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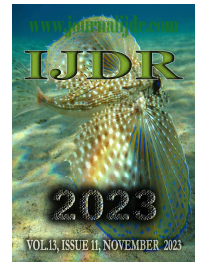
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RESEARCH ARTICLE

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HORTICULTURAL STRATEGIC FOR NUTRITIONAL SUSTAINABILITY AMONG THE DISABLED: A STUDY ON CULTIVATION METHOD AND VARIETIES WITHIN THE NAROMAN ASSOCAITION FOR THE FUTURE

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ABSTRACT

This research focuses on individuals with disabilities engaged in horticultural activities in three locations: Dili, Ermera, and Viqueque. Horticulture, a subset of agriculture, primarily produces consumable crops. The study aims to explore how this horticulture program promotes nutritional sustainability within the community and enhances economic activities through the Association for the Future. It adopts a qualitative approach and case study research model, gathering information from individuals and groups knowledgeable about individuals with disabilities and their involvement in horticulture. The findings show that this program significantly contributes to meeting the nutritional needs of individuals with disabilities and the wider community by cultivating various crop varieties.

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INTRODUCTION

Rationale: Horticulture plays a vital role in sustaining communities, providing nutrition, and supporting economic well-being. It's particularly important in rural areas, where agriculture is a cornerstone of life. Horticultural practices focus on natural cultivation methods, producing crops for direct consumption, often in close proximity to residences. Paulo Espíndola Trani's work emphasizes sustainable agriculture, including horticulture, as an integrated system that meets food and fiber needs, improves environmental quality, and supports economic viability. It benefits farmers and society as a whole. In Timor-Leste, there's a significant population of individuals with disabilities, whose rights are protected by law. Despite disabilities, they can achieve many things with support and assistance. Dependency on external food sources is high, even in farming communities. Many are unaware of the nutritional value of locally produced food. Horticulture provides essential nutrition, employment opportunities, and supports agrotourism and agroindustry activities. Timor-Leste faces significant malnutrition issues, primarily among children and women. Addressing this requires promoting nutritious diets and vitamin intake, especially during childhood.

Horticultural groups, with support and training from the Naroman Association for the Future, engage individuals with disabilities in horticultural activities to improve nutrition and livelihoods. This effort is crucial in a country with high malnutrition rates.

Formulation of the research Problems

The research problem can be formulated as follows:

How can a horticulture program for individuals with disabilities effectively contribute to promoting nutritional sustainability within the community?

What role does the Association play in enhancing economic activities through the implementation of a horticulture program for nutrition promotion within the community?"

Research Objective

The general objectives of this research, aimed at understanding the Horticulture Program for individuals with disabilities as a means to promote nutritional sustainability within ANBF, are as follows. The specific research objectives are:

1. To understand the cultivation varieties practiced by the different modes within the group of individuals with disabilities, including gaining insights into ANBF's role in managing horticultural groups.
2. To investigate how the groups utilize the results of their production and how committed they are to ensuring sustainability in horticultural activities.

LITERATURE REVIEW

Some theoretical Concepts

Horticulture: Horticulture involves intensive cultivation for commercial production of fruits, vegetables, and ornamental plants, despite its time-consuming nature. The term "horticulture" comes from Latin, where "hortus" means garden plants, and "cultura/colere" signifies cultivation, defining it as garden plant cultivation. Horticulture covers activities such as seedling propagation, tissue culture, plant production, pest and disease control, harvesting, packaging, and distribution. In Timor-Leste, where most people are farmers, the Naroman Association for the Future offers a sustainable horticulture program, including opportunities for individuals with disabilities to participate in various forms of cultivation. As the population grows and community needs increase, especially regarding food and economic development, there's a significant demand for horticultural products. Hence, boosting horticultural production is crucial to meet these community needs.

