Cultivating Sustainable Futures: Community-Led Farming Initiatives in Malaysia by APPGM-SDG

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Abstract

Malaysia grapples with pressing food security challenges, marked by uneven resource access, fluctuating agricultural yields, and vulnerability to external factors. Recognizing the urgency of these issues, APPGM-SDG has directed its efforts towards fostering both food security and food safety. With 198 ongoing projects this year and 53 successfully completed projects in the previous year, this journal article explores APPGM-SDG's initiatives in localizing Sustainable Development Goals (SDGs) in Malaysia, with a specific focus on community farming projects. The article aims to offer a holistic overview of these projects, delving into their multifaceted impacts and thoroughly examining their farming practices, socio-economic and community dimensions. The methodology involves the promotion of the food security initiative through grant allocation and selection processes for identifying and supporting solution providers. Additionally, insights from the database of the 198 ongoing projects, coupled with two case studies from completed projects, highlight the scale and reach of APPGM-SDG's endeavors, providing both quantitative and qualitative insights into the tangible outcomes and positive impacts realized within the grassroots communities.

Keywords: food security, community farming, income generation, community resilience, sustainability

Introduction

The landscape of food security, safety, and sovereignty in Malaysia is marked by complex challenges, as illuminated by various scholarly works and global indices. Highlighting the multifaceted nature of

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food security, the 1996 World Food Summit defined food security as the situation where everyone has physical and economic access to adequate, safe, and nutritious foods[1]. This definition, later refined by the Food and Agriculture Organization of the United Nations (FAO 2008), encompasses four major dimensions: availability, accessibility, utilization, and stability.[2] This framework provides a lens through which to examine Malaysia's performance in the Global Food Security Index (GFSI), where fluctuating rankings over recent years reveal a dynamic scenario. In 2020, Malaysia ranked 43rd among 113 countries, experienced an increase in score to 39th rank and then a notable decrease in 2022, signifying challenges, particularly in affordability, availability, quality, safety, sustainability, and adaptation.[3]

The APPGM-SDG, through issue mapping exercises across selected constituencies in Malaysia, identified poverty and poor socio-economic conditions as crucial issues in the agricultural sector. Moreover, a web of concerns that includes farming input prices, physical threats to paddy crops, infrastructure, marketability of local produce, and land tenure are the five key themes.[4] The link between food safety, nutrition, and food security underscores the urgency of addressing these challenges. Furthermore, championed by La Via Campesina (1996)[5] a global movement of farmers, asserts that food sovereignty advocates for "*the right of people to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems*". In essence, it acknowledges food as both a fundamental right and a public good, not just as a valuable commodity, placing producers and democracy at the heart of our food systems. In the Malaysian context, it is crucial to adopt this, with an emphasis on inclusive policies that incorporate diverse inputs and ensure fair access to resources.

1 Engler-Stringer, R. (2014) 'Food Security', Encyclopedia of Quality of Life and Well-Being Research, p. 2326.

2 Hassan, N., & Jia-Yi Kam, A. (2022) 'Can Malaysia Feed Itself? Food Security Issues in Malaysia', Journal of Strategic Studies & International Affairs, 2.

3 KPKM, '2022' (https://www.kpkm.gov.my/en/gfsi-2022) [accessed 23 December 2023].

4 Dr Lin Mui Kiang, 'Chapter 2: Farmers' in Teo Sue Ann (ed), Localising SDGs & Grassroots Concerns of Six Vulnerable Groups in Malaysia (Persatuan Promosi Matlamat Pembangunan Lestari, 2023).

5 Claeys, P. (2018) 'Food Sovereignty and the Recognition of New Rights for Peasants at the UN: A Critical Overview of La Via Campesina's Rights Claims over the Last 20 Years', The Politics of Food Sovereignty, p. 32.

