

# The Role of CSR in Enhancing ESG Impact: Case Study of The Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) Program

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**Abstract.** In the last decade, the principles of ESG (Environmental, Social, and Governance) have become not just a trend but a business paradigm for companies. This aligns with the increasing praxis of the ‘S’ or social aspect in ESG, which companies implement through CSR programs. This study, employing a qualitative approach through a single case study type, specifically highlights the Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) CSR Program conducted by PT Pertamina EP Sangatta-Semberah Field. The findings of this study indicate that the CSR program praxis is relevant to the company’s ESG principles, which can be measured through, first, community engagement in community development praxis. This praxis has strengthened the relationship between the company and the local community. The second is local content. Through the CSR program, the company not only creates group satisfaction with the ongoing program but also tends to contribute to the pleasure and happiness of group members. The last one is the indirect economic impact. Through ECON-ESG measurements, it was found that the Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) CSR program does not lead to a decrease in GDP; on the contrary, it positively contributes to macroeconomic conditions.

**Keywords:** CSR, ESG, Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) Program.

## A. INTRODUCTION

In recent years, the focus on ESG has become a global trend (Peiró-Signes and Segarra-Oña, 2013; Serikakhmetova and Adambekova, 2022). Companies worldwide are increasingly required to not only focus on financial profits but also consider the environmental, social, and governance (ESG) impacts of their activities. ESG principles have become more significant as companies strive to achieve long-term sustainability that benefits not only shareholders but also the surrounding community and environment. PT Pertamina EP Sangatta-Semberah Field, as part of their commitment to ESG, has launched the Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) Program, which focuses on honey management by the local community in Tanah Datar Village, Muara Badak District.

The Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) program is a CSR initiative from PT Pertamina EP Sangatta-Semberah Field that successfully integrates ESG principles into local community empowerment efforts through honey management. In its implementation, this program has directly involved the local community of Tanah Datar Village in every stage, from training in stingless bee cultivation to processing and marketing honey products. The development of this program began with social mapping, which showed the great potential for *Trigona sp.* farming in the village. PT Pertamina EP Sangatta-Semberah Field then provided intensive training to the community on effective cultivation techniques, including the use of modern tools to increase honey production. Furthermore, to ensure sustainable bee feed availability, appropriate vegetation such as fruit trees and flowers were

planted. This step not only supports bee farming but also contributes to the preservation of the local environment.

Previous studies have shown that good CSR programs can positively contribute to ESG and community development. For instance, in the study “Corporate Social Responsibility: Understanding the Mining Stakeholder with a Case Study” by Que et al. (2019), community involvement and local acceptance were proven crucial for the success of CSR projects in the mining sector. In this context, the active involvement of the community in every stage of the Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) Program ensures that their needs and aspirations are met, enhancing program ownership and sustainability. Other research indicates that good ESG disclosure can improve a company’s financial performance and community welfare. By integrating ESG principles, PT Pertamina EP Sangatta-Semberah Field not only enhances the economic well-being of the community through honey sales but also ensures environmental sustainability and strengthens community governance.

The Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) Program also demonstrates significant indirect economic impacts. The improvement of skills and knowledge within the community can be applied to other economic activities, expanding economic opportunities and enhancing overall well-being. The sale of honey products and their derivatives, supported by effective marketing strategies and attractive packaging, increases community income and opens up wider market access. PT Pertamina EP Sangatta - Semberah Field commitment to ESG principles is also reflected in the program’s transparent and accountable governance.

From an environmental perspective, this program has successfully increased local biodiversity through vegetation planting and environmentally friendly bee cultivation. Socially, the program enhances community skills and knowledge, creates new jobs, and strengthens community involvement and support in economic activities. This aligns with Stakeholder Theory, which emphasizes the importance of considering the interests of various stakeholders, including local communities, to achieve sustainability. Additionally, the Triple Bottom Line (TBL) principle, which measures a company’s performance based on three dimensions: economic, environmental, and social, is also reflected in the success of this program.

The success of the Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) Program provides a tangible example of how a holistic approach integrating ESG can achieve broader sustainability goals, create long-term benefits for local communities and the environment, and enhance the company’s reputation as a leader in social responsibility and sustainability. This program’s success can serve as a model for similar initiatives in other sectors, demonstrating that companies can balance economic, social, and environmental interests by engaging and empowering local communities.

