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Initiation of Eco-Islamic Boarding School-Based Food Garden at Al Bayan Islamic Boarding School Sendangrejo Minggir Sleman

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ABSTRACT

Food garden activities based on religious values are a special form of community development in environmental management. This activity is considered quite effective because the awareness or education is carried out by religious/community leaders who are trusted and respected by the community. Mass mobilization activities are also easier because the activities are carried out in the pesantren environment where they meet at any time to carry out worship and education at the Islamic boarding school. Partners for community service, namely the Al Bayan Islamic Boarding School in Tobayan Hamlet, Sendangrejo Minggir, Sleman, DIY. The partners' problems are as follows: low public awareness and knowledge of the importance of managing a clean and productive Islamic boarding school environment, land has not been utilized as a source of cheap healthy (vegetable and animal) food for students. Based on these problems, this community service aims to help manage the environment of Islamic boarding schools and provide healthy food through an eco-Islamic boarding school based food garden. Through assistance in the management of eco-Islamic boarding schools based food gardens, the planned solutions are: First, the Focus Group Discussion (FGD) aims to identify in more detail related to environmental management through eco-Islamic boarding schools based food gardens and the needs of partners. Second, Counseling and recitation of eco-Islamic boarding school-based food gardens is carried out to increase awareness and knowledge in environmental management through eco-Islamic boarding school-based food gardens. Third, training on organic fertilizers and cultivating vegetables and ornamental plants to provide healthy food.

KEYWORDS
Management of the environment;
food gardens;
healthy food;
Eco-Islamic boarding school

1. Introduction

The eco-Islamic boarding school program as a model for environmental education implemented in Islamic boarding schools was initiated with the Ministry of Religion of the Republic of Indonesia from March 5 to 6 2008. Eco-Islamic boarding schools as a form of Indonesian environmental education are based on Islamic boarding schools. The term eco-Islamic boarding school was first introduced at the "Moeslem seven year action plan for climate change" meeting in Istanbul, Turkey in early June 2009. Eco-Islamic boarding school means an Islamic educational institution (Islamic boarding school) that has an emphasis on activities that are responsive to environmental sustainability. The Eco-Pesantren concept is the basis for good characteristics and learning with concern for the environment [1].

Preserving nature is not only driven by the awareness that disaster will come if nature is not taken care of. But also as a form of obedience to a Muslim [2]. Since God commands us to do good, doing good to nature is also a form of obedience. Islam is a religion that orders its adherents to do good. Not only do good for the sake of Allah (hablum minallah) and do good for fellow human beings (hablum minannas), Islam also commands Muslims to do good to nature (hablum minal alam) [1]–[4].

Secular science is believed to have failed in overcoming climate and environmental problems [4]. This urges environmental activists to support spiritualism as an effective solution. Evelyn believes that

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religions have five perfect recipes for preserving nature they are: Reference, Respect, Withhold, Redistribution, and Responsibility. Vasudha Narayan also states that there are three basic efforts to save the world based on religious beliefs, Texts, Temples and Gurus. Meanwhile, Gardner recommends environmental activists consider religion as a solution to the climate crisis. The role of religion in the scientific context is cosmological codependency and ecological values, moral authority, a large following foundation, significant material resources, and community building capacity.

From the above insights, it is clear that religion tends to play a role in environmental conservation. Reflected in the classical works of Islamic law (fiqh), there are main elements related to environmental preservation which address environmental themes. As can be appreciated, in classical fiqh there are articles such as al-Tahārah (holy), al-Shaid (hunting), Ihyā' al-Maut (utilizing dead land), al-'At'imah (law of food), al -Asyribah (law of drinking), and so on [2]–[4].

