A Case Study of Community Empowerment in Orang Asli Villages: Pos Yum and Kampung Pendeq, Sungai Siput, Perak, Malaysia

(Kajian Kes Pemerkasaan Komuniti di Kampung Orang Asli: Pos Yum dan Kampung Pendeq, Sungai Siput, Perak, Malaysia)

# ZAL HASMI MOHAMAD ROSLAN\*, NUR HASYAREEDA HASSAN, SITI AISHAH HASBULLAH, NORFARHAN MOHD ASSA'AD & MOHD SHAHRIM SENIK

## **ABSTRACT**

The 17 Sustainable Development Goals (SDGs) are at the heart of the 2030 agenda for sustainable development. This report focuses on the case study impact of Orang Asli Village in Pos Yum and Pendeq, Sungai Siput, Perak, Malaysia, as the outcome of the offroad Corporate Social Responsibility (CSR) activity organized by Persatuan Mahasiswa, Fakulti Sains dan Teknologi, UKM. The CSR activity was supported by Yayasan Food Bank Malaysia (YFBM), the charitable organization governed by a Board of Trustees that put an effort to reduce food waste from the manufacturer, wholesaler, hypermarket and hotel industry, sort and re-distribute it to the identified targeted B40 communities in higher learning institution (IPT), charity home, welfare centre and Program Perumahan Rakyat Termiskin (PPRT). This CSR program also received assistance from organizations such as the Department of Civil Defence Malaysia, Yayasan Dana Kita and Laboratory and Instrumentation Secretariat Faculty Science and Technology UKM (SMI FST UKM). The activities carried out during the CSR are aimed at looking at the menstrual poverty among Orang Asli and providing information on menstrual hygiene and awareness. Furthermore, it was discovered that Orang Asli needed help finding healthy food sources. Another issue is the spread of infectious diseases among the Orang Asli without sufficient education. Ineffective transport and infrastructure discourage parents from bringing their children to medical facilities, leading to infectious diseases. This indicates the urgency of locating missions and providing Orang Asli Village with a full range of action health services. Furthermore, it sparked a great deal of interest among students and non-governmental organizations to launch a new initiative to steer the future of these indigenous people in the direction of life to its fullest.

Keywords - Orang Asli, Indigenous Community, Sustainable Development Goal (SDG), Sustainability, Corporate Social Responsibility (CSR), Volunteerism.

#### **ABSTRAK**

17 Matlamat Pembangunan Mampan (SDG) adalah teras agenda 2030 untuk pembangunan mampan. Laporan ini memfokuskan kepada impak kajian kes Kampung Orang Asli di Pos Yum dan Pendeq, Sungai Siput, Perak, Malaysia, sebagai hasil daripada aktiviti Tanggungjawab Sosial Korporat (CSR) offroad anjuran Persatuan Mahasiswa, Fakulti Sains dan Teknologi, UKM. Aktiviti CSR disokong oleh Yayasan Food Bank Malaysia (YFBM), pertubuhan amal yang ditadbir oleh Lembaga Pemegang Amanah yang berusaha mengurangkan sisa makanan daripada industri pengilang, pemborong, pasar raya besar dan hotel, menyusun dan mengagihkannya semula kepada mengenal pasti sasaran komuniti B40 di institusi pengajian tinggi (IPT), rumah kebajikan, pusat kebajikan dan Program Perumahan Rakyat Termiskin (PPRT). Program CSR ini turut mendapat bantuan daripada organisasi seperti Jabatan Pertahanan Awam Malaysia, Yayasan Dana Kita dan Sekretariat Makmal dan Instrumentasi Fakulti Sains dan Teknologi UKM (SMI FST UKM). Aktiviti-aktiviti yang dijalankan semasa CSR adalah bertujuan untuk melihat kemiskinan senggugut dalam kalangan Orang Asli dan memberi penerangan tentang kebersihan dan kesedaran haid. Tambahan pula, didapati Orang Asli memerlukan bantuan mencari sumber makanan yang sihat. Isu lain ialah penularan penyakit berjangkit dalam kalangan Orang Asli tanpa pendidikan yang mencukupi. Pengangkutan dan infrastruktur yang tidak berkesan tidak menggalakkan ibu bapa membawa anak-anak mereka ke kemudahan perubatan, yang membawa kepada penyakit berjangkit. Ini menunjukkan kesegeraan untuk mencari misi dan menyediakan Kampung Orang Asli dengan rangkaian penuh perkhidmatan kesihatan tindakan. Tambahan pula, ia mencetuskan minat yang besar dalam kalangan pelajar dan pertubuhan bukan kerajaan untuk melancarkan inisiatif baharu bagi mengemudi masa depan orang asli ini ke arah kehidupan yang sepenuhnya.