This article delves into APPGM-SDG's transformative initiative in community farming as an alternative solution to food security. The objective is to establish and scale up community farm projects, fostering sustainable food production, income generation, and the development of a strong business network to meet local market demand. Simultaneously, the initiative aims to empower and build the capacity of local farmers. The following sections will explore APPGM-SDG's agenda for localizing SDGs, particularly with a focus on community farming projects through grant allocation. Specific case studies from completed and ongoing projects will be examined, covering diverse impact dimensions such as socio-economic transformations, best farming practices, and community empowerment.

Methodology

Recognizing the critical need to build resilient communities with a commitment to empower individuals, APPGM-SDG's agenda is deeply grounded in the United Nations' Sustainable Development Goals. The overarching objective is the localization of SDGs in Malaysia, with a focus on uplifting grassroots communities. APPGM-SDG exercises comprehensive issue mapping across constituencies where target communities are given a space to express their experiences, challenges, concerns, and ideas, ultimately enabling the identification of issues in economic, social, and environmental aspects. The resulting reports from the mapping exercise act as a catalyst for strategic action, with the identified issues facilitating policy discussions and directing grants to the right solution providers. From 2020 to 2022, APPGM-SDG collaborated with 132 Solution Providers nationwide, implementing 296 projects. Notably, 53 projects were dedicated to addressing food security and food safety.[6] With additional allocation from the Ministry of Finance in 2023, a Community Farming Initiative was specially introduced. The community farming grant opportunity, open to new and existing projects, garnered an overwhelming response, with 253 proposals received in just under five months. The rigorous selection process involving internal officers and external review experts led to the identification and approval of 198 projects to be implemented in 2023/2024. In terms of its project capacity, each project is allocated a fixed budget of RM40,000, with

6 James Ryan Raj and Nur Balqis Osman, 'Case Studies of Community Gardens: Innovations From The Ground '(2023)

10-15 participants recruited for each project. Each project mandates a minimum of 12 training sessions aimed at equipping participants with essential skills and knowledge in farming activities. These training sessions are tailored to the specific farming practices of each project, providing that participants become proficient in the management of crops and livestock, modern farming innovations and technologies, and cultivation techniques such as seedling transfer, crop rotation, soil preparation, and so on. Beyond just cultivation, the initiative seeks to encourage local communities at the grassroots level to produce their own food while generating income through the sale of their produce; therefore, through the training session, the participants are guided in the process of selling and downstreaming products, thereby diversifying their income streams.

Community farming projects: a holistic overview

With an overarching objective to localize Sustainable Development Goals (SDGs) in Malaysia, APPGM-SDG's community farming projects serve as a dedicated effort to address food security, especially in producing their own food for consumption, while empowering communities by fostering income generation. In 2023, the Community Farming Initiative marked a significant milestone, promoted through roadshows and briefings, followed by community farming projects being identified. These projects, building on the foundation of 5 projects in 2020, 17 projects in 2021, and 31 projects in 2022, amount to an overall total of 251 community farming projects overseen by APPGM-SDG, with 198 projects ongoing as of 2023 (Table 1).

Table 1. Community farming projects from 2020 until 2023

Year	Number of Projects
2020	5
2021	17
2022	31
2023	198
Total Projects	***251***

Geographically, these projects span 107 parliamentary constituencies in Malaysia, showcasing diversity across regions. As provided in

Table 2 and Appendix 1, the Central Region, inclusive of Kuala Lumpur and Selangor, has 31 projects. The East region boasts 56 projects from Kelantan, Pahang, and Terengganu. The North region features 45 projects from Perak, Perlis, Pulau Pinang, and Kedah. The South region accounts for 43 projects, including Johor, Negeri Sembilan, and Melaka. Sabah has 48 projects, and Sarawak has 25 projects.

Table 2. Community farming projects by region, from 2020 to 2023

Region	**2020 - 2022**	**2023**
Central	6	25
East	16	40
North	10	35
South	3	40
Sabah	8	40
Sarawak	7	18
Total Projects	***53***	***198***

Diversity characterizes these projects, encompassing various farming and livestock activities. As provided in Table 3, the predominant category, encompassing 106 projects, is modern farming, followed by 38 projects in animal breeding. Additionally, there are 28 projects focused on organic farming, 25 projects on mushroom farming, and 22 projects on conventional farming. Complementing these, 7 projects are dedicated to integrated farming, while an additional 5 projects are oriented towards agromarketing. Furthermore, specialized categories with fewer projects each contribute to the overall diversity of the initiative. Each farming method exhibits its own focus and cultivation practices, with Table 3 offering these specifics.

