



## INTEGRATING GREEN ECONOMY CONCEPTS TO SUPPORT THE ACHIEVEMENT OF SDGS TENGANAN DAUH TUKAD VILLAGE, MANGGIS DISTRICT, KARANGASEM REGENCY

A. A. Ketut JAYAWARSA<sup>1</sup>, A. A. Ngurah Mayun NARINDRA<sup>2</sup>, Komang Adi Kurniawan SAPUTRA<sup>3</sup>

<sup>1,2,3</sup>Warmadewa University, Indonesia

Corresponding author: Komang Adi Kurniawan Saputra

Email: [adikurniawan@warmadewa.ac.id](mailto:adikurniawan@warmadewa.ac.id)

### Article Info:

Received: 2024-07-18

Revised: 2024-08-15

Accepted: 2024-09-15

Volume: 3

Numbers: 2

Pages: 108 - 113

### Keywords:

Green Economy, SDGs, MSMEs, Akuntabilitas

### Abstract:

The implementation of the Green Economy in MSMEs in Karangasem, Bali, highlights dedication to sustainable development and environmental preservation. Many MSMEs in the region adhere to environmentally friendly practices, such as the use of sustainable materials and technology. In the tourism sector, for example, the business world focuses on environmentally friendly tourism with effective waste management and the use of renewable energy. Likewise, agricultural MSMEs are turning to organic methods to minimize the use of harmful chemicals. Government training and mentoring programs support these environmentally friendly practices. In Tenganan Village, the Ata craftsmen group exemplifies this approach. Known for their expertise with the roots of the Ata plant, the artisans uphold traditional methods while adapting to modern trends. Although the production process is environmentally friendly, the Ata tree trunks used as raw materials cannot be cultivated, and greater awareness of Green Economy principles is needed among partners. The service team is committed to educating these craftsmen about Green Economy practices to increase productivity and economic sustainability. In addition, although craftsmen currently use simple ledgers for financial recording, they lack detailed cost accounting for raw materials and operations. Introducing financial reporting that is aligned with Green Economy principles will improve accountability and financial management. With the existence of 15 independent Ata craft groups in Tenganan Village, the establishment of an integrated supervisory body can further support the integration of Green Economy practices and overall business efficiency.

## INTRODUCTION

Green Economy has a positive impact on all economic sectors in Indonesia. First, the energy sector is transforming with increased use of renewable energy resources, such as geothermal and solar power, which helps reduce carbon emissions (Cho et al., 2020). In the agricultural sector, sustainable and organic farming practices stimulate economic growth while maintaining environmental sustainability. The tourism industry also benefits from adopting environmentally friendly practices, such as waste management and sustainable property development, increasing the attractiveness of tourist destinations (Saputra et al., 2023). In the manufacturing sector, clean technology innovations are emerging that reduce the negative impact of production on the environment. In addition, the transportation sector is experiencing changes with the push towards sustainable transportation and vehicle electrification (Chung, 2020). Overall, the Green Economy promotes sustainable economic growth, creates new jobs, increases efficiency, and reduces the risk of adverse environmental impacts. Commitment to a green economy can also increase Indonesia's



This open-access article is distributed under a Attribution (CC-BY-NC) 4.0 license

global competitiveness, accommodating international market demands and increasingly paying attention to sustainable business practices (Watto et al., 2020).

The green economy has a positive impact on Indonesia's MSME sector. Sustainable practices, such as using environmentally friendly materials and energy-efficient production, can increase competitiveness and market access for MSMEs (Kijkasiwat & Phuensane, 2020). Environmental initiatives can also open up new opportunities in the green economy sector, such as producing environmentally friendly goods or providing sustainability consulting services. In addition, government support programs for sustainable training and certification for MSMEs can strengthen their capacity. Overall, the Green Economy encourages the growth and sustainability of MSMEs, creating new opportunities in an economic context that is increasingly environmentally conscious (Veronica et al., 2020).

Implementing a Green Economy in MSMEs in Karangasem, Bali, reflects a commitment to sustainable development and environmental preservation. Many MSMEs in this area adopt sustainable practices, including environmentally friendly materials and green technologies (Hou et al., 2019). For example, businesses in the tourism sector support eco-friendly tourism with good waste management and the use of renewable energy. In addition, MSMEs in the agricultural sector are starting to apply organic methods to reduce the use of dangerous chemicals. Training and mentoring programs from the government and related institutions also help MSMEs adopt Green Economy practices (Alhadid & Abu-Rumman, 2014). Thus, the application of the Green Economy to MSMEs in Karangasem not only supports local economic growth but also preserves environmental sustainability (Wang & Juo, 2021).