This research aims to explore the honey management practices carried out by the Kelompok Tani Madu Sari Alam in improving the well-being of the local community, analyze how the TAMU SARAH Program and PT Pertamina EP Sangatta - Semberah Field integrate ESG principles in their CSR activities, and evaluate the social, economic, and environmental impacts of the Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) Program on the local community in Tanah Datar Village. This research is expected to provide insights into how the integration of ESG in CSR programs can deliver long-term benefits for local communities and the environment and serve as a model for similar initiatives in other sectors.

## **B. METHODS**

The methodology employed in this study was a qualitative approach with a single case study variation (Yin, 2009; Hollweck, 2015). This study explored the praxis conducted by the

Kelompok Tani Madu Sari Alam in managing honey that is both health-beneficial and highly marketable, produced by *Trigona sp.* bees. Numerous studies have shown that, in addition to its health benefits, the honey produced by *Trigona sp.* bees also benefit farmers and create well-being for the communities that cultivate it (Fadiah, 2023; Febriani & Pujiastuti, 2023; Ramdiawan, Herdiana, & Rosadi, 2023).

Specifically, this study focused on delving into the honey management practices carried out by the group that contribute to the group's well-being. In addition, these practices align with the ESG principles implemented by PT Pertamina EP Sangatta-Semberah Field CSR as a development partner of the group. In practice, this study was conducted through in-depth interviews with the group and corporate partner representatives. Moreover, to further examine the theoretical framework of the praxis conducted by the group in collaboration with the corporation, program document analysis such as social mapping documents, program implementation documents, and program evaluation documents was also carried out.

## C. RESULTS AND DISCUSSION

### 1. Implementation of the Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) Program and Its Challenges

PT Pertamina EP Sangatta-Semberah Field as a subsidiary of PT Pertamina (Persero), was established by Law Number 22 of 2001 concerning Oil and Gas. This company plays a significant role in increasing oil and gas production in Indonesia through progressive exploration and production activities. Besides focusing on production, PT Pertamina EP Sangatta - Semberah Field also demonstrates a strong commitment to social and environmental responsibility in its operational areas, including Tanah Datar Village, Muara Badak District, Kutai Kartanegara Regency.

Tanah Datar Village is known for its abundant natural resources, particularly the biodiversity that supports the cultivation of stingless honey bees (*Trigona*). The local community has a strong drive to improve their economic well-being through sustainable and environmentally friendly activities. Recognizing this potential, PT Pertamina EP Sangatta-Lapangan Field developed a community empowerment program known as the TAMU SARAH Program (Pengembangan Petani Madu Sari Alam Semberah).

Starting from the results of social mapping in 2019 on the honey potential in Tanah Datar Village, Muara Badak District, Kutai Kartanegara Regency PT Pertamina EP Sangatta-Semberah Field identified a significant opportunity to develop stingless bee honey (*Trigona*) cultivation as part of its community empowerment program. PT Pertamina EP Sangatta-Semberah Field began planning a CSR program that could provide long-term benefits to the communities around its operational areas. This planning process began with a series of Focus Group Discussions (FGD) with local community groups interested in bee farming. The FGDs revealed a great potential for developing stingless bee cultivation in Tanah Datar Village, which was further supported by social mapping to identify the village's needs, potentials, and challenges.

Based on various ESG program documents, as studied by Shakotko (2023) in his paper titled "ESG Programs: Understanding the Untapped Opportunities," many companies are called to prioritize corporate social responsibility (CSR) programs. According to Shakotko, CSR programs are highly relevant to ESG principles, which have become a major concern for many companies over the past decade. This is no longer just a suggestion; the implementation of CSR programs aligned with ESG principles has been adopted by PT Pertamina EP Sangatta - Semberah Field through its flagship program, the TAMU SARAH Program.

The company's priority on CSR programs became evident when the TAMU SARAH Program was first launched. Initially, the company identified the potential for community

development through social mapping conducted in 2019 in Tanah Datar Village. This village is located very close to the company's assets and is affected by the company's operations. Due to its proximity, the area is vulnerable to the impacts of the company's operations. Therefore, the company is obliged to undertake social responsibility in this village, beginning with social mapping. Ultimately, through the social mapping conducted, the economic potential of the community that could be developed was identified to be the management and processing of honey.