In terms of scale, the 251 projects involve a total of 3,243 participants (Appendix 1). Considering an average household size of 3.8 in Malaysia,[7] these community farming projects are anticipated to benefit approximately 12,323 individuals, fostering a positive impact on their families.

7 Statista Research Department, & 1 N, 'Malaysia: Number of Households 2022' (Statista, 1 November 2023) (https://www.statista.com/statistics/728240/number-of-households-malaysia/) [accessed 23 December 2023].

Table 3 Displays the number of projects that follow specific farming methods, along with a detailed focus and set of practices

Type of Farming	Number of projects	
	2023	2020-2022
Modern Farming *Focus and practices: Reducing reliance on traditional soil-based methods such as Fertigation, Hydroponics, Aquaponics, Vertical Farming*	84	22
Agro Marketing *Focus and practices: Marketing and selling agricultural products to boost economic returns*[8]	-	5
Food processing *Focus and practices: Food product making to generate income by making products from crops*[9]	-	3
Animal Breeding *Focus and practices: Breeding and raising animals for various purposes, including meat, milk, and other products*	32	6
Mushroom Farming *Focus and practices: Cultivation of various mushroom varieties*	18	7
Organic Farming *Focus and practices: Cultivating crops without synthetic pesticides or fertilizers*	25	3
Food Forest *Focus and practices: Creating a self-sustaining, multi-layered ecosystem that mimics a natural forest, with a focus on edible plants*[10]	2	-
Conventional Farming *Focus and practices: Traditional soil-based farming methods*	19	3
Rice Cultivation *Focus and practices: Enhancing local rice production and preserving cultural practices*	2	2

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9 James Ryan Raj and Nur Balqis Osman (2023) rep

10 Albrecht, S., & Wiek, A. (2021) 'Food Forests: Their Services and Sustainability', Journal of Agriculture, Food Systems, and Community Development, 1.

Type of Farming	Number of projects	
	2023	2020-2022
Herbal Farming *Focus and practices: Cultivating medicinal and aromatic herbs*	4	-
Animal Feed *Focus and practices: Producing locally sourced supply of animal feed such as Napier Farming*	2	-
Integrated Farming *Focus and practices: Combining different agricultural activities within a single farming system.*	6	1
Compost Production *Focus and practices: Recycling organic waste to produce nutrient-rich compost*	3	1
Total	**198**	**53**

Case Study 1: Best farming practices in the urban landscape

In response to the challenges brought about by the Movement Control Order (MCO) during the COVID-19 pandemic, the popularity of urban farming gained as a consequence of food supply issues due to the restrictions on movement, where fresh food supplies such as vegetables had difficulty reaching local consumers. Integrated into urban ecosystems, urban farming serves as a local solution to economic challenges where its initiative contributes to household income, ensures food resource availability, creates employment, and opens up market opportunities while reducing transportation and energy costs.[11] Urban farming, however, is not without its challenges, notably in highly populated and polluted environments. Moreover, access to essential inputs such as fertilizers and water is limited, posing a threat to the quality of produce. For example, the use of pesticides within city limits can lead to air pollution, particularly in densely populated areas, impacting individuals with respiratory issues. Additionally, fertilizers and pesticides employed in urban farming may contribute to water supply contamination.