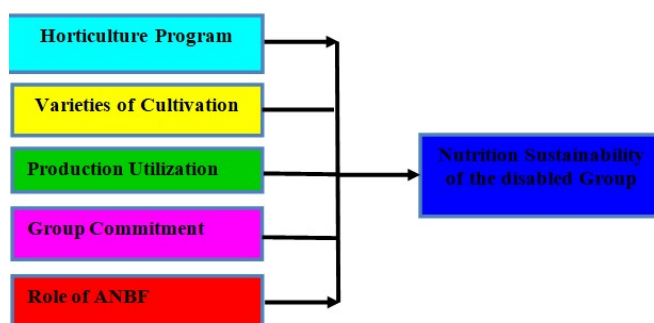
Disabled persons: Deficiency, in the context of physical challenges compared to non-disabled individuals, can be categorized into four types: physical, visual, mental, and auditory. Timor-Leste's Constitution (2002) ensures that citizens with disabilities have equal rights and obligations while protecting them from discrimination. People with disabilities, often referred to as "differently-abled," exist in our communities due to various factors like injuries, congenital conditions, or accidents. Disabilities can limit physical abilities and daily activities. The World Health Organization (WHO) for instance defines disability as a concept encompassing body structure and function, along with limitations in daily participation. Though Utomo (2010) emphasizes that individuals with disabilities deserve equal opportunities and should not face discrimination, supported by various foundations and principles. Disability is not just about physical limitations; it also includes societal barriers that hinder individuals. WHO's definition includes impairment (anatomical structures not functioning normally), disability (reduced capacity or limitations), and handicap (disadvantages in a normal environment). M. Joni Yulianto (2010) describes an inclusive society as one that accepts diversity and differences in various aspects, including physical/mental abilities, commonly known as disabilities. Efforts are ongoing to provide opportunities to individuals with disabilities, including economic activities that align with their capabilities and contribute to societal development.

Nutrition: Nutrition is a complex process involving the utilization of food through various stages such as digestion, absorption, transportation, metabolism, and the utilization of substances. It is crucial for promoting optimal health and well-being. Insufficient nutrition, especially in young children, can lead to health problems. Malnutrition is a significant issue, primarily affecting vulnerable families in rural areas with limited access to adequate healthcare services and facilities. Susianto et al. (2008) and Ida Purnomowati and Diana H. Cahyo (2016) emphasize the importance of nutrition in maintaining and enhancing overall health and well-being.

Nutrition Sustainability: Nutrition, as highlighted by Harry Oxorn and William R. Forte (2016), goes beyond the mere choice of food; it involves how we source and process food for a healthy life. Understanding and practicing good nutrition is vital for children's growth, intellectual development, and overall health. Sustainable Development Goals (SDGs:2015) emphasize the importance of

reducing hunger, increasing nutritious food production, and promoting sustainable agriculture to ensure access to adequate food as a fundamental right. In Timor-Leste, malnutrition remains a pressing issue, as reported by the Millennium Development Goals Timor-Leste Report (2009) and the First Report of the Analysis of the Chronic Food Insecurity Situation IPC in Timor-Leste (2019). High levels of chronic malnutrition and poor food quality and quantity are the main drivers of food insecurity in the country, affecting nearly 29% to 60% of children under the age of 5. This situation results from limited access to nutritious diets and heavy reliance on low-nutrition food imports. To address this, there is a critical need to promote diversified, vitamin-rich foods and alternative protein sources like poultry to combat malnutrition effectively.

Conceptual Framework: Based on the literature and the defined research objectives, the researcher establishes the conceptual framework for the study.



The diagram above explains how ensuring nutritional sustainability for people with disabilities can be affected by various determinants, such as cultivation diversity, production utilization, group commitment, and the role of ANBF (Associaaun Naroman ba Fututu) in managing the group as a program or determinant for ensuring nutritional sustainability for people with disabilities. Thus, by fostering commitment within the group of people with disabilities, this commitment can effectively guide how the results of cultivation activities, especially through cultivation diversity itself, can ensure nutritional sustainability in terms of health and socio-economic aspects.

RESEARCH METHODOLOGY

This research adopts a qualitative descriptive approach with a case study model. Information sources were gathered from individuals and groups with knowledge of relevant issues related to the horticultural activities of people with disabilities. The research area covered three municipalities: Dili, Ermera, and Viqueque, focusing on the involvement of people with disabilities in horticultural activities as a means to ensure nutritional sustainability. Data collection techniques included Focus Group Discussions (FGD), direct field observations, in-depth interviews with knowledgeable informants, including members of horticultural groups and ANBF focal points involved in the horticultural program, and the review of relevant literature and documentation. The collected data were analyzed using an Interactive Analysis model, which involved data reduction, data presentation, conclusion drawing, and verification. The selection of the municipalities, Dili, Ermera, and Viqueque, was based on their identification in the national statistical data from the 2015 Census, which indicated a significant number of people with disabilities in these regions: 4,016 in Dili, 4,421 in Ermera, and 3,416 in Viqueque. These municipalities have shown creativity in implementing various productive programs and have become centers for disability advocacy, including participation in horticultural programs. The research informants consisted of people with disabilities engaged in horticultural activities, totaling 24 individuals, with a focus on examining the existence of horticultural activities within each group in the three municipalities.