The existence of normative values of Islamic teachings as a doctrine that strictly prohibits mankind from destroying the environment has often been conveyed by religious teachers in their recitations. Various efforts to instill the values of Islamic teachings regarding concern for the environment around Islamic boarding schools, especially in making all students aware of the doctrine of religious teachings, there are several verses of the Koran that are deliberately posted as reminders of how important protecting the environment and its sustainability is. Thus maintaining the environment is not just aesthetics (beauty) but rather the implementation of the objectives of implementing Islamic values. Yusuf Qardhawi explained that protecting the environment is included in the objectives of enforcing religious sharia as in Imam Al Syatibi's conception regarding the objectives of enforcing Islamic sharia.

The growth of a dense and heterogeneous composition of the population raises quite complex social problems. Social problems that are often encountered in urban areas include unemployment, health, sanitation, malnutrition, to access to food which is quite difficult. Sustainable agricultural development can be a solution in overcoming these social problems [5], [6]. The social benefits derived from sustainable agriculture are increasing food supplies, increasing nutrition for the urban poor, improving public health, reducing unemployment, and reducing social conflict [7][8][9]–[12]. This shows that farming can provide jobs and become a source of income for the community as well as support economic stability in critical situations and is directly related to poverty alleviation efforts and the creation of a sustainable environment [13], [14]. Thus the development of agriculture in an integrated and sustainable manner also has health, education and tourism values [15]–[17]. The existence of green open space is not only used as a gathering place for residents to socialize and have recreation, but also makes a positive contribution to improving the quality and environmental sustainability of an area [18][19].

One form of community empowerment in agriculture and environmental preservation is empowering eco-Islamic boarding schools through food garden activities [20]. Empowerment of the cottage with an eco-Islamic boarding school based food garden is one of the agricultural and environmental preservation programs by involving the participation of the community and students in managing agricultural businesses to produce healthy food by utilizing the resources and environment available in the cottage environment such as land and waste water for ablution and organic waste. household [21][22]. The vacant land around the cottage can be used for vegetable and fruit farming activities. Agricultural production can be used to fulfill the nutrition and food of pilgrims, even if it is abundant, it can be a source of income for funding social and religious activities. In this case, the implementation of an eco-Islamic boarding school-based food garden really requires the active participation of all elements of society, especially the Islamic boarding school community and students. The Eco-Islamic Boarding School program has the potential to build a caring attitude towards the environment so that environmental sustainability can be maintained continuously [23][24][25]–[30].

Eco-Islamic boarding school-based food garden activities are not only in the context of meeting food needs but also in the framework of implementing religious (Islamic) values, namely maintaining cleanliness and food that is halal and good [31]. Food garden activities based on religious values are a special form of community development in environmental management [12], [32]–[34]. This activity is considered quite effective because the awareness or education is carried out by religious/community leaders who are trusted and respected by the community. Thus Tuan Guru (religious figure) with charismatic leadership can act as a foreman, motivator and evaluator of environmental conservation in

implementing a sustainable lifestyle based on ecological values in the Al-Quran and Hadith which have an impact on social values.

The ecological value in question is stated in the Hadith of Rasulullah Muhammad SAW: "Verily Allah is good and loves kindness, clean and likes cleanliness, generous and happy to generosity, generous and happy to generosity. Therefore clean up your yard and don't imitate the Jews. (HR. Tirmidhi). In addition, Allah SWT said, "O people, eat what is lawful and good from what is on earth, and do not follow the steps of the devil; for verily satan is a real enemy to you" (QS: Al Baqarah 168). This will strengthen the motivation of the congregation/community to manage waste to be more useful as a practice of religious teachings.

Based on the understanding of the arguments mentioned above, the contribution of community service activities is environmental management through food garden activities that need to be pioneered, especially at the Al Bayan Islamic Boarding School, Tobayan Hamlet, Sendangrejo, Minggir, Sleman. Pondok has land that has not been managed properly, including yards and fields as listed in table 1.

Table 1. Land potential for the Al Bayan Islamic Boarding School

Land	Area (m2)
Girls Dormitory grounds	250
Boys' Dormitory Yard	1.000
Moor	1.500
Ricefield	3.600

The commodities cultivated by the Al Bayan Islamic boarding school are chilies in paddy fields, teak trees in the moor, fish and free-range chicken in the moor. While the yard has not been used optimally. In addition, environmental management and waste management have not been carried out properly. This condition is caused by the knowledge and skills of students in environmental management is still low.