In the urban landscape of Jalan PJS1/25 PJ, Kebun Komuniti PJS1 is an exemplary model of sustainable urban farming, distinguishing

11 Muhammad, R. M., et al. (2020) 'Impact of Urban Farming Technology on Urban Community in Malaysia', Economic and Technology Management Review, 15.

itself through a commitment to best farming practices and embodying sustainable and organic principles. Incorporating these best practices not only ensures the production of high-quality, chemical-free food but also contributes to the overall well-being of the environment and community. The farm is a community-driven initiative that has embraced a diverse array of sustainable practices, including organic farming, fruit orchards, herbal cultivation, composting, mushroom farming, and aquaponics, over the recent years within an urban setting in Petaling Jaya, Selangor.

Kebun Komuniti PJS1's cultivation methods, particularly their emphasis on organic farming, align with the World Health Organization's (WHO) call to action in adopting key practices to minimize microbial contamination and enhance food safety in the cultivation of fresh produce.[12] Kebun Komuniti PSJ1 resonates these safe practices as affirmed by project coordinator, Mr. Ishak and participant Mr. Azman, detailing their best farming practices: *"Tanaman batas dan aquaponik menggunakan baja kompos, dibuat sendiri dan kitosan, penghalau serangga menggunakan bahan organik….cuka kayu, serai wangi & bawang putih"*. Their approach reflects their dedication to addressing food security, food safety, and environmental well-being within the local community, implementing innovative solutions like aquaponics in an agro-box-based system where fish waste provides nutrient-rich water for plants, creating a sustainable closed-loop system. This mutually beneficial relationship between aquaculture and hydroponics not only makes resource use more efficient but also ensures the production of high-quality, organic leafy vegetables.

The community farm secured a grant from the APPGM-SDG in 2023, marking another milestone with the project, *'Penanaman Golden Rock Melon Menggunakan Kaedah Organik Bagi Menghasilkan Buah Organik*'. The objective of the project is the transfer of knowledge to 11 participants in the production of safe and nutritious organic golden melons for consumption as well as the sale of the harvest to ensure the long-term sustainability of the organic farming project. The project engages a diverse group of participants, comprising seven females and four males. Of the participants, nine individuals are between the ages of 61 and 71, with seven of them being retirees. Additionally, two youths are actively

12 'Five Keys to Growing Safer Fruits and Vegetables' (World Health Organization) (https://www.who.int/publications-detail-redirect/9789241504003) [accessed 21 December 2023].

involved in the project. The project encompasses various components, including an automatic drip irrigation system, organic compost production, an organic booster from fish by-products, composting with weeds and animal manure, and organic fertilization and pest control. These initiatives not only reflect a holistic approach to farming but also demonstrate the farm's commitment to sustainable, chemical-free agricultural practices. Furthermore, organic farming practices provide advantages such as developing natural resources, repurposing waste, sustaining nutrient cycles, fortifying communities, and enhancing human capabilities.[13] Participant Mr. Azman notes the positive impact of doing organic farming on soil health and harvest yield, *"Sangat positif. Sayuran daun atau buah lebih cantik dan lebih yakin untuk di makan…… Penggunaan kompos menambah kesuburan tanah & lebih mudah digembur"* and Mr. Ishak further added, *"kawalan dan penjagaan kesuburan tanah lebih mudah melalui alat ujikaji seperti tahap nutrition tanah tinggi".*

Table 4. Overview of the projected rock melon harvest and projected income generation for participants in one cycle with its minimum revenue according to its market price

Parameters for Rock Melon Harvest	***Result***
Plant Count	101
Units per plant *Calculations:* *101 plants x 2 units* *Deduct 10% of 202 (rounded to 20)*	2
Total expected units	182
Average weight (kg) / unit *Calculations:* *1.2 kg x 182 units*	1.2 / unit
Total weight (kg)	**218.4**
Selling price (RM) / kg *Calculations:* *1.2 kg x 182 units*	14.00 / kg
Seasonal Revenue (RM)	**3057.60**

