a conversion value of 86.07%. The Commitment aspect which received an average score of 3.80 for SMEs and was included in the Very Good category. And the community has optimism to continue the program after the intervention is carried out.

References

- Hák, T., Janoušková, S., & Moldan, B. (2016). Sustainable Development Goals: A Need For Relevant Indicators. *Ecological Indicators*, 60, 565–573.
- Indrawati, L., Suharjo, S., Anita, N., Dominggus, H., Arianto, N. T., & Rahanto, S. (2012). Etnik Mamasa Desa Makuang Kecamatan Messawa Kabupaten Mamasa, Provinsi Sulawesi Barat (Buku Seri Etnografi Kesehatan Ibu Dan Anak 2012). Badan Penelitian Dan Pengembangan Kesehatan.
- Lamdo, H., Sari, Y., Al Faridzi, R., Pebriyanti, P., Winanta, R. A., & Latif, F. (2023). Teknologi Dan Budidaya Tanaman Hortikultura, Buah Subtropika, Pangan, Pemanis Dan Serat, Serta Perkebunan Teh. *Seroja: Jurnal Pendidikan*, 2(4).
- Melani, R., Adiartayasa, W., & Wijaya, I. N. (2018). Deteksi Penyakit Citrus Vein Phloem Degeneration (Cvpd) Dengan Teknik Polymerase Chain Reaction (Pcr) Pada Daun Tanaman Jeruk Yang Memilikipola Gejala Klorosis Berbeda. *E-Jurnal Agroekoteknologi Tropika*, 7(2), 164–173.
- Pertamina, E. L. F. (2023). Laporan Studi Indeks Kepuasan Masyarakat (Ikm) Program Csr Pertamina Ep Limau Field Tahun 2023: Anggrek Dewata (Agribisnis Penggerak Desa Wisata Air Talas). Internal Report. Muara Enim: Pertamina.
- Pertamina, E. L. F. (2024). Laporan Pemberdayaan Masyarakat (Ppm) Pt Pertamina Ep Limau. Internal Report. Muara Enim: Pertamina (Vol 2024).
- Prayoga, D., Wilujeng, C. W., Putra, E. H., & Hendrawan, W. (2023). Inclusiveness Of Transmigration Women. *E-Proceeding Conference: Indonesia Social Responsibility Award*, *1*(1), 75–82.
- Saputra, D. (2020). Evaluasi Program Csr Pt Pertamina Ep Limau Field Pada Program Niat Mila Desa Air Enau, Sumatera Selatan. Fakultas Dakwah Dan Ilmu Komunikasi Universitas Islam Negeri Syarif
- Sodec, U. (2023). Laporan Social Return On Investmen (Sroi) Pt Pertamina Ep Asset 2 Limau Field 2023. Universitas Gadjah Mada.
- Sudirman, F. A., & Susilawaty, F. T. (2022). Kesetaraan Gender Dalam Tujuan Pembangunan Berkelanjutan (Sdgs): Suatu Reviuw Literatur Sistematis. *Journal Publicuho*, 5(4), 995–1010.
- Sugiyono. (2018). Metode Penelitian Kuantitatif, Kualitatif, Dan R&D. Cv. Alfabeta.
- Supriyatno, A., Farida, F., & Supriyanto, S. (2018). Peranan Pt. Pertamina Ep Asset 2 Field Pendopo Di Bidang Sosial Ekonomi Masyarakat Di Kecamatan Talang Ubi Kabupaten Pali Tahun 2003-2015. *Criksetra: Jurnal Pendidikan Sejarah*, 7(1).
- Tuwo, M., Kuswinanti, T., Nasruddin, A., & Tambaru, E. (2024). Uncovering The Presence Of Cvpd Disease In Citrus Varieties Of South Sulawesi, Indonesia: A Molecular Approach. *Journal Of Genetic Engineering And Biotechnology*, 22(1), 100332.
- Watson, K. J., & Whitley, T. (2017). Applying Social Return On Investment (Sroi) To The Built Environment. *Building Research & Information*, 45(8), 875–891.
- Yates, B. T., & Marra, M. (2017). Social Return On Investment (Sroi): Problems, Solutions... And Is Sroi A Good Investment? *Evaluation And Program Planning*, 64, 136–144.