Kata Kunci - Orang Asli, Komuniti Orang Asli, Matlamat Pembangunan Lestari (SDG), Kelestarian, Tanggungjawab Sosial Korporat (CSR), Kesukarelawanan.

#### INTRODUCTION

This volunteer-based initiative program has been carried out under a Social Corporate Responsibility program endorsed by the Faculty of Science and Technology Student Association (PMFST UKM) in collaboration with various governmental and non-governmental

organizations (NGOs) such as the Food Bank Malaysia Foundation (YFBM), Dana Kita Organization, the Civil Defense Department (APM), student affairs and alumni of Faculty Science and Technology, UKM as well as the Instrumentation and Laboratory Secretariat of the Faculty of Science and Technology at the Universiti Kebangsaan Malaysia (SMI FST UKM) (Figure 1).



FIGURE 1. The above logo represents the entities that involved on implementation of the program that has endorsed by Faculty of Science Technology Student Association, Universiti Kebangsaan Malaysia (PMFST UKM)

The objectives of this program to help the indigenous communities residing in Pos Yum and Kampung Pendeq, Sungai Siput, Perak, Malaysia, to aid and enhance awareness regarding infectious diseases, advocate for menstrual poverty, and promote the importance of clean, high-quality, and balanced

nutrition. These target groups were selected due to their remote location, far from urban areas, despite being home to one of the largest indigenous communities on the Malay Peninsula. Inadvertently, this initiative aligns with the Sustainable Development Goals (SDGs) 3, 4, 5, and 6, as shown in Figure 2.









FIGURE 2. Targeted Sustainable Development Goals

The indigenous people in Pos Yum and Pendeq primarily belong to the Temiar tribe, the largest indigenous group on the Peninsula of Malaysia. Specifically, the Temiar people are predominantly found in Malaysia's Perak, Pahang, and Kelantan states (Roseman, 1993; Nor Azmi Baharom & Pakhriazad Hassan Zaki, 2020).

Currently, it is estimated that between 40,000 to 120,000 Temiar individuals reside in riverine and forested areas of peninsular Malaysia(Nor Azmi

Baharom & Pakhriazad Hassan Zaki, 2020). During data collection in Pos Yum and Kampung Pendeq, Sungai Siput, Perak, it was found that there are more than 100 Temiar families in these two villages alone.

Consequently, the significant number of families and their remote location, with limited access to urban amenities and the internet, make it challenging to obtain necessities, much like those encountered by modern society today (Fang et al., 2022). Therefore, addressing these urgent circumstances by aiding and

raising awareness about infectious diseases, advocating for menstrual poverty, and promoting clean, high-quality, and balanced nutrition becomes paramount, in line with SDGs 3, 4, 5, and 6.

#### PLANNING AND STRATEGY

Several critical skills and strategies are essential to master for the successful execution of this program. These skills include planning skills, fostering effective diplomatic relations with external organizations, methods for obtaining preliminary information, managing goods and logistics, and, finally, effective communication skills. Without these skills and strategies, challenges and difficulties may arise in implementing the program and achieving its intended goals.