13 Lorenz, K. (2015) 'Organic Urban Agriculture', Soil Science, 180, p. 146.

Additionally, the project involves 101 polybags and is soon approaching its fourth month in the active phase, having started in September. As provided in Table 4, the project envisions a harvest from 101 rock melon plants, each expected to yield two rock melon fruits. Considering potential losses (10%), the anticipated net total units of fruit stand at 182. With an estimated average weight per unit of 1.2 kg, the total weight of the projected harvest is calculated to be 218.4 kg. Leveraging a selling price of RM 14.00 per kilogram, the projected revenue for the project is RM 3057.60 (Table 4). The urban farm is already accumulating specific annual revenues from various cultivation areas, such as RM1,400 from vegetables, RM1,800 from aquaponics, RM1,260 from tilapia, and RM1,680 from catfish. Despite the complexities of urban agriculture, Kebun Komuniti PSJ1 serves as a small-scale but strong representation of a holistic approach to organic farming and community engagement, not only ensuring food safety by producing high-quality, chemical-free food but also contributing to local food security and income generation, creating a resilient and sustainable urban farming model. Furthermore, the farm has obtained myGAP certification (Malaysia Good Agricultural Practices), a recognition program initiated by the Department of Agriculture in 2002. This certification acknowledges farms embracing environmentally friendly practices, ensuring the well-being and safety of workers while adhering to the concept of Agriculture Best Practices (APB) to deliver high-quality, safe, and consumable products.

Outside of the farm gates, Kebun Komuniti PJS1 actively engages the community through educational initiatives, including providing briefings to visitors on the benefits of organic plants, offering briefings and site visits to association members, visitors from other community gardens, and school students, as well as hosting visits and studies for university students. Looking ahead, Kebun Komuniti PJS1 can be seen as a potential tourism product, with multi-tiered farming innovations, a city farm exhibit for visitors, and space for higher education students to do research. In the hands of the team running the project alongside participants, as well as with collaborative efforts from relevant agencies and parties, this urban farm goes beyond harvesting produce. With the adoption of best farming practices, the farm contributes to the environmental well-being of an urban space, filling it with greenery as well as showcasing the transformation of a practice into a dynamic force that shapes a sustainable and resilient community.

Case Study 2: Socio-economic transformation through modern farming in the rural landscape

In the face of the ongoing challenges posed by COVID-19, the prospect of increased unemployment rates in Sabah, particularly in Pensiangan, underscores the need for a comprehensive economic development plan. Recognizing the significance of non-formal education, skill enhancement, and practical training, a transformative initiative led by Mr. Amran Jining with the project *"Pembangunan Ekonomi melalui Tanaman Hidroponik"* was initiated. Unlike Kebun Komuniti PSJ1, the project completed its active phase in 2022, falling under one of APPGM-SDG's 53 community farming projects. The project focuses on hydroponic farming—a 'green' agricultural technology. Hydroponics, a method of cultivating plants without soil, holds the promise of integrating innovative agricultural practices for sustainable and productive outcomes.[14] Notably, hydroponic farming represents a new modern concept of farming as opposed to the traditional farming methods that are widely practiced in Pensiangan. Mr. Amran emphasizes the importance of understanding modern agricultural technology, stating, *"Mengenalkan peserta pada teknologi pertanian modern yang dapat meningkatkan hasil tanaman tanpa ketergantungan pada tanah"*. Furthermore, the project aimed to enhance productivity, reduce pesticide usage, embrace the efficient use of water, and reduce land requirements.

The project is based in the rural landscape of Kampung Sinaron, Pensiangan, involving 10 participants, predominantly from indigenous groups such as Dusun, Murut, and Rungus communities, comprising seven females and three males. The project involves three youths and seven others between the ages of 41 and 58. Greenhouses were set up for each participant, equipped with UV plastic to control the internal temperature. The hydroponic sets were installed with five pieces of PVC and a total of 140 plants, enabling participants to start their cultivation without incurring any additional costs. Participants engaged in hydroponic farming using readily available and modern agricultural materials such as plastic bottles, strings, and seedlings. Most of the participants expressed their interest in the project as a means to improve family economics, seize opportunities for personal and experiential growth, and elevate their quality of life.

14 Dubey, N., & Nain, V. (2020) 'Hydroponic— the Future of Farming', International Journal of Environment, Agriculture and Biotechnology, 4, p. 857.