At the beginning of the initiative, two local community leaders were identified as already engaged in the buying and selling of forest honey. One of these leaders had even become a trained cadre under the Forestry Service of Kutai Kartanegara Regency, actively promoting, teaching, and developing beekeeping. This individual had also provided honey management training in Malaysia, a country with high honey demand. Consequently, through the company's social mapping, the potential for developing honey farming was identified. When examined closely, the company's social mapping efforts for CSR were not just a process but a result. This result demonstrated the company's ability to identify the potential for honey farming development, which was then actualized a year later by the Kelompok Tani Madu Sari Alam Semberah in 2020.

Initially, the potential for cultivating *Trigona sp.* honey bees were identified through social mapping; however, the honey cultivation efforts by Kelompok Tani Madu Sari Alam Semberah had not shown significant progress. This was partly due to the difficulty in finding *Trigona sp.* bees, locally known as Kelulut bees, which required searching deep into the forest. Some members of the group, who have now become pioneers, were initially pessimistic about cultivating this bee species. However, thanks to the company's engagement and exchange of perspectives, as well as various research conducted by the company, Kelulut bee farming became feasible. The company's research revealed that the vegetation in Tanah Datar Village was suitable as feed for Kelulut bees. Additionally, the cultivation was economically viable, with a colony costing IDR 3,000,000 able to produce one liter of honey every three months.

At the beginning of the program, identified as a potential through social mapping, the honey farming activities of the Kelompok Tani Madu Sari Alam had not yet seen significant development. This was due to the difficulty in locating *Trigona sp.* bees, known locally as Kelulut bees, in the forest. A member who later became a group pioneer initially doubted the feasibility of cultivating this bee species. However, following discussions with the company and various research efforts, Kelulut bee farming became achievable. This was possible because the vegetation in Tanah Datar Village was suitable as feed for Kelulut bees, and the required investment was relatively affordable. A colony costing IDR 3,000,000 could produce one liter of honey every three months.

In 2020, the company provided the necessary infrastructure for honey farming, including honey harvesting tools and training facilities for producing sachet-packaged honey. Initially, honey harvesting was done using conventional tools. After two years, with the knowledge gained by the group, a new harvesting tool called bee-sap was introduced. The bee-sap tool significantly increased the efficiency and yield of honey harvesting and has since been patented. Besides the harvesting tool developed through group learning and innovation, in 2022, the company also provided a dehumidifier at the group's request. This device reduces the water content in honey and minimizes fermentation.

### Innovative Honey Harvester of Bee-Sap



### Dehumidifier Tool



**Figure 1. Bee-Sap and Dehumidifier Tool**

Source: CSR Documentation of PT Pertamina EP Sangatta-Semberah Field (2024)

However, amidst the increasing productivity and large honey harvests, the group encountered challenges during the program's implementation. With the substantial availability of honey, marketing efforts initially struggled. This situation was exacerbated by the presence of numerous competitors, compelling the group to innovate to effectively market their products. To address these issues, the company stepped in once again, involving the Kelompok Petani Madu Sari Alam Semberah in various SME exhibitions. This initiative was undertaken at the group's request, as they had become more adept at identifying marketing problems that could potentially lead to stagnation in product sales if left unresolved.

Another significant challenge was the absence of Halal Certification and the Household Industry Food Commitment Fulfillment Certificate (SP-PIRT). The lack of these crucial certifications for food products diminished consumer trust in honey products. Moreover, some SME exhibitions that the group was keen to participate in rejected their participation due to the absence of these certificates. Consequently, the company, in collaboration with relevant agencies, facilitated the application for Halal and SP-PIRT certifications. This effort coincided with the group's request to involve more women in processing various honey-derived products such as propolis, facial soap, and dish soap. Training sessions for making these honey-derived products were conducted with the support of CSR from PT Pertamina EP Sangatta - Semberah Field.