**Green Economy, Sustainable Development Goals (SDGs).** with Warmadewa University This green economy can also be interpreted as producing low or no carbon dioxide emissions to the environment, saving natural resources and being socially just (Calderon-Monge & Ribeiro-Soriano, 2023). A green economy is a low-carbon, resource and socially inclusive economy. In a green economy, job and income growth is driven by public and private investment in a wide range of economic activities, infrastructure, and assets that enable reduced carbon emissions and pollution, increased energy and resource efficiency, and prevented loss of biodiversity and ecosystem services (Li et al., 2020). The difference between the green economy and other economic ideas is the direct valuation of natural capital and ecological services as economic value and cost accounting in which costs realized to society can be traced back and calculated as liabilities, an entity that does not harm or ignore assets (Calderon-Monge & Ribeiro -Soriano, 2023; Shah et al., 2022).

**Ata Crafts.** This Ata craft was first known in Tenganan Pegringsingan Village, Manggis District, Karangasem Regency, as shields for the Megeret Pandan tradition or Pandan War (Mekare-Kare tradition). This tradition is thought to have existed since Tenganan Pegringsingan Village was founded around the X and XI centuries AD. This tradition was born to honor Dewa Indra as the God of War, a belief of the people of Tenganan Pegringsingan Village. In battle, they will always carry a shield or shield (a local term called taming), using strong and flexible material to withstand attacks, namely woven ata nails. Incidentally, this data nail material grows wild in the gardens and forests of Tenganan Pegringsingan Village. Apart from taming, several Ata crafts still existed at that time, namely Ingke Ati Ata (as a place for canning or offerings) and Wanci (as a place for sedan or betel nut). This is the first form of Ata craft that has existed since around the X.

**Partner Problems.** Looking at the environmentally friendly production process and using natural materials, partners do not yet know about implementing the Green Economy in their business. This affirms the service team's commitment to Green Economy outreach for Mr. Nyoman



Giri Arta's business. Of course, it is hoped to increase business productivity and improve the partners' economies. Then, regarding financial reporting from partner businesses, Mr. Nyoman said that he only made simple records of how much money came in and went out through a simple cash notebook without calculating raw material costs, operational costs and so on. This is an additional innovation for the service team to provide understanding regarding financial reporting accountability and is added to the Green Economy approach so that partner business accountability reporting becomes better. There are 15 groups of ata craftsmen in Tenganan village. However, in producing and selling their products, this group of ata craftsmen is independent; no official organization/association oversees all groups of ata craftsmen in Tenganan Village.

## METHODS

There are several stages in implementing this service, including 1) Observation and interview methods to obtain accurate data for reflection material; observations are carried out on the target audience/students using direct observation and interview methods. The first observation was carried out shortly before the service was carried out, and training sessions were given by providing verbal counseling regarding the extent of the artisans's understanding of the green economy and its implementation. In the future, if the program has been implemented, follow-up observations and interviews will be held to obtain follow-up information on activities from the results of the observations. 2) Lecture Method: This lecture method is carried out by delivering material regarding the accountability of MSME financial reports directly or orally. 3) Mentoring, the method used to achieve the goals formulated in advance, is the discussion and practice method. Combining these two methods is expected to increase the public's understanding and skills regarding the green economy and accountability of MSME financial reports.

## RESULTS AND DISCUSSION

Based on the problems partners face, the solution provided by the service team is to provide intensive socialization regarding the Green Economy concept, including its application in accounting and business management, so that partners can sustainably optimize their business potential. By providing training and mentoring, partners can learn to apply Green Economy principles in accounting and production to increase the added value of their products and the competitiveness of their businesses. ata woven artisans with knowledge of the Green Economy concept (Calderon-Monge & Ribeiro-Soriano, 2023). Through this training, artisans will understand how to apply Green Economy principles in production, from selecting raw materials to manufacturing techniques. Thus, the woven ata products produced not only have high aesthetic value but are also environmentally friendly and sustainable, so they can attract consumers who are increasingly concerned about environmental issues (Hussain et al., 2019).