> *"Saya ingin mencuba sesuatu yang baru disamping ingin menjana pendapatan melalui tanaman hidroponik sebagai seorang suri rumah."* – Elviana, participant

> *"Kerana dapat membantu menjana pendapatan serta memenuhi keperluan harian kami."* – Iska, participant

> *"Untuk mengubah kehidupan .... untuk meningkatkan taraf kehidupan."* – Nooni & Milah, participants

The outcomes of the Phase 1 hydroponic farming project are significant, with monthly income generated from the project varying, with two participants earning under RM100, five participants earning between RM100 and RM200, and three participants earning between RM200 and RM300. Testimonies from participants highlighted reduced daily expenses, enhanced family nutrition, and the establishment of hydroponic farming as a sustainable second income. Participant Linus asserted, "*Tanaman pertama memberikan impak yang besar.... mengurangkan kos perbelanjaan harian, terutama sekali pembelian sayur dari lua*r", while participant Adirah and Iska mentioned how the project has impacted their families, respectively, "*projek ini memberikan impak positif kerana saya mampu menyediakan sumber makanan yang berkhasiat dan selamat untuk keluarga saya*" and "*sebelum saya menyertai hidroponik ini anak-anak tidak suka makan sayur apabila saya menyertai hidroponik anak-anak minat makan sayur*". Even after the completion of the active phase and training, the project continues to thrive, resulting in a total income ranging from RM200 to RM3000. The amount varies as the participants conduct their sales differently, marketed through both offline and online sale platforms. The project has witnessed transformative impacts on participants' lives. Participant Miah, for instance, has successfully turned hydroponic farming into a secondary source of income, supporting the education expenses of her children at secondary school. With a greenhouse spanning 10'x 20', Miah's journey exemplifies not only economic empowerment but also the cultivation of a sustainable livelihood. Additionally, the participants have expressed the efficiency and easy cultivation of hydroponic farming; as participant Rozieh noted, "*melalui tanaman hidroponik ini, hasil tanaman yang diperolehi lebih pantas, mudah ditanam dan tidak memakan ruang/kawasan penanaman yang terlalu luas*".

Table 5. Comparison of Hydroponic farming harvest projections per participant between Phase 1 (2022) and Phase 2 (2023)

Year / Phase	PVC Pipes per participant	Total plants per participant	Projected quantity per month (kg)
2022 / Phase 1	5	140	35 - 40
2023 / Phase 2	10	280	80 – 100
Percentage increase (%) from 2022 to 2023			***128 – 150***

Following the successful completion of Phase 1, the project secured a grant for its second phase in 2023, this time under the Community Farming Initiative. Unlike the initial phase, which focused on establishing new farms, Phase 2 aims to facilitate the scaling up of existing operations. In 2022, the estimated sales per participant ranged from 35 to 40 kg per month with 8 harvest cycles, utilizing 5 PVC pipes with a total of 140 plants. With Phase 2, the number of plants for each participant has increased to 10 PVC pipes, totaling 280 potted plants. The projected quantity is expected to rise to 80-100 kg per month per participant, with a percentage increase of 128-150 percent – 2.5 times more than the range in 2022 (Table 5), reflecting the project's commitment to continuous growth and sustainability.

The case study illustrates the transformative impacts of hydroponic farming, where the initiative goes beyond economic benefits, drawing in social and environmental benefits. The participants' improved income, and improved quality of life are clear indicators of a socioeconomic transition. Furthermore, by encouraging local production of nutritious and safe food and lowering dependency on external sources, the project is crucial for preserving food security. Despite challenges such as inappropriate humidity levels, differing nutrient rations, and root diseases, the project persevered through continuous monitoring, nutritional shifts, and preventative measures. Lastly, in addition to empowering individuals, innovation and community involvement have created a sustainable model for future farming undertakings in the area.