Thanks to this training, a new SME group focused on the production and marketing of honey-derived products was established. This new institution, known as the Kelompok UMKM Wanita Sari Alam Sumberasih, is expected to concentrate on producing and marketing a diverse range of honey-derived products. So far, the partnership between the Kelompok Tani Madu Sari Alam Sumberasih and the CSR of PT Pertamina EP Sangatta - Semberah Field in the TAMU SARAH Program has led to innovative honey bee farming and the production of numerous honey-derived products. Despite these successes, challenges such as the presence of many similar honey products in the market were addressed through the creation of more attractive packaging, coupled with Halal and SP-PIRT certifications. The company also facilitated various infrastructure and equipment supporting honey production, such as more effective and efficient honey harvesting tools like the bee-sap and the dehumidifier. The previously unimaginable task of cultivating Kelulut honey bees became possible, thanks to the

company's involvement, which included recruiting program assistants to maintain intensive communication with the group.

Currently, the 12 members of the Kelompok Tani Madu Sari Alam, who primarily work as farmers, entrepreneurs, and laborers, have significantly increased their income through honey farming and sales. Monthly sales of cultivated honey add income of IDR 700,000 to IDR 2,600,000 per month. This supplementary income is substantial, especially considering their primary jobs do not always guarantee a steady income. This is why the TAMU SARAH Program has gained increasing popularity, even sparking the initiation of new groups like the Kelompok UMKM Wanita Sari Alam Sumberasih. The hope is that more people will benefit from honey, produce, and market honey-derived products without fear of competition. Instead, Kelulut honey can become a shared economic source through sustainable group efforts.

## 2. Community Development

ESG has not only been a trend for the past decade but has now evolved into a new paradigm for corporate business processes (Mandell, 2022). The development of ESG has increasingly become a business priority for companies as the "S" or "social" component gains more attention. This is why ESG and CSR are sometimes difficult to distinguish. However, according to some scholars who discuss the meaning of the ESG concept, there are still significant differences between CSR and ESG (Pollman, 2022). This section will explain how the "S" in ESG, often equated with CSR, is specifically articulated through four overlapping aspects: community development, local content, community engagement, and indirect economic impact. Through these four aspects, we can see how the Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) program operates and how it relates to the ESG paradigm adopted by the company.

The Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) program has generated significant benefits for the community of Tanah Datar Village through a Community Engagement approach that establishes a sustainable relationship between the company and the local community based on ESG principles. Community engagement in ESG is a multifaceted process characterized by active participation and collaboration between organizations and individuals in their communities (Peiró-Signes and Segarra-Oña, 2013). It is an approach that encompasses a variety of activities and dialogues aimed at creating strong, cohesive, and resilient community structures. The implementation of Community Engagement in this program involves the active participation of local stakeholders in the planning, decision-making, and execution of projects that yield sustainable outcomes.

In the context of the Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) program, practical steps taken to promote effective Community Engagement include:

- a. Empowerment of Local Pioneers: The expertise of local pioneers like Syamsul Alam, who has succeeded in *Trigona sp.* honey bee farming, is utilized as mentors and resource persons. The program provides direct training sessions and workshops focusing not only on the technical aspects of bee farming but also on business management and marketing skills. This ensures that participants are adequately prepared to start and sustain their bee farming ventures.
- b. Formation of Cooperatives or Community-Based Organizations (CBO): The establishment of cooperatives or CBOs aids in resource pooling, knowledge sharing, and joint marketing of the honey produced. Such structures facilitate access to microfinance or small business loans, enabling participants to invest in necessary equipment and expand their operations. The involvement of local government bodies and NGOs enhances the support system available to the community, providing additional resources and advocacy for bee farming initiatives.

- c. Utilization of Innovative Technology: The Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) program employs innovative technology in Kelulut honey bee farming, such as modified honey dehumidifiers and Bee-sap honey harvesting tools. The dehumidifier reduces the water content reduction time from three days to 1.5 to two days, while Bee-sap makes honey harvesting more efficient, reducing the time from three hours to one hour per liter of honey. These innovations make Kelulut farming more time-efficient and produce purer products.

In the context of Community Development, the program adopts the Triple Bottom Line theory, which focuses on social, environmental, and economic aspects. Socially, the program improves the quality of life through training and employment opportunities; environmentally, the eco-friendly *Trigona sp.* bee farming helps preserve the local ecosystem; economically, the increased income from honey sales positively impacts community welfare. Stakeholder Theory is applied by involving community groups, local government, NGOs, and PT Pertamina EP Sangatta - Semberah Field, ensuring that the needs of all stakeholders are accommodated. The program also supports several SDG goals such as poverty alleviation (SDG 1), the creation of decent jobs (SDG 8), and environmental conservation (SDG 15).