Planning is the foundational skill and strategy that must be established. It provides a roadmap for the project team, outlining the tasks, resources, and timelines needed to successfully complete the project. Effective planning allows for better coordination and resource allocation, helps identify potential risks and challenges, and enables the project team to make informed decisions throughout the project lifecycle.

In the initial stages of program planning, a program organization is typically formed, as is customary in most programs. However, the approach implemented for appointing program organizers by PMFST aims to provide fresh exposure to each committee member within PMFST. For example, suppose a committee member has never held the position of program treasurer. In that case, that member will be appointed as the program treasurer with some guidance from the highest council within the program organization. The selection of the highest council of the program organization is from among those who have a comprehensive understanding of the overall program implementation and development direction. This is crucial for providing clear and easily understandable guidance and actions to streamline the program implementation process.

Additionally, the strategic approach to program implementation planning is carried out by executing a grand master plan using Google Docs, accessible online to all program organization members via a provided link. This grand master plan encompasses task details, task initiation dates, deadlines, task statuses, responsible member names, and the names of the highest council members monitoring task execution. This method indirectly facilitates the ability of all organization members to understand their respective

tasks and the individuals to whom they should refer without overloading work tasks simultaneously. Also, it could help provide a clear roadmap for the project team to outline the tasks, resources, and timelines needed to successfully complete the project.

The next skill is fostering good diplomatic relations with external organizations. Maintaining such diplomatic relationships is not only required between nations but is also crucial within a student organization. Fostering good diplomatic relations can enhance the network of relationships among organizations, facilitating the attainment of a common goal, such as resolving human rights issues, addressing climate change, or engaging in trade agreements that make collective objectives more readily achievable (Faizullaev, 2014). PMFST has established favourable relationships with external organizations such as YFBM and the Dana Kita Organization.

These positive relationships have been cultivated through the contributions of human resources to assist volunteer missions. For example, the need for volunteer assistance in packaging basic food items for flood victims in Johor occurred in mid-2022 and 2023. This cooperation has created a positive impact, encouraging mutual support in times of need. Thus, thanks to these established good relations, PMFST successfully secured aid from YFBM and the Dana Kita Organization, providing over 100 boxes of high-quality and clean food (YFBM) and 16 boxes of sanitary towels (Dana Kita).

Understanding socio-cultural is another crucial aspect of managing a large-scale program involving a sensitive target group, such as indigenous people. Enhancing comprehension of socio-cultural aspects contributes to a more profound understanding, facilitating effective regional transformation and policy formulation (Elmustapha et al., 2018). This is essential to avoid insufficient or excessive aid provisions and information.

Therefore, PMFST collected data early on by contacting the heads of the indigenous villages in Pos Yum and Kampung Pendeq, Sungai Siput, Perak, Malaysia. This approach is vital to prevent excessive aid distribution, leading to wastage. Furthermore, it helps determine the program's target group size and the location of participant settlements. This information is crucial to ensure the timely preparation of cooking supplies, bedding, distance from urban areas or health facilities, access to clean water supply, and food provision, all of which contribute to participant safety.

Furthermore, the skill of managing goods and logistics is indispensable, especially when overseeing a humanitarian aid mission. Managing goods and logistics

is of utmost importance in project operations for cost reduction and risk mitigation to help identify and mitigate risks associated with inventory management, transportation, and distribution (Ristovska et al., 2017). Therefore, it is crucial to ensure that all aid items received are stored in good condition, free from contamination, damage, and spoilage, and are not accessible to animals and pests.

PMFST's approach to storing aid items such as food assistance involves initial packaging at YFBM facilities, the organization responsible for providing food aid and storing them in their storage warehouse. Sanitary towel donations are collected and stored in a locked and temperature-controlled room to maintain the quality of items to be distributed to the target group. Once the program implementation day arrives, the plan for transporting these aid items is executed. PMFST negotiated with the Malaysian Civil Defence Department to provide large-sized lorries capable of traversing hilly and forested areas to transport these items to Pos Yum and Kampung Pendeq, Sungai Siput, Perak, Malaysia, which are far from urban areas.