Table 1. Informants were selected according to the various groups within the Naroman Ba Futuru Association

No	Municipalities	Groups	Informants	Observation
1	Dili	Dissble Youth Forum	3	
		The dissable Group's Existence	2	
		Inclusive Horticulture Group	2	
		Naroman Association of the Future	3	
2	Ermera	Coffe Production Group Members	2	
		Agriculture Group Members	2	
		Fish Raiser Disseble Group	3	
3	Viqueque	Horticulture Group Members	2	
		Dissebled Youth Forum	3	
		Chess Export Group	2	
Total			24	

From the group of people with disabilities that the Naroman Association of the future accompanies, three groups were selected in three municipalities: Ermera, Dili, and Viqueque. These groups were chosen using purposive informants, based on those who actively participate in group activities and the association's staff members.

RESULTS AND DISCUSSION

Presenting of the Findings: This section reports the research results obtained through Focus Group Discussions (FGD), in-depth interviews, and observations conducted with the three horticulture groups in three municipalities: Viqueque, Ermera, and Dili, related to their horticultural activities. Another member, EdJM, from the Ermera Municipality horticulture group, shared that life was difficult before joining the group, mainly due to the need to care for his elderly mother. However, after joining, he learned effective farming techniques and was able to grow various crops. The resulting produce enabled him to open his own kiosk to meet his household needs. JC, the director of the Naroman Ba Futuru Association, emphasized that the horticulture group's outcomes have been beneficial for its members. They have utilized the income from their horticultural activities to enhance their lives, including improving their homes, supporting their children's education, and purchasing essential goods. As a result, they feel that their lives have improved significantly compared to before they joined the group. From the interview results, it is evident that participation in horticultural activities has had positive impacts on the members, especially those with disabilities. Their involvement has enabled them to learn agricultural techniques, manage their income, and use it to meet their individual and family needs. This reflects a positive change in their quality of life.

Varieties of Vegetables and Resasons to Choose them: Disability groups in three Timor-Leste municipalities engage in horticultural activities, cultivating a diverse range of vegetables, such as Modo Mutin, Lis Mutin, Alfase, Kankun, Okra, Binzela, Modo Metan, Aidila, and Brokoli. This choice is influenced by community preferences for vegetables that are fresh, affordable, and easily accessible through local markets and supermarkets. These varieties are primarily sourced from agricultural supply stores in Dili, Gleno, and Viqueque, with support from the Association Naroman Ba Futuru. The selection of these varieties aligns with the local climate and environmental conditions, ensuring successful cultivation. The preference for these specific vegetables can be attributed to their popularity in the community, which makes them easier to sell compared to other varieties. The cultivation of these vegetables serves multiple purposes, including providing a local food source, creating employment opportunities, generating income, and promoting regional vegetables. This approach aligns with broader economic and growth objectives, as highlighted by Tasya Talitha (2021), who emphasizes that vegetable cultivation aims to obtain food products using previously planted resources. Furthermore, this practice helps create jobs, boost income, and develop the potential of regional vegetables for economic growth. In summary, the cultivation of specific vegetable varieties by disability groups in Timor-Leste is driven by community preferences for fresh and accessible produce, aligning with local climate conditions.

This approach also contributes to economic goals and growth, in line with Tasya Talitha's perspective on vegetable cultivation.