Through training in making financial reports, service partners will be given an in-depth understanding of making good and correct financial reports. They will know the potential for village economic development, especially in the ata woven sector. This training aims to increase the capacity of service partners in managing BUMDes finances so that the resulting financial reports can be the basis for making strategic decisions for developing data-weaving businesses and the village economy (Tóth et al., 2021).

Tenganan Dauh Tukad village, with its rich data-weaving tradition, has excellent potential to develop the local economy. However, artisans often need help managing their business finances and marketing their products effectively. Socialization regarding the Green Economy and training in



preparing financial reports aims to empower artisans to manage their businesses more independently and sustainably (Hamimah et al., 2022). With a better understanding of Green Economy principles, artisans are expected to be able to produce products that are environmentally friendly and have high added value while preserving village culture and the environment. Improving the welfare of the people of Tenganan Dauh Tukad Village is one of the main objectives of this community service activity. Artisans can increase their income through socialization about the Green Economy and training in making financial reports. With sound financial reports, craftspeople can identify business development potential, access funding sources, and make more informed business decisions. Applying Green Economy principles can also open up new, broader market opportunities, both at home and abroad (Manurung et al., 2022).

**Social and Environmental Impacts:** (1) Increased environmental awareness: Green Economy socialization is expected to increase artisans's awareness of the importance of protecting the environment in the woven ata production process. This can encourage using sustainable natural raw materials and reduce production waste. (2). Strengthening social networks: Through outreach and training activities, artisans can share knowledge and experience, thereby forming a solid social network. This network can be a source of support, inspiration, and information for artisans developing their businesses. (3). Improved quality of life: With increased income and welfare, it is hoped that artisans' quality of life will increase. They can better fulfill their basic needs and have the opportunity to develop their own and their family's potential. (4). Cultural preservation: Empowerment activities that focus on developing woven products or indirectly help preserve the culture and traditions of the people of Tenganan Dauh Tukad Village.

Community service that focuses on developing the skills of ata woven artisans in Tenganan Dauh Tukad Village can have a very positive impact. Through training and mentoring, the quality of woven ata products can be improved, productivity can be increased, and market reach can be expanded. This will have an impact on increasing the income of artisans, family welfare, and preserving local culture. The success of this service is highly dependent on active community involvement, relevant quality training, support from various parties, and cross-sector collaboration. Thus, this service economically benefits artisans and contributes to sustainable village development.



This open-Attribution

**Figure 1.** Service activities at Ata Craftsmen

## CONCLUSION

Community service to Ata woven artisans in Tenganan Dauh Tukad Village has increased awareness of the importance of Green Economy principles in Ata woven production. Through training and mentoring, product quality increases significantly so that they can compete in the broader market. Apart from that, this program has also succeeded in increasing artisans' production efficiency and income and contributing to cultural and environmental preservation. In this way, the welfare of village communities increases. For the sustainability of this program, it is necessary to strengthen institutions, diversify products, develop export markets, utilize information technology, and increase human resource capacity. Tenganan Dauh Tukad Village hopes to become an example for other villages in developing sustainable and value-added handicraft businesses.

## REFERENCES

- Alhadid, A. Y., & Abu-Rumman, A. H. (2014). The Impact of Green Innovation on Organizational Performance, Environmental Management Behavior as a Moderate Variable: An Analytical Study on Nuqul Group in Jordan. *International Journal of Business and Management*, 9(7), 51-58. <https://doi.org/10.5539/ijbm.v9n7p51>
- Calderon-Monge, E., & Ribeiro-Soriano, D. (2023). The role of digitalization in business and management: a systematic literature review. In *Review of Managerial Science* (Issue 0123456789). Springer Berlin Heidelberg. <https://doi.org/10.1007/s11846-023-00647-8>
- Cho, C. H., Kim, A., Rodrigue, M., & Schneider, T. (2020). Towards a better understanding of sustainability accounting and management research and teaching in North America: a look at the community. *Sustainability Accounting, Management and Policy Journal*, 11(6), 985-1007. <https://doi.org/10.1108/SAMPI-08-2019-0311>
- Chung, K. C. (2020). Green marketing orientation : achieving sustainable development in green hotel management Green marketing orientation : achieving sustainable. *Journal of Hospitality Marketing & Management*, 00(00), 1-17. <https://doi.org/10.1080/19368623.2020.1693471>
- Hamimah, T., Nurul Huda, N., Uni Kamlun, K., Rosmalina, A. R., & Jennifer, C. K. L. (2022). Sustainability assessment of mangrove forest as a tourist destination: A case study using GSTC Criteria in Kota Belud, Sabah, Malaysia. *IOP Conference Series: Earth and Environmental Science*, 1053(1). <https://doi.org/10.1088/1755-1315/1053/1/012028>
- Hou, J., Luo, S., & Cao, M. (2019). A review of China's current situation and prospects of poverty alleviation with photovoltaic power generation. *Journal of Renewable and Sustainable Energy*, 11(1). <https://doi.org/10.1063/1.5048102>
- Hussain, M., Al-Aomar, R., & Melhem, H. (2019). Assessment of lean-green practices on the sustainable performance of hotel supply chains. *International Journal of Contemporary Hospitality Management*, 31(6), 2448-2467. <https://doi.org/10.1108/IJCHM-05-2018-0380>