Lastly, effective communication skills are crucial. Communication is the key to success in any project or program, whether at the university level or workplace. Effective communication skills

include providing positive responses to all entities involved in a program, maintaining a good image, building strong relationships, making sound decisions with strong justifications, maintaining consistency, and exercising control in performing assigned tasks. Effective communication ensures that everyone in the organization understands the need for change, the changes, and how they will affect project and individual work (Zareen Husain, 2013). Without effective communication, difficulties may arise in project execution and in reaching agreements among external organizations involved in achieving project success.

## LOCATION SELECTION

This initiative is specifically designed for the indigenous populations residing in Pos Yum (Figure 3) and Kampung Pendeq, Sungai Siput, Perak, Malaysia. It is located alongside the Sungai Siput, Perak. These communities were chosen due to their remote geographical location, situated far from urban centres, despite being home to one of the largest indigenous populations, the Temiar Tribe, which is highly concentrated on the Peninsula of Malaysia.



FIGURE 3. The location of Pos Yum and Kampung Pendeq

## LOCATION SELECTION

This initiative is specifically designed for the indigenous populations residing in Pos Yum (Figure 3) and Kampung Pendeq, Sungai Siput, Perak, Malaysia. It is located alongside the Sungai Siput, Perak. These communities were chosen due to their remote geographical location, situated far from urban centres, despite being home to the one of the largest indigenous populations, which is the Temiar Tribe that is highly concentrated on the Peninsula Malaysia.

## **ACTIVITIES AND MECHANISM**

Activities conducted in the program have placed a strong emphasis on education and awareness, while also aiding packages to the target groups in both villages, namely Pos Yum Village and Pendeq Village. Additionally, community gatherings with the indigenous people were organised to foster friendly interactions and introduce them to the culture and traditions within their community.

However, several challenges were identified during the program implementation. The most

significant challenge encountered was engaging the villagers to actively participate alongside the volunteer members involved in the program. Strategies employed to engage the indigenous community included incentives such as prizes, karaoke competitions, distributing used clothing, and organising children's games. These methods have proven effective, resulting in excellent cooperation during the program's execution at the end.

## Advocacy for Infectious Disease Education Among Indigenous Communities

The Infectious Disease Awareness and Education Activity constituted the first segment conducted upon arrival at the indigenous settlement site. Raising awareness about infectious diseases holds significant importance for these indigenous communities due to their high susceptibility to such diseases.

Factors contributing to this susceptibility include exposure to parasites, vector-borne illnesses transmitted by rodents and mosquitoes, untreated water sources, and unhygienic food practices (Chin et al 2016). Intestinal parasitic infections (IPIs) among indigenous population consistently increase with







FIGURE 4. Commencing of advocacy of infectious disease within the indigenous communities

recorded prevalence that is range between 52.4% to 98.4% (Chin et al. 2016; Ngui et al. 2011: Ahmed et al. 2011; Ngui et al. 2015; Al-Delaimy et al. 2014). Hence, it is imperative to provide education and exposure regarding the transmission of these diseases and mitigation measures to prevent their spread among these communities and align with SDG 3 to achieve good health and wellbeing within Orang Asli communities.

The educational approach involved the placement of posters in the form of banners and displays throughout the indigenous communities at the site. The selection of infectious diseases was guided by health experts from the Ministry of Health Malaysia and advice from infectious disease specialists within the faculty of science and technology at UKM. The chosen diseases include:

- i. Malaria: Caused by the Plasmodium spp. parasites transmitted through mosquito bites.
- ii. Tuberculosis (TB): Airborne bacterial infection caused by Mycobacterium tuberculosis.
- iii. Filariasis: Resulting from parasitic worms and transmitted through mosquito bites.
- iv. Leptospirosis: Caused by exposure to contaminated water, heat, or infected animals.

v. Whipworm Infection (Trichuris Trichiura spp., Trichocephalus trichiura spp.): A parasitic worm found in contaminated food or on body parts, like feet, and infecting the human large intestine.