2. Method

The concept of people-centered development (People Centered Development) views people's initiative as the most important development resource and views material and spiritual well-being as goals to be achieved. Efforts to carry out people-centered development are carried out through empowerment. In principle, community empowerment is an effort to change the existence of the community to become more independent, productive and prosperous. The community empowerment process aims to: 1). So that people are able to identify and analyze their own problems, 2). Facilitating so that the community is able to formulate several alternative solutions to the problem, 3). Encouraging the community to be able to explore their potential while developing it. Empowering the community aims at "educating people to be able to educate themselves" or "helping people to be able to help themselves". The goals to be achieved through community empowerment efforts are a society that is independent, self-supporting, able to adopt innovation, and has a cosmopolitan mindset.

In accordance with the problem of environmental management through an eco-Islamic boarding school-based food garden at the Al Bayan Islamic Boarding School, this program will be implemented through several stages, namely:

a Initial assessment of the problem

Identification of problems is carried out through FGD activities both with managers, students and the Tobayan community. The output of this activity is mapping of environmental management problems through an eco-Islamic boarding school based food garden at the Al Bayan Islamic boarding school.

b. Increased Awareness and Knowledge Based on religious values

Increasing awareness and knowledge about environmental issues needs to be given to both the management of the boarding school and the students so that awareness and knowledge arises about managing the congregation-based boarding environment. Increasing awareness and knowledge is carried

out through counseling and recitation. The output of this stage is an increase in understanding and awareness of environmental management through a food garden based on eco-Islamic boarding schools by planting organic vegetables and ornamental plants [5], [7], [8], [35]–[38].

c. Assistance and Empowerment Environmental management through an eco-Islamic boarding school-based food garden.

Assistance and empowerment are carried out so that the values of awareness about the environment for students and congregation of Islamic boarding schools can be instilled through various religious activities which are then applied in daily life to foster theological awareness about the importance of caring for the environment, developing participatory-based environmental activities. Assistance and empowerment is carried out by training in the production of organic vegetable cultivation. As evaluation material and follow-up plans, training will be conducted to form environmental cadres as well as administrative management assistance for Islamic boarding schools for managers and students of Al Bayan Sendangrejo Minggir Selman.

The length of the submitted paper is at least 3000 words and no more than 7000 words. The editor will consider if the article requires more than 7000 words. (one single space, 11pt font)

3. Results and Discussion

The service is carried out in stages starting from counseling, FGD, preparation of SOPs and training. Service activities are participatory in nature to foster theological awareness about the importance of caring for the environment, developing environmental activities. This is in accordance with the concept of community empowerment which aims to "educate people to be able to educate themselves" or "help people to be able to help themselves". The goals to be achieved through community empowerment efforts are a society that is independent, self-supporting, able to adopt innovation, and has a cosmopolitan mindset.

3.1. Counseling on Food Gardens and Eco Islamic Boarding Schools

The food garden extension was held on March 6 2022 at the Islamic boarding school pendapa. Counseling presented speakers from Caping Merapi Agroeducation Panggih Dwiatmojo S.T. The activity participants consisted of female students and caretakers of PP Al Bayan. The activity continued with discussion in response to the material presented related to environmental management problems faced by the Al Bayan Islamic boarding school. At the end of the counseling session, specialization was carried out for students who would take part in further activities in managing the environment of Islamic boarding schools. The purpose of this activity is to provide an understanding of the concept of Eco-Pesantren as the basis and learning good characteristics with concern for the environment, so that it cares about saving the world based on religious beliefs.

3.2. Focused Group Discussion (FGD) Eco Boarding School Management

Positioning Figures and Tables: Place figures and tables at the top and bottom of columns. Avoid placing them in the middle of columns. Large figures and tables may span across both columns. Figure captions should be below the figures; table heads should appear above the tables. Insert figures and tables after they are cited in the text. Use the abbreviation “Fig. 1,” even at the beginning of a sentence.