The program's outcomes show success in poverty alleviation, contributing to a 2.4% reduction in the number of poor residents in Tanah Datar Village through the involvement of farmer group members receiving BLT assistance. Income increases among target groups are evident from the rise in Kelulut honey harvests, with an average income increase of 123.3% among group members. The program is also supported by the village government as a best practice model for Kelulut honey farming, demonstrated by policies involving the Kelompok Tani Madu Sari Alam as a knowledge transfer partner.

The program's contributions to environmental conservation include pollination by *Trigona sp.* bees effectively benefit nine plant species, planting 50 fruit and flower plants for greening, and reducing CO<sub>2</sub> emissions by 0.0685 tons CO<sub>2</sub> eq/year through tree planting and waste management activities. Strategic actors such as Syamsul Alam and Ibu Heldiana, as local heroes, play key roles in program implementation, with the regeneration of local heroes expanding the scope of beneficiaries through the initiation of new assisted groups like the Ratu Sarah Group.

A study by Peiró-Signes and Segarra-Oña (2013) emphasizes the importance of integrating ESG principles into CSR programs to achieve long-term sustainability. Serikakhmetova and Adambekova (2022) also indicate that good ESG disclosure can enhance corporate financial performance and community welfare. Moreover, referring to studies conducted by Tripopsakul and Puriwat (2022), ESG has positively contributed to brand value and fostered customer trust and engagement. The success of the Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) Program, which adopts these principles, demonstrates how companies can create long-term value for local communities and the environment while strengthening their reputation as socially responsible companies.

This is why the success of community groups in developing and overcoming various challenges when implementing the Pengembangan Petani Madu Sari Alam Semberah (TAMU SARAH) program also determines the company's reputation. It is not without reason that the company provides various facilities to the group based on accurate needs identification rather than just the group's desires. So far, the company has been very responsive when Kelompok Tani Madu Sari Alam faces challenges such as product marketing. The company then provides opportunities for the group to participate in UMKM exhibitions at the group's request. These efforts by the company may seem ordinary, but upon closer examination, they are not easy. Involving the group in exhibitions also means the company needs to build relationships with stakeholders such as the local UMKM Office. The company's efforts to improve the group's

product marketing align with the statement by Pelosi and Adamson (2016) that integrating the social component of CSR into ESG is the most challenging, resource-intensive, and time-consuming effort for companies. However, the long-term benefits for the company are undeniable.

### 3. Local Content: Beyond Group Satisfaction

Local content can be translated as local satisfaction, referring to the satisfaction of the community or company-assisted groups with programs supporting ESG principles. However, according to a study by Huang, Chan, and Hsieh (2022), local content goes beyond this literal meaning, focusing on how companies manage community demands and expectations. To date, PT Pertamina EP Sangatta - Semberah Field CSR has developed a community satisfaction index in 2023 to specifically measure the satisfaction levels of beneficiaries regarding the TAMU SARAH Program. Fourteen criteria were used to measure group satisfaction with the CSR program, ranging from active group participation, program sustainability, the company's responsiveness to complaints, and program fairness, to group satisfaction with community development facilitators provided by the company.

The company received a "very good" rating in the community satisfaction study for the TAMU SARAH program. These criteria broadly capture the satisfaction of the Kelompok Petani Madu Sari Alam Semberah both qualitatively and quantitatively. However, based on the study by Huang, Chan, and Hsieh (2022) on Taiwanese society's renewed interest in LOHASism—a past lifestyle associated with natural, healthy, beautiful, and enjoyable living—there is an emerging criterion related to group satisfaction with programs aligned with ESG principles, which is the concept of joy and happiness. While there is no urgent need to measure these levels of happiness and satisfaction, it is interesting to note that in some of the successes of the TAMU SARAH program, there is a tendency for the program to exceed mere satisfaction, reaching the point of creating joy and happiness for the group.

This is not only in line with the praxis of the 'S' in ESG through the implementation of CSR, which is typically identified with sustainability principles and emphasizes a balance between economic and environmental aspects (Pollman, 2022). More broadly, according to Mitra et al. (2019), sustainability principles have become a concern for researchers and policymakers to link with the concept of happiness. Some criteria for measuring group happiness include the empowerment of the community, economic strength and equity, warm and loving family, health, and a democratic society with good governance (Baramuechai, 2007). These criteria tend to be present within the Kelompok Tani Madu Sari Alam Semberah, especially when new initiative groups like the Kelompok UMKM Wanita Sari Alam Sumberasih emerge.