To engage the community and foster continued interaction with the involved volunteer members, a "Pulling Factor" strategy was employed. Prizes, such as snacks, were arranged on a stage and awarded to those who successfully answered questions or actively engaged with the presenters (Figure 4).

High-Quality and Hygienic Food Aid Distribution Session Donated by YFBM and Dana Kita Organization to Indigenous Communities

The session for providing high-quality and clean food assistance donated by YFBM and Dana Kita followed the infectious disease education session were shown in Figure 5. The food aid session began with the gathering of indigenous families at the designated location, facilitated by the village leader known as the "Tok Batin."

After assembling the family members and



FIGURE 5. Food aid distribution session donated by YFBM, and Dana Kita

cross-referencing their names with pre-collected data, the aid distribution took place by calling out the names of the family heads. This procedure is highly critical to prevent any one family from receiving an excess of aid, which could lead to wastage, and to ensure an equitable and organised distribution of assistance across the entire community. On the next day, the food distribution took place at Kampung Pendeq in Sungai Siput (Figure 6).

The implementation mechanism for this session did not require a "Pulling Factor" since this factor had been implemented during the first session. This approach led to the early and well-received gathering of the entire community. Indirectly, this effort also aligns with the Sustainable Development Goals

(SDGs), specifically SDG 3 - Good Health and Wellbeing, and SDG 6 - Clean Water and Sanitation.

Advocacy for Menstrual Poverty Among Indigenous Communities.

The following day continued with advocacy for menstrual poverty among the indigenous community in the area. Menstrual poverty refers to individuals or communities lacking adequate access to menstrual hygiene products due to financial constraints and challenges in disposing of and managing menstrual waste (Suhaida, 2022). Moreover, among the local community, many perceive topics like menstruation



FIGURE 6. Food aid distribution in the morning at Kampung Pendeq, Sungai Siput, Perak, Malaysia

cycles or menstrual hygiene as embarrassing or taboo to discuss (Faiza, 2011). Consequently, menstrual poverty issues persist uncontrolled and without proper education among this community. This issue becomes critical when some community members lack access to proper education, technology, or urban amenities, as is the case with indigenous people living in remote areas.

Therefore, advocating for menstrual poverty among the indigenous community is crucial, given their remote and isolated location, limited access to education, and technology. The advocacy method began with attracting the indigenous population to interact with our volunteer members. The attraction factor

involved placing clean, attractive, and well-presented clothing in their community hall. The village leader, known as "Tok Batin" would inform the villagers to visit their community hall. Once the entire community gathered, the advocacy activity commenced.

The advocacy approach involved individualised interactions, as building a good rapport with indigenous individuals was a priority before initiating menstrual hygiene education. This approach also ensured that discussions remained private and respected the privacy of those being interviewed. Brochures were distributed to the interviewed individuals as reference materials (Figure 7).

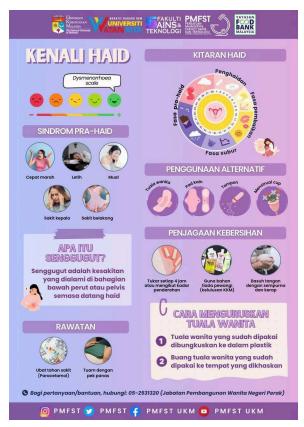


FIGURE 7. The brochure for the event

After conducting interviews with selected indigenous individuals, volunteer members provided them with menstrual pads based on their specific needs as well as donation of used clothes as a "pulling factor" to increase interaction between volunteers and targeted people. This effort aimed to provide clear guidance to the indigenous community regarding menstrual hygiene during menstruation, aligning with the Sustainable

Development Goal (SDG) 5, which focuses on gender equality.

Sport and Gamtes Event With Indigenous Children

In addition to conducting advocacy for menstrual poverty, a sports and games activity with indigenous children was simultaneously organised (Figure 9).



FIGURE 9. Donations of used clothes.