Environmental management FGDs were carried out with selected students in the specialization of the eco pesantren program. The FGD was facilitated by Mrs. Yusi as PP Albayan's caregiver. In the FGD discussion, environmental problems have been identified, including the management of kitchen organic waste, garden organic waste and yard garden arrangement. In subsequent discussions it was agreed that the division of environmental management tasks would consist of the person in charge of each activity, namely kitchen waste, garden waste and yard garden. In addition, a board was also formed which would coordinate all eco-boarding management activities consisting of a chairman, secretary and coordinator for wet organic waste, dry organic, inorganic and gardening.

In carrying out the discussion on Management of the Eco Islamic Boarding School organization, the tasks needed for each division of the Eco Islamic Boarding School management have been identified. Furthermore, the composition of the management and job descriptions of each eco pesantren board

were agreed upon. In the context of implementing eco pesantren management, the activity was continued with an FGD for the preparation of Eco pesantren Standard operating procedures (SOP). The discussion discussed the SOP draft that had been prepared by the service team based on the results of the previous discussion. Caregivers and students provide feedback and input and discuss the draft SOP with the team so that the SOP is agreed upon to be ratified by the Board of Islamic Boarding Schools. The preparation of this SOP is a form of implementation of Islamic jurisprudence/law relating to environmental preservation which addresses environmental themes such as Ihyā' al-Maut (utilizing dead land), al-'At'imah (law of food) and so on. Thus the preparation of the SOP is intended so that the Eco-Islamic Boarding School Program has potential in an effort to build a caring attitude towards the environment so that environmental sustainability can be maintained continuously.

Fig. 1. Counseling and discussion on food garden management

3.3. Food Garden Management Training

Training activities include arranging parks and gardens carried out by a team with students and caretakers assisted by gardeners. This activity starts with a land survey, garden design and planting of existing ornamental, vegetable, herbal and fruit plants and arranged in such a way that they look beautiful and beautiful. This activity is part of the practice of religious values in the context of environmental management as the role of religion in the scientific context is cosmological codependency and ecological values, moral authority, a large foundation of followers, significant material resources, and community building capacity.

Food garden management training consists of planting ornamental plants and vegetables in the garden and making compost from dry organic waste. Planting of ornamental plants and vegetables is carried out by utilizing compost growing media that has been processed so far. Plant seeds are sown in pots and arranged on a shelf that has been prepared. The shelves are marked with the names of the plants based on the order of the shelves. This planting training is intended to help food supplies, improve community nutrition, improve public health, reduce unemployment, and reduce social conflict. This shows that food garden farming can be one of the efforts to reduce poverty and create a sustainable environment.

Fig. 2. Training, assistance and monitoring of food garden management

Furthermore, training on making compost from dry organic waste was carried out using a composter bag. Dry organic waste is arranged layered with soil. Each layer is sprayed with bioactivator so that the material decomposition process is faster and more efficient. Apart from being accompanied by the community service team, activities are also carried out by Islamic boarding school caretakers. Thus Tuan

Guru (religious figure) with charismatic leadership can act as a foreman, motivator and evaluator of environmental conservation in implementing a sustainable lifestyle based on ecological values in the Al-Quran and Hadith which have an impact on social values.

4. Conclusion

Eco-school-based food garden management activities are an effort to manage the environment by utilizing clean, healthy, beautiful and productive Islamic boarding school environmental resources to produce food to meet the needs of Islamic boarding schools. Activities carried out starting from counseling, FGD identification of problems, alternative solutions and needs in environmental management. Furthermore, the formation of an eco pesantren management organization and organizational management agreed upon in the preparation of the eco pesantren SOP. Islamic boarding schools' eco-management practices are carried out by students starting from training in making compost, arranging gardens and parks, planting vegetables and ornamental plants, as well as segregating Islamic boarding school waste for fish feed, fertilizer and waste sodaqoh. The establishment of a management organization and SOP for eco pesantren is expected to create a sustainable eco pesantren.