Benefits of the Vegetables Products: The results of vegetable production and utilization indicate that the majority of group members sell the vegetables to earn money for various needs. *Kankun* (spinach) and *Modo Metan*(.) from the Metinaru Dili group are sold at Komoro Market at varying prices, with *Kankun* fetching a high price of \$8.00 to \$15.00 per kilogram. Okra is sold at different supermarkets in Dili, with prices ranging from \$1.15 to \$3.00 per kilogram. The income generated from vegetable sales is deposited into the group's fund, used for small loans to members and purchasing seeds for the next planting season. JM, a member with physical disabilities from the Viqueque horticulture group, stated that *"my life has significantly improved since joining the group. My involvement has given my leadership responsibilities within the group, and the production results have allowed me to improve my household and overall quality of life."* Cybext (2019) highlights the economic benefits of horticultural plants, emphasizing their contribution to the community's economic well-being. Horticultural plants are characterized by their perishability due to high water content, and product quality is closely tied to freshness, impacting pricing. These plants also contain more vitamins compared to carbohydrates. In summary, vegetable prices fluctuate based on market supply and quality. Most group members prioritize selling their produce to generate income, though some vegetables are retained for personal consumption, aligning with the economic advantages of horticultural plants as outlined by Cybext (2019).

The Main Responsible Who Manage The Products: Group coordinators shoulder significant responsibilities in managing finances, ensuring transparency, and making collective financial decisions. This shared approach aligns with Dodi Normansyah et al.'s (2014) notion of collective decision-making in agricultural income management. However, continued support and training beyond farming activities are essential for the long-term success and sustainability of these disability groups' initiatives.

Promoving of Nutrition Sustainability: To sustain their farming activities, horticulture groups employ various means to overcome challenges and ensure continuity. Members, including those with physical disabilities, emphasize the importance of preparing and continuously planting crops, even in the face of difficulties. The commitment of these groups is evident in their efforts to maintain farming, as they prepare the land, sow seeds, and continue planting crops. However, challenges such as limited resources and busy schedules can disrupt their activities. Despite these obstacles, they find ways to sustain their efforts. Members of the Metinaru Dili group, led by AMM, explain that their farming continues through a cyclical process. They emphasize the importance of consistent production, and while some members may temporarily withdraw from farming due to various factors, the group remains committed to ongoing cultivation. JMC, a physically disabled member, underlines their continuous efforts to cultivate crops. They explain that regardless of the varying results, they persevere in planting and harvesting crops. The article by Fatmawati (2022) highlights the practice of reinvesting vegetable harvests for seeds and nutrition,

emphasizing that vegetable farming serves not only as an economic activity but also contributes to greening the environment. In conclusion, these horticulture groups utilize various means to sustain their farming activities, including continuously planting crops, preparing land, and investing in organic fertilizers and seeds. While challenges persist, the commitment to farming remains strong. To ensure long-term sustainability and increased crop variety, support and guidance from agricultural experts are essential. These efforts contribute not only to economic prosperity but also to a healthier environment for the community.

The Duration of the Group's Existence: The existence of horticulture groups is subject to various challenges, with some members leaving while others remain committed despite the difficulties encountered. The duration of a group's existence is influenced by these factors, but many continue to cultivate various crops due to the ongoing demand from consumers. AMM, the coordinator of a group in Metinaru Dili, indicates that their group will persist, driven by the continuous need for their produce, as members rely on farming as their primary source of income. Despite facing material constraints, such as limited farming equipment, diminishing rainfall, and busy schedules, these groups are determined to maintain their farming activities. MSP, a physically disabled member, highlights the importance of support, such as tools and irrigation systems, to ensure a steady supply of fresh produce. While facing these challenges, the commitment of the group members remains strong, as they continue to invest time and effort into farming activities. MJM, a physically disabled member and group coordinator, emphasizes the need for equipment like plows and irrigation systems to increase productivity. They rely on farming as their primary occupation and main source of income. Drawing from the article on *Strengthening Institutions and Training Farmers in Flood Management in Selected Rivers (FMSRB) Agriculture (2020)*, training and support play a crucial role in improving crop production and productivity. This includes training in crop rehabilitation, intensification, extension, and diversification, as well as the development of flagship seasonal crops based on local wisdom and potential market demands. In summary, these horticulture groups face various challenges, but their commitment to farming activities remains strong. They adapt to individual and collective farming methods based on their circumstances, demonstrating their determination to continue providing fresh produce to meet the community's dietary needs. The duration of a group's existence depends on factors like member turnover and individual engagement, but the demand for their products ensures the continuation of their farming activities.