This was done to attract indigenous mothers to attend the menstrual poverty advocacy session. Typically, according to the Tok Batin, indigenous mothers would be with their children during the afternoon when their children were playing outside the house. The sports and games activity aimed to enhance the interaction between volunteer members and the indigenous community, allowing them to better understand the cultural context and traditions.

The indigenous children included kids, early adolescents, and teenagers, who were divided into balanced groups for the sports and games activities. The attraction method employed in this session involved providing prizes to all participating groups. However,

the prizes provided were educational supplies and facilities that could be used for educational purposes. This approach aligns with Sustainable Development Goal 4, which seeks to achieve quality education.

Karaoke Session with The Indigenous Community

On the evening of the second day, the focus shifted to a more relaxed activity – a communal karaoke session with the indigenous community (Figure 10). The choice of karaoke as an activity was based on advice from the village leader, Tok Batin. According to Tok Batin, karaoke is the most favored activity within the community. This preference arises from the fact



FIGURE 10. Karaoke session alongside the indigenous community on that night

that the indigenous population has limited exposure to technology, unlike urban areas, and they opt for entertainment activities like karaoke.

The activity was organised by hosting a karaoke competition among the adult indigenous community members. Prizes such as food hampers and milk were provided as incentives to ensure active participation among the indigenous community members.



Presentation Of "Sewang" Traditional Ritual Performance in The Temiar Indigenous Community

The final session featured a traditional Sewang performance presented by the indigenous community in the area (Figure 11). Sewang dance, also known as Jenulang, is a traditional dance among the Semai and Temiar indigenous ethnic groups in the state of Pahang, Malaysia. This dance incorporates elements



FIGURE 11. The sport and games event commence with the indigenous children

of dance, music, and singing and involves a group of 18 or more members, including both genders, as dictated by the available stage space. The dance serves various purposes, including entertainment, welcoming, courtship, weddings, honouring rice spirits, and even for medicinal reasons (Yahaya et al 2014). There are seven (7) types of Sewang that has been identify. Which is Sewang Gamok, Sewang Chenchem, Sewang Penhei, Sewang Panoh, Punggei, Tanggei and Sewang Selombang (Hassan et al 2022).

The dance is led by an older male known as Tok Halak, who also serves as the lead singer. The dancers repeat each line of their leader's song while moving in a circular fashion and stomping their feet on the floor. They are accompanied by the traditional 'Buluh Cetong' musical instrument made from bamboo,

which is struck against a wooden surface. Performances with fewer than 10 members are rare, as they can affect the physical synchronisation of the group during the performance. Some of the songs performed include 'Bunga Kahwin' and 'Semangat Boleh.'.

There are four dance formations depending on the dance's purpose. First, the dancers are arranged in a single line while dancing. Second, the dancers form a circle and move clockwise or counterclockwise. Third, there are paired dances involving both male and female dancers who sometimes hold hands. Fourth, group formations are also observed. During this session, volunteer members also participated to experience how the Sewang dance is performed, fostering cultural understanding and interaction with the indigenous community.





FIGURE 12. Tok Halak serves as the lead singer for "Sewang" traditional ritual performance

## PROGRAM IMPACT

The impact of this program on the indigenous communities in the area is profound and multifaceted. This initiative has left an indelible mark through a well-structured series of activities ranging from infectious disease education to addressing menstrual poverty, fostering community engagement, and celebrating cultural heritage.

First and foremost, the educational component addressing infectious diseases has provided these vulnerable communities with vital knowledge to safeguard their health. Given their remote location and limited access to healthcare, this knowledge is a lifeline in mitigating the risks associated with infectious diseases. By aligning with SDG 3 - Good Health and Well-being, this program contributes to improving the health and well-being of these indigenous populations.