- Kijkasiwat, P., & Phuensane, P. (2020). Innovation and Firm Performance: The Moderating and Mediating Roles of Firm Size and Small and Medium Enterprise Finance. *Journal of Risk and Financial Management*, 13(5). <https://doi.org/10.3390/jrfm13050097>
- Li, L., Msaad, H., Sun, H., Tan, M. X., Lu, Y., & Lau, A. K. W. (2020). Green innovation and business sustainability: New evidence from energy-intensive industry in China. *International Journal of Environmental Research and Public Health*, 17(21), 1–18. <https://doi.org/10.3390/ijerph17217826>
- Manurung, D. T. H., Hidayah, N., Setiany, E., Saputra, K. A. K., & Hapsari, D. W. (2022). Does Carbon Performance and Green Investment Affect Carbon Emissions Disclosure? *Journal of Environmental Accounting and Management*, 10(4), 335–344. <https://doi.org/10.5890/JEAM.2022.12.001>
- Saputra, K. A. K., Subroto, B., Rahman, A. F., & Saraswati, E. (2023). Sustainability Performance in Hospitality Industry: Interaction of Strategic Sustainability Management and Sat Kerthi Culture. *Jurnal Ilmiah Akuntansi Dan Bisnis*, 18(1), 147. <https://doi.org/10.24843/jiab.2023.v18.i01.p10>
- Shah, S. Q. A., Lai, F. W., Shad, M. K., & Jan, A. A. (2022). Developing a Green Governance Framework for the Performance Enhancement of the Oil and Gas Industry. *Sustainability (Switzerland)*, 14(7). <https://doi.org/10.3390/su14073735>
- Shen, H., Ng, A. W., Zhang, J., & Wang, L. (2020). Sustainability accounting, management and policy in China: recent developments and future avenues. *Sustainability Accounting, Management and Policy Journal*, 11(5), 825–839. <https://doi.org/10.1108/SAMPJ-03-2020-0077>
- Tahir, I. N. (2020). Poverty Alleviation Strategies Implemented By ‘umar Ibn ‘abd Al ‘aziz: Lessons for Muslim Economists on Achieving Sdg of Poverty Alleviation. *International Journal of Economics, Management and Accounting*, 28(2), 483–515.
- Tóth, B., Lippai-Makra, E., Szládek, D., & Kiss, G. D. (2021). The contribution of ESG information to the financial stability of European banks. *Public Finance Quarterly*, 66(3), 429–450. [https://doi.org/10.35551/PFQ\\_2021\\_3\\_7](https://doi.org/10.35551/PFQ_2021_3_7)
- Veronica, S., Alexeis, G. P., Valentina, C., & Elisa, G. (2020). Do stakeholder capabilities promote sustainable business innovation in small and medium-sized enterprises? Evidence from Italy. *Journal of Business Research*, 119(July 2019), 131–141. <https://doi.org/10.1016/j.jbusres.2019.06.025>
- Wang, C. H., & Juo, W. J. (2021). An environmental policy of green intellectual capital: Green innovation strategy for performance sustainability. *Business Strategy and the Environment*, 30(7), 3241–3254. <https://doi.org/10.1002/bse.2800>
- Watto, W. A., Manurung, D. T. H., Saputra, K. A. K., & Mustafa, S. G. (2020). Corporate Social Responsibility and Firm Financial Performance: A Case of SME's Sector in Pakistan. *International Journal of Environmental, Sustainability, and Social Science*, 1(2), 62–74. <https://doi.org/10.38142/ijesss.v1i2.30>