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Author Contribution

This community service activity plan aims to help manage the environment of Islamic boarding schools and provide healthy food through an eco-Islamic boarding school-based food garden.

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Conflict of Interest

The authors declare no conflict of interest.

References

[1] M. Muhardi, N. Nurdin, and A. Irfani, "The role of knowledge-based ecological pesantren in environmental conservation," J. Phys. Conf. Ser., vol. 1469, no. 1, p. 012126, Feb. 2020.

[2] H. Herdiansyah, T. Jokopitoyo, and A. Munir, "Environmental Awareness to Realizing Green Islamic Boarding School (Eco-Pesantren) In Indonesia," IOP Conf. Ser. Earth Environ. Sci., vol. 30, no. 1, p. 012017, Feb. 2016.

[3] M. Bakri, "ECO-PESANTREN ASSESSMENT STUDY OF ISLAMIC BOARDING SCHOOL IN BANDA ACEH, INDONESIA," J. Islam. Archit., vol. 6, no. 3, pp. 143–150, Jun. 2021.

[4] R. N. Aulia, I. Mardhiah, A. Gunawan, D. E. N. Isnaini, M. Firdaus, and S. Narulita, "Pesantren-based environmental management in equatorial areas," in AIP Conference Proceedings, 2018, vol. 2019, no. October 2018, p. 030015.

[5] A. Sofo and A. Sofo, "Correction to: Converting Home Spaces into Food Gardens at the Time of Covid-19 Quarantine: all the Benefits of Plants in this Difficult and Unprecedented Period," Hum. Ecol., vol. 48, no. 2, pp. 141–141, Apr. 2020.

[6] S. Somerset and K. Markwell, "Impact of a school-based food garden on attitudes and identification skills regarding vegetables and fruit: a 12-month intervention trial," Public Health Nutr., vol. 12, no. 2, pp. 214–221, Feb. 2009.

[7] G. Lyons et al., "Macro- and Micronutrients from Traditional Food Plants Could Improve Nutrition and Reduce Non-Communicable Diseases of Islanders on Atolls in the South Pacific," Plants, vol. 9, no. 8, p. 942, Jul. 2020.

[8] J. Pierre, V. Fast, J. Kumari, and C. Rinner, "Cartoforum – A Map-Based Discussion Forum with Applications in the Planning of Cycle Lanes, Community Food Gardens and Campus Sustainability," GI_Forum, vol. 1, no. 1, pp. 171–184, 2019.

[9] J. Ward and J. Symons, "Optimising Crop Selection for Small Urban Food Gardens in Dry Climates," Horticulturae, vol. 3, no. 2, p. 33, May 2017.

[10] S. M. Laurie, M. Faber, and M. M. Maduna, "Assessment of food gardens as nutrition tool in primary schools in South Africa," South African J. Clin. Nutr., vol. 30, no. 4, pp. 80–86, Oct. 2017.

[11] D. Soleri, "Civic seeds: new institutions for seed systems and communities—a 2016 survey of California seed libraries," Agric. Human Values, vol. 35, no. 2, pp. 331–347, Jun. 2018.

[12] S. Roberts and C. Shackleton, "Temporal Dynamics and Motivations for Urban Community Food Gardens in Medium-Sized Towns of the Eastern Cape, South Africa," Land, vol. 7, no. 4, p. 146, Nov. 2018.

[13] K. Mulondo and W. Parker, "Mediating antiretroviral treatment for HIV during COVID-19: lessons from implementation in Gomba District, Uganda," African J. AIDS Res., vol. 21, no. 2, pp. 201–206, Apr. 2022.

[14] L. Sovová, P. Jehlička, and P. Daněk, "Growing the Beautiful Anthropocene: Ethics of Care in East European Food Gardens," Sustainability, vol. 13, no. 9, p. 5193, May 2021.