According to Chin et al. (2016), education and awareness regarding cleanliness and health are crucial to enhancing indigenous people's knowledge and awareness regarding the spread of infectious diseases and ways to prevent infection. Therefore, this underscores the significant impact of the program, as it focuses on raising awareness through education about infectious diseases, hygiene, and menstrual poverty. The advocacy against menstrual poverty is a significant stride towards gender equality; in alignment with SDG 5y providing menstrual hygiene education and supplies, this program empowers indigenous women and girls, breaking down the barriers of shame and taboo surrounding this critical aspect of their lives.

Providing high-quality and hygienic food aid directly tackles nutrition and food security issues, ensuring these communities have access to essential sustenance. In doing so, it aligns with SDG 2 - Zero

Hunger and reduces hunger and malnutrition within these communities.

Lastly, the mesmerizing Sewang performance not only preserves and celebrates indigenous culture but also offers an opportunity for intergenerational storytelling. It reinforces the indigenous communities' sense of identity and pride, promoting and preserving their rich cultural traditions. According to Nur Saidatul Nadia (2022), the preservation of the Sewang dance is deemed necessary and should be introduced to the general public because it represents the cultural heritage of Malaysia, symbolizing the diversity of its ethnicities.

However, in contemporary times, the Sewang dance is at risk of being forgotten (Nur Saidatul Nadia, 2022). This highlights the cultural impact of the program, as it reintroduces the Sewang dance to volunteers and the world through academic documentation. This effort aims to ensure that the Sewang dance endures as a cultural heritage in Malaysia. The engagement of indigenous children, adolescents, and adults in these activities fosters social cohesion, a sense of belonging, and a deeper understanding of their unique cultural heritage.

In sum, this program represents a holistic approach to addressing indigenous communities' multifaceted challenges. Its impact is far-reaching, enhancing health, nutrition, gender equality, community cohesion, and cultural preservation. By aligning with various SDGs, it embodies the essence of sustainable development, striving to leave no one behind and ensuring the well-being and dignity of these marginalized communities. This initiative underscores the transformative power of community-focused interventions in achieving meaningful and lasting change.



FIGURE 13. Buluh Cetong musical instrument

## CONCLUSION

In conclusion, this comprehensive program has not only addressed critical health, nutrition, and gender equity challenges within indigenous communities but has also illuminated the transformative potential of community-focused initiatives. By imparting essential knowledge on infectious diseases, mitigating menstrual poverty, fostering community engagement through sports and games, and celebrating cultural heritage with the Sewang performance, this endeavour has left an indelible mark on the lives of these marginalized populations. The alignment with various SDGs underscores the program's commitment to sustainable development and equitable well-being. This initiative serves as a beacon of hope, exemplifying the profound impact of empathetic, culturally sensitive interventions in uplifting and empowering indigenous communities, ultimately contributing to a more inclusive and sustainable future for all.

## **ACKNOWLEDGEMENT**

The authors would like to thank Yayasan Food Bank Malaysia (YFBM) and the charitable organization's Board of Trustees for their commitment to reducing food waste and contributing to community welfare, Department of Civil of Defence Malaysia, Yayasan Dana Kita, the Laboratory and Instrumentation Secretariat Faculty Science and Technology UKM (SMI FST UKM) and all those who contributed to the success of this research.

## REFERENCES

- Ahmed, A., Al-Mekhlafi, H. M., Choy, S. H., Ithoi, I., Al-Adhroey, A. H., Abdulsalam, A. M., & Surin, J. (2011). The burden of moderate-to-heavy soil-transmitted helminth infections among rural malaysian aborigines: an urgent need for an integrated *control programme Parasites* Vectors, 4(242).
- Ahmed K. Al-Delaimy, Al-Mekhlafi, H. M., Nasr, N. A., Sady, H., Atroosh, W. M., Nashiry, M., Anuar, T. S., Moktar, N., Lim, Y. A. L., & Mahmud, R. (2014). Epidemiology of Intestinal Polyparasitism among Orang Asli School Children in Rural Malaysia. PLoS Negl Trop Dis, 8(8), Article e3074.
- Chin, Y. T., Lim, Y. A. L., Chong, C. W., Teh, C. S.