Conclusion and recommendations

Based on APPGM-SDG's findings and key observations whilst engaging with grassroots communities and local farm operators, as well as during the monitoring of projects, certain key challenges were similarly occurring across the community farming projects, such as limited access to markets, limited land access, weather constraints, the requirement

of start-up capital, a lack of agricultural expertise, a lack of access to infrastructure resources such as water and electricity supply, as well as social dynamics within communities. Overcoming such challenges demands concentrated effort. The observed keen interest of local communities underscores the need for policies facilitating capacity building and education on innovative farming methods and agricultural technologies. Sustainable farming practices, building long-term capacity for safe and quality food security, environmental conservation and protection, and increasing community wellbeing should be integrated into national agricultural policies. Furthermore, policies should also emphasize connecting grassroots farm operators with local or commercial markets to address the challenge of market accessibility. Coordinated efforts involving agencies like MARDI, FAMA, and the private sector are crucial for fair distribution of sales and ensuring a steady supply of locally grown produce.[15] Furthermore, there needs to be an emphasis on the importance of shifting to or adopting climate resilience or climate adaptation strategies. These include increased resilience to extreme weather events, improved crop yields and livestock health, reduced dependency on synthetic inputs, enhanced soil fertility and biodiversity, and long-term farming operation sustainability.

In conclusion, APPGM-SDG's community farming projects have shown a transformative impact on local communities, addressing issues related to food security, economic development, and sustainable agriculture. By integrating findings into the national SDG framework, encouraging collaborations and partnerships with government and stakeholders, and addressing identified issues through focused policies, Malaysia can enhance the impact of community farming initiatives while building communities and contributing significantly to localizing Sustainable Development Goals.

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15 James Ryan Raj and Nur Balqis Osman (2023) rep

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Appendices

Appendix 1. Number of projects and participants by parliament

State	Parliament	Number of Projects	Number of Participants
Sarawak	Selangau Batang Lupar Batang Sadong Petra Jaya Baram Julau Kapit Kota Samarahan Kuching Miri Mukah Puncak Borneo Sadong Jaya Stampin	25	505
Sabah	Papar Pensiangan Tenom Keningau Kota Belud Beluran Beaufort Kota Marudu Kudat Libaran Penampang Ranau Sepanggar Silam Sipitang Tuaran	47	422
Kelantan	Jeli Tumpat Gua Musang Kuala Krai Pasir Mas	14	281

State	Parliament	Number of Projects	Number of Participants
Pahang	Bentong Temerloh Kuantan Cameron Highlands Jerantut Pekan Temerloh	27	320
Terengganu	Setiu Besut Dungun Hulu Terengganu Kuala Nerus Kuala Terengganu Marang	15	170
Selangor	Kuala Selangor Selayang Bangi Batang Kali Gombak Hulu Langat Hulu Selangor Kuala Langat Kuala Selangor Petaling Jaya Puchong Sepang Shah Alam Sungai Besar Sungai Buloh	25	303
Kuala Lumpur	Lembah Pantai Cheras Batu Kepong Segambut	6	100
Pulau Pinang	Permatang Pauh Bayan Baru Bukit Gelugor Jelutong Nibong Tebal	13	180

State	Parliament	Number of Projects	Number of Participants
Kedah	Baling Sik Merbok Pendang Jerlun Kepala Batas Padang Serai Sungai Petani	11	178
Perak	Ipoh Barat Parit Buntar Batu Gajah Gopeng Ipoh Timur Kuala Kangsar Larut Parit Pasir Salak Sungai Siput Tambun Tanjung Malim Teluk Intan	20	280
Negeri Sembilan	Tampin Jelebu Rembau Seremban	13	150
Melaka	Tangga Batu Masjid Tanah Alor Gajah Jasin	7	70
Johor	Iskandar Puteri Johor Bahru Kota Tinggi Ledang Muar Pontian Pulai Segamat Sri Gading Sembrong Tanjung Piai Tebrau Simpang Renggam	26	264

State	Parliament	Number of Projects	Number of Participants
Perlis	Padang Besar Kangar	2	20
Sum	107 constituencies	251	3243