Sustainability in Providing Seeds to the Community: The primary reason for the existence and continued activities of these horticulture groups is to address the community's dietary needs. MJM, a member with physical disabilities and a group coordinator, emphasizes the importance of continuous farming activities, which require mutual organization and the acquisition of essential equipment such as large plows to enhance their capacity and increase crop yield. He highlights that farming activities must continue because the changing weather conditions, particularly the decrease in rainfall and the emergence of smaller insects, necessitate the use of larger machinery. ASM, a family member of a disabled individual, echoes the need for equipment support, including tools like hoes and shovels, to facilitate better farming practices. This support is crucial to maintaining the sustainability of farming activities. Mush'ab Nursantio et al. (2020), in their article on *Urban Farming and Alternative Sustainable Food Systems Post-Covid-19 Pandemic*, underscore the concept of urban farming and its multiple benefits, including ecological value by creating green spaces in urban areas, economic value by potentially generating income and sustainable livelihoods, and educational value as a source of knowledge. Urban farming allows people to use their limited space creatively and productively, ensuring the availability of fresh vegetables for nutrition, greening the environment, and contributing to the reduction of global warming. In addition to farming, it can also incorporate animal husbandry, with agricultural waste used as animal feed and animal waste transformed into

compost. In conclusion, the continuity of farming activities is essential for the future, contingent on the commitment and capacity of the horticulture group, particularly its coordinators and members, to maintain the program. Material limitations, especially for members with disabilities, can pose challenges that hinder their efforts. Nevertheless, farming activities in both rural and urban areas can have ecological and economic benefits, contribute to community nutrition, and serve as an educational platform. It allows society to utilize their land productively and contribute to food security and nutrition.

Nutritional Sustainability Through Horticultural Activities: In Timor-Leste, the majority of the community relies on staple vegetables like mustard, eggplant, pumpkin, sweet potatoes, lettuce, and cabbage to meet their dietary needs, with okra providing an option for diversification. MSP, a member with physical disabilities, underscores the significance of cultivating these vegetables to ensure continuous access to fresh and nutritious food. His sentiment aligns with the idea that food security at the national level is rooted in the food security of individual families. Families are pivotal in fulfilling diverse and balanced nutritional needs through the utilization of open spaces, including home gardens. This approach not only addresses immediate dietary requirements but also enhances the capacity of families and communities to support diversified local food-based programs. Moreover, it contributes to the preservation of local genetic food resources, fosters sustainable agricultural practices, and bolsters productive economies, ultimately leading to improved family well-being and the autonomous preservation of green environments.

Alvi Yani (2014) further elaborates on this concept in the context of sustainable household food production. Yani suggests that national food security is fundamentally tied to the food security of individual families. Families play a crucial role in:

- (a) Meeting diverse and balanced nutritional needs through the use of open spaces or household gardens.
- (b) Enhancing the capacity of families and communities to support food diversification programs based on local resources.
- (c) Preserving local genetic food resources for the management of environmentally friendly future agriculture.
- (d) Developing seed resources through seedling gardens, which also help maintain the sustainability of household garden utilization.
- (e) Developing productive economies to improve family welfare and independently conserve green environments.

The field observations underscore that while individual members encounter challenges in maintaining farming activities, the commitment of the horticulture group and the community as a whole ensures a consistent supply of fresh and nutritious produce to local markets. This dedication is crucial not only for promoting sustainable farming practices but also for enhancing the overall nutritional status of families, the group, and the community. A nutritious diet is pivotal for the physical and intellectual well-being of future generations, which aligns with the concepts put forth by Yani regarding household food production and its broader implications for national food security.

The Existence of Horticulture Groups in Three Municipalities: Through on-site observations of horticulture groups receiving assistance from the Association for a Bright Future (ANBF) in three different municipalities (Viqueque, Ermera, and Dili), it was found that these groups are actively engaged in horticultural activities. These groups primarily cultivate various products such as cassava, mustard, eggplant, tomatoes, sweet potatoes, lettuce, cabbage, white radish, and okra. Their cultivation activities span both rainy and dry seasons. One significant challenge they face is limited access to irrigation, as the scarcity of water during dry seasons affects their crop production, necessitating support for irrigation systems. Regarding the marketing of their produce, the research indicates that some groups sell their products directly to buyers at the cultivation sites, while others

transport their produce to local markets. Observations revealed that group members coordinate their harvest times to ensure a continuous supply of products to the market. Additionally, it was noted that besides participating in group cultivation, individual members also engage in private cultivation activities.