- J., Seng, I. K., Yap, S. C. L., Tee, M. Z., Siow, V. W. Y., & Chua, K. H. (2016). Prevalence and risk factors of intestinal parasitism among two indigenous sub-ethnic groups in Peninsular Malaysia. *Infectious Diseases of Poverty*, 5, 1-15.
- Elmustapha, H., Hoppe, T., & Bressers, H. (2018). Understanding Stakeholders' Views and the Influence of the Socio-Cultural Dimension on the Adoption of Solar Energy Technology in Lebanon. Sustainability 10(2).
- Faizullaev, A. (2014). Diplomatic Interactions and Negotiations. *Negotiation Journal*, 30 (3), 275-299.
- Fang, Y, X., Gill, S. S., Puvaneswaran Kunasekaran, Mohd Roslan Rosnon, Ahmad Tarmizi Talib & Azureen Abd Aziz. (2022). Digital Divide: An Inquiry on the Native Communities of Sabah. *Societies 12*(148), 1-22.
- Fatan Hamamah Yahaya & Liyana Syafiqah Yahaya. (2014). *The Empowerment of Orang Asli Women in the Tourism Industry in Lenggong, Perak* 4th International Conference on Tourism Research (4ICTR),
- Husain, Z. (2013). Effective communication brings successful organizational change. The Business & Management Review, 3(2), 43.
- Latifah Majid, *Zuliza Mohd Kusrin &* Nurul Suhaida. (2022). Overview of Period Poverty Among the Urban Poor During COVID-19 Pandemic in Malaysia. NeuroQuantology 20 (10), 7029-7035.
- Muhamaad Razis Ismail. (2021, August 31). Kemiskinan haid makin meresahkan. my Metro. https://www.hmetro.com.my/WM/2021/08/749006/kemiskinan-haid-makin-meresahkan
- Ngui, R., Aziz, S., Chua, K. H., Aidil, R. M., Lee, S. C., Tan, T. K., Sani, M. M., Arine, A. F., Rohela, M., & Lim, Y. A. L. (2015). Patterns and Risk Factors of Soil-Transmitted Helminthiasis among Orang Asli Subgroups in Peninsular Malaysia. The American journal of tropical medicine and hygiene,, 93(2), 361–370.
- Nor Azmi Baharom & Pakhriazad Hassan Zaki. (2020). Socioeconomic Temiar community in RPS Kemar, Hulu Perak IOP Conf. Series: Earth and Environmental Science 596,
- Nur Saidatul Nadia Abu Hasan. (2022). The function of Sewang Dance in medical ceremony of Jahut's Aboriginal community at Kampung Kuala Terbol, Kuala Krau, Pahang [Undergraduate Final Project Report]. http://discol.umk.edu.my/id/eprint/3738/
- Ristovska, N., Kozuharov, S., & Petkovski, V. (2017). The impact of logistics management practices on company's performance. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 7(1), 245-252.
- Roseman, M. (1993). Healing Sounds from the Malaysian Rainforest: Temiar Music and Medicine (Vol. 28). University of California Press.

Zal Hasmi Mohamad Roslan\*
Department of Earth Science and Environment, Faculty Science and Technology, Universiti Kebangsaan Malaysia (UKM), 43600 UKM Bangi, Selangor, Malaysia.

Nur Hasyareeda Hassan & Siti Aishah Hasbullah Department of Chemical Sciences, Faculty Science and Technology, Universiti Kebangsaan Malaysia (UKM), 43600 UKM Bangi, Selangor, Malaysia.

Norfarhan Mohd Assa'ad Department of Applied Physics, Faculty Science and Technology, Universiti Kebangsaan Malaysia (UKM), 43600 UKM Bangi, Selangor, Malaysia.

Mohd Shahrim Senik Department of Science Biology & Biotechnology, Faculty Science and Technology, Universiti Kebangsaan Malaysia (UKM), 43600 UKM Bangi, Selangor, Malaysia.

<sup>\*</sup>Corresponding author: zalhasmi.ppd@gmail.com