For instance, a local hero from the group, in disseminating knowledge about *Trigona sp.* honey farming, shows no reluctance or fear of competition when sharing his knowledge. This attitude indicates two achievements during his involvement in the group: he has been empowered, and he has achieved economic strength and equity. This results in group members not merely becoming subordinates to the local hero, who naturally has more knowledge about bee farming. Instead, other group members actively participate in the farming process and earn proportional income.

Moreover, the reflection of the group members having achieved strong and equitable economic conditions is evident when the group encountered challenges in product marketing. The group did not hesitate to involve women who were not yet part of the group in the production of honey derivatives and in expanding the marketing reach. The Kelompok UMKM Wanita Sari Alam Sumberasih emerged as a new entity involved in this process. This UMKM

group was not initiated and formed without reason; rather, it further solidified the existence of economic equality, which is one of the goals of cultivating *Trigona sp.* honey.

This indicates that while the TAMU SARAH program was initially aimed at improving the economy of its members, now, with economic strength achieved, the group has another goal of creating happiness and well-being for the group and the broader community. This is reflected in the pursuit of economic equality, which is not intended to be enjoyed individually. Therefore, the group's goals and successes are fundamentally not solely economic but also emphasize justice and happiness for its members. Furthermore, the group's praxis, which does not merely focus on economic success, also reflects the criteria of a warm and loving family, where group members and other community members wishing to join are not seen as competitors. Instead, these members and aspiring joiners are viewed as potential entities that can further develop the cultivation of *Trigona sp.* bees and the production of honey-derived products.

#### **4. Indirect Economic Impact on Sustainable Company Production Processes**

The 'S' or social aspect of ESG, as implemented by the company, has contributed to the economic improvement of community groups and has become a strategic necessity for the company. Often, a company's success can be sustained by aligning its business principles with the needs of the surrounding community where it operates (Denis Grigorevich, 2023). In a study by Zhou et al. (2020) titled "The effect of firm-level ESG practices on macroeconomic performance," it is clearly stated that increased ESG practices by companies enhance a country's GDP. The more ESG practices a company adopts, the more positive the macroeconomic conditions of a country become.

The study by Zhou et al. (2020) challenges the mainstream conclusion that corporate social and environmental responsibilities reduce a country's Gross Domestic Product (GDP). Instead, over time, ESG proves to be beneficial for companies, especially during monetary crises. Companies that adopt ESG practices properly and effectively are more economically sustainable than those that neglect ESG principles (Zhou et al., 2020). Another study by Işık, Ongan, and Islam (2024) titled "New Pathway to Sustainability: Integrating Economic Dimension (ECON) into ESG factors as (ECON-ESG) and aligned with sustainable development goals (SDGs)" elaborates on how to measure the implementation of ESG and its impact on macroeconomic conditions, linking ESG with GDP, consumer price index, foreign exchange rates, and unemployment rates.

The 'S' principle in ESG implemented by PT Pertamina EP Sangatta - Semberah Field is embodied in the TAMU SARAH CSR program through the cultivation of *Trigona sp.* honey bees. Macroeconomically, the program conducted by the Madu Sari Alam group, and more broadly applied by the Sari Alam Sumberasih UMKM group, has provided economic income opportunities for group members ranging from IDR 700,000 to IDR 2,600,000 per month. This economic income earned by group members is not merely a profitable microeconomic gain. According to the ECON-ESG measurements presented by Işık, Ongan, and Islam (2024), these microeconomic conditions have positively contributed to macroeconomic conditions.

For instance, the minimum income of Rp 700,000 earned by group members from cultivating and selling *Trigona sp.* honey is above the lowest average income in Kutai Kartanegara Regency, which, according to the Central Statistics Agency in 2023, stands at IDR 644,570 (National Socio-Economic Survey, Indonesia Statistics, 2023). Moreover, this income is supplementary, as group members generally have primary occupations as farmers, entrepreneurs, or laborers, earning between IDR 500,000 and IDR 2,000,000 per month. Indirectly, based on ECON-ESG measurements, the income of group members has contributed to the regional GDP. Indirectly as well, some members who fall into the category of individuals

with income below the average GDP, meaning they are categorized as poor, are gradually able to rise out of poverty through this program.