The Role of the Naroman Association for the Future (ANBF) in Organizing Horticulture Groups: As the organization that focuses on providing attention and support to people with disabilities, the Naroman for the Future Association (ANBF) seeks to empower individuals through education, non-formal training, and horticultural activities. ANBF has organized groups of disabled individuals, initially consisting of 8 groups in Dili, Metinaru, Ermera, and Viqueque in 2018. However, currently, only 3 of these groups are actively engaged in horticultural activities, with 5 groups on pause. The primary role of the organization for disabled individuals is advocacy and accompanying disabled individuals through technical support, including education and capacity-building in various areas, including horticulture. This aims to enhance the knowledge and expertise of disabled individuals in effective farming techniques and how to manage their production. The facilitation process for disabled groups involved in cultivation includes several phases. First, disabled individuals form cultivation groups. Then, ANBF collaborates with partners to provide training on effective farming techniques, starting from preparing the land, planting, and caring for crops. Subsequently, training is provided on how to select and manage crops for cultivation. The association also prepares techniques for supervising the activities each month to monitor progress and address any challenges faced during the cultivation process. ANBF is an organization that accumulates activities to assist disabled individuals and their families. They aim to empower these individuals through education and training, with a specific focus on how to manage activities and programs effectively. These programs begin with the formation of groups and continue with training activities before being implemented in the community.

Resources to Support Disability Groups in Vegetable Cultivation: This section discusses the material support provided to disability groups involved in cultivation activities. The horticulture groups make equipment requests to the Association for a Bright Future (ANBF) for items such as tools, seeds, irrigation systems, profiles, fertilizers, and even greenhouses to enhance their cultivation practices. In response to these requests, ANBF collaborates with national and international partners such as UNDP to provide support to three groups in Ermera, Metinaru, and Viqueque in 2018, supplying them with the requested equipment, seeds, irrigation systems, profiles, and greenhouses. Members of these groups, who have physical disabilities, expressed the significant impact of the training and support they received. One member, MSB, with physical disabilities, mentioned that after participating in education and training programs, including small-scale farming techniques offered by the Naroman for the Future Organization, they gained valuable knowledge. This knowledge enabled them to engage in various activities to support themselves and their families, not limited to farming but also encompassing other aspects of their lives. Another member, AS, with low vision, emphasized that the motivation and knowledge acquired from programs by the Naroman for the Future Organization enabled them to do various things for themselves and their families. These programs were not limited to farming but also extended to other areas of knowledge. The text concludes by referencing an article by Maulida Murdayanti (2021), which emphasizes the importance of human resources in sustainable agricultural development. It underscores that individuals, including those with disabilities, desire and are capable of contributing to various aspects of life. The support programs facilitated by the Naroman for the Future Association have not only improved the members' agricultural skills but also enhanced their overall well-being and their ability to contribute to their communities.

Challenges Faced by Horticulture Groups: The text discusses the challenges faced by horticulture groups in various regions, particularly in East Timor. These challenges include issues related to

group dynamics, such as members who are inactive or inexperienced in the early stages of preparing gardens or obtaining licenses. Additionally, the text mentions challenges in coordinating activities, especially in Viqueque Municipality. In some cases, members must balance their cultivation efforts with other responsibilities like work or education. Further, the horticulture groups also face challenges related to irrigation methods, seasonal timing for planting, and the need for agricultural inputs to facilitate their activities. They also request organization and government support in training related to horticultural activities. Despite these difficulties, direct observations have revealed that many members of horticulture groups have been able to pay for their children's education, open small kiosks, and improve their living conditions as a result of their involvement in horticultural activities. Changes in their horticultural activities have led to some difficulties, but their ongoing commitment to cultivation activities helps meet their family's needs.

Analysis and Discussion of the Results: The text discusses the outcomes of horticultural activities, often regarded as domestic agriculture, characterized by natural cultivation methods, and typically conducted on a smaller scale. Horticultural activities are short-term, space-efficient, and relatively easy to organize. Most of the harvested vegetables are swiftly consumed or sold, given their perishable nature, requiring prompt harvesting, especially when they ripen. Commonly cultivated vegetables in these horticultural groups include kankun, bayam, brinzela, modo mutin (mustard), kobi, among others. These vegetables primarily serve household consumption, though some are sold in markets, shared with neighbors, or used for group meals. Horticultural activities, given their space and time efficiency, provide an accessible platform for people with disabilities to participate, often with the support of the Naroman Ba Futuru Association. This involvement extends to families with disabilities, contributing to their livelihood enhancement. Significantly, individuals with disabilities and their family members actively participate in these groups, even though cultivation spaces are relatively small, and the activities are time-sensitive. The importance of good nutrition is highlighted, as it significantly contributes to an individual's overall health and development. Access to fresh, high-quality, and nutritious food is paramount for a healthy life. The study indicates that communities engaged in horticultural activities consistently have access to fresh, high-quality produce. People readily purchase and consume these vegetables, and some are even sold in local markets. Nutrition sustainability is emphasized, with a continuous supply of fresh vegetables deemed essential for community members. The study concludes that the sustained supply of fresh vegetables from horticultural programs plays a vital role in ensuring the community's access to nutritious and healthy food. The commitment of these groups to growing vegetables, despite facing challenges such as limited equipment and changing weather conditions, demonstrates their dedication to providing their communities with fresh and high-quality produce. Overall, the availability of nutritious food is viewed as essential for physical and intellectual growth, contributing to the well-being of the nation. To maintain these conditions, it is crucial to secure a steady supply of fresh vegetables, which is essential for the community's health and economic well-being. This is in line with the ideas presented by the authors.

CONCLUSION AND RECOMMENDATION

Conclusion: This research focuses on a horticulture program involving vegetable cultivation, specifically by groups of individuals with disabilities, under the guidance of the Naroman Ba Futuru Association. The study examines the cultivation of various vegetable varieties by these disability groups and their participation in horticultural activities, highlighting the role of the association in capacity-building. The horticulture program's significance lies in its continuous supply of fresh and high-quality vegetables to the community. In rural areas, the produce from these horticultural groups is essential, as it reduces the reliance on imported vegetables. The community consistently receives fresh and high-quality vegetables directly from these groups, which are known for their

commitment to maintaining freshness and quality. In this context, the sustainability of nutrition is emphasized, as it directly impacts the well-being of the community. The horticulture program, which includes vegetable cultivation by disability groups, contributes significantly to the local food supply. Therefore, this program requires ongoing attention to promote nutrition sustainability, ensuring that the community has continuous access to fresh and nutritious vegetables.

Recommendations: The horticulture program involving individuals with disabilities serves as a pathway to promoting nutritional sustainability. It plays a vital role in providing fresh and high-quality vegetables to the community. Based on the research findings, the researchers recommend specific actions for relevant authorities to ensure the program's continued success:

1. Government Authorities:

- a. **Ministry of Health:** The Ministry of Health should raise awareness and educate the community about the importance of fresh and nutritious food for health. Nutritious food contributes to better health outcomes, making it essential to encourage the consumption of fresh vegetables, including those grown locally.
- b. **Ministry of Social Solidarity and Inclusion:** This ministry can create innovative and productive programs for individuals with disabilities to ensure their continuous engagement in productive activities. Such programs provide opportunities for disabled individuals to express their capabilities and be integrated into development processes.

2. Naroman Ba Futuru Association: The Naroman Ba Futuru Association should continue its periodic vegetable cultivation program. This initiative benefits not only individuals with disabilities but also the wider community by ensuring access to fresh and high-quality vegetables. The association should also provide ongoing support to disabled individuals and their families and maintain the group's continuity in the future.

3. Universidade da Paz: The Universidade da Paz, particularly the Faculty of Community Health, should continue to pay attention to research programs that contribute new and constructive ideas. Research can help communities understand how to access and grow their vegetables, ultimately ensuring food security and nutritional sustainability.

4. Families of Disabled Individuals and Communities: Families of disabled individuals and communities should begin paying attention to and providing support to disabled individuals, involving them in activities that showcase their capabilities. This support is essential for the integration of disabled individuals into groups that receive support from various organizations.

By implementing these recommendations, the government, associations, educational institutions, and communities can work together to ensure the sustainability of nutrition and improve the overall well-being of individuals with disabilities and the wider community.

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