Additionally, the cultivation of honey, resulting in significant honey production, has spurred the formation of groups such as the Kelompok UMKM Sari Alam Sumberasih, which develops honey-derivative products like propolis, facial soap, and dishwashing soap. The continuation of the program, which encourages broader community participation, has the potential to reduce unemployment in the areas where the program is implemented, by the ECON-ESG measurement criterion of “unemployment rate.” These data further substantiate Zhou et al.’s (2020) argument that the ‘S’ practice in ESG through the implementation of corporate CSR programs is not incompatible with GDP growth in developing countries. Moreover, the TAMU SARAH CSR program has the potential not only to reduce unemployment but also to alleviate poverty. Consequently, not only do the community groups benefit from this ESG-aligned program, but the business of the company also stands to benefit, as the ESG program positively contributes to macroeconomic conditions.

#### D. CONCLUSION

ESG has evolved beyond a mere trend to become a business paradigm for numerous companies worldwide, demonstrating long-term positive impacts. Integrating the ‘S’ or social component of ESG poses significant challenges for companies due to its time-consuming nature. PT Pertamina EP Sangatta - Semberah Field, which has long implemented the ‘S’ component of ESG through CSR practices, exemplifies this challenge. Nevertheless, the various efforts and achievements in the ‘social’ aspect of ESG by PT Pertamina EP Sangatta-Semberah Field have yielded significant outcomes. These can be measured through three specific aspects that link CSR practices to the ESG principles upheld by the company.

*Firstly*, community engagement is a key aspect of the TAMU SARAH community development program. The company’s involvement with various stakeholders to ensure the successful implementation of TAMU SARAH is a notable achievement. For instance, the company voluntarily built relationships with local governments to address marketing issues faced by the Kelompok Tani Madu Sari Alam. This effort reflects the company’s alignment with maintaining a good reputation, as the success of its CSR programs directly impacts its reputation. Therefore, providing program advisors from within the company is equivalent to the company’s continuous responsiveness to the group’s requests related to program issues and improvements.

*Secondly*, local content, traditionally interpreted as community satisfaction with the company’s development programs, takes on a deeper meaning in this context. If local content is understood merely as local community satisfaction with CSR programs, the TAMU SARAH program has already been deemed excellent based on the 2023 Community Satisfaction Index. However, in this context, local content relates to how the company manages community demands and expectations. The TAMU SARAH program, which involves the cultivation and marketing of honey and its derivative products, has provided additional income for group members. This achieved economic mission explains the high satisfaction levels among group members regarding the program.

The implementation of the TAMU SARAH program has further demonstrated a tendency to foster group happiness and contentment. This is evident in two ways: group members do not feel competitive when sharing knowledge about *Trigona sp.* honey bee cultivation, and they willingly teach cultivation skills to a broader audience due to the achievement of strong and equitable economic conditions. This reality is supported by the establishment of new institutions like the Kelompok UMKM Sari Alam Sumberasih, involved in marketing and producing honey derivative products. The presence of this new group reflects

the “warm and loving” criterion, where existing groups are not threatened but rather welcome contributions, support, and interest from the broader Tanah Datar village community. Such conditions indicate that the program’s objectives for group members extend beyond economics to encompass joy, happiness, collective spirit, and mutual sharing.

*Thirdly*, the indirect economic impact reinforces the challenge to the mainstream conclusion that ESG practices lead to GDP decline. This study found that ESG practices, particularly the ‘social’ component in the form of CSR, have contributed to GDP growth. This is evident when measured using the ECON-ESG concept, which directly assesses the economic impact of ESG on macroeconomic conditions. The income earned by group members through the TAMU SARAH Program is above the average GDP standard, meaning the program does not contribute to GDP decline. Instead, the additional income helps group members rise out of poverty. Furthermore, the openness of existing groups to the formation of new groups and the broader community joining the program to expand honey derivative product marketing and production has the potential to reduce unemployment, aligning with the unemployment rate reduction criterion, and indicating a positive contribution to macroeconomic conditions. Such direct contributions to macroeconomic conditions provide long-term benefits to the company. In times of economic crisis, companies that meticulously apply ESG principles and have programs that positively impact macroeconomic conditions will recover more swiftly.

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