[15] V. Chikadzi and E. Munatswa, "Contributions and Limitations of Food Gardening as a Sustainable Livelihood Strategy: Insights from a Case Study," Mediterr. J. Soc. Sci., vol. 5, no. 4, pp. 597–603, Mar. 2014.

[16] S. S. Grewal et al., "An assessment of soil nematode food webs and nutrient pools in community gardens and vacant lots in two post-industrial American cities," Urban Ecosyst., vol. 14, no. 2, pp. 181–194, Jun. 2011.

[17] C. Hanna and P. Wallace, "Planning the urban foodscape: policy and regulation of urban agriculture in Aotearoa New Zealand," Kōtuitui New Zeal. J. Soc. Sci. Online, vol. 00, no. 0, pp. 1–23, Nov. 2021.

[18] C. Sherry, "Learning from the Dirt: Initiating university food gardens as a cross-disciplinary tertiary teaching tool," J. Outdoor Environ. Educ., vol. 25, no. 2, pp. 199–217, Aug. 2022.

[19] N. Rodda, K. Carden, N. Armitage, and H. Du Plessis, "Development of guidance for sustainable irrigation use of greywater in gardens and small-scale agriculture in South Africa," Water SA, vol. 37, no. 5, pp. 727–738, Dec. 2011.

[20] K. R. Kirsch, T. J. McDonald, G. D. Newman, X. Xu, and J. A. Horney, "Surveys of community garden affiliates and soils in Houston, Texas," Environ. Monit. Assess., vol. 194, no. 5, p. 330, May 2022.

[21] O. O. David and W. Grobler, "Status Quo of Households' Backyard Food Gardens in South Africa: The 'Drivers,'" Sustainability, vol. 14, no. 5, p. 2674, Feb. 2022.

[22] R. B. Aditya and A. Zakiah, "Practical reflection and benefits of making a food garden at home during Covid-19 pandemic," Int. J. Food Stud., vol. 11, no. 1, pp. 85–97, Apr. 2022.

[23] S. Somerset and A. Bossard, "Variations in prevalence and conduct of school food gardens in tropical and subtropical regions of north-eastern Australia," Public Health Nutr., vol. 12, no. 9, pp. 1485–1493, Sep. 2009.

[24] C. M. Walsh, M. S. Fouché, M. Nel, and F. Booysen, "The Impact of a Household Food Garden Intervention on Food Security in Lesotho," Int. J. Environ. Res. Public Health, vol. 17, no. 22, p. 8625, Nov. 2020.

[25] J. L. Black et al., "Sustainability and public health nutrition at school: assessing the integration of healthy and environmentally sustainable food initiatives in Vancouver schools," Public Health Nutr., vol. 18, no. 13, pp. 2379–2391, Sep. 2015.

[26] J. R. Taylor and S. T. Lovell, "Urban home gardens in the Global North: A mixed methods study of ethnic and migrant home gardens in Chicago, IL," Renew. Agric. Food Syst., vol. 30, no. 1, pp. 22–32, Feb. 2015.

[27] N. Semananda, J. Ward, and B. Myers, "Evaluating the Efficiency of Wicking Bed Irrigation Systems for Small-Scale Urban Agriculture," Horticulturae, vol. 2, no. 4, p. 13, Sep. 2016.

[28] F. Lupia, V. Baiocchi, K. Lelo, and G. Pulighe, "Exploring Rooftop Rainwater Harvesting Potential for Food Production in Urban Areas," Agriculture, vol. 7, no. 6, p. 46, May 2017.

[29] R. C. Gbedomon, V. K. Salako, A. B. Fandohan, A. F. R. Idohou, R. Glèlè Kakaï, and A. E. Assogbadjo, "Functional diversity of home gardens and their agrobiodiversity conservation benefits in Benin, West Africa," J. Ethnobiol. Ethnomed., vol. 13, no. 1, p. 66, Dec. 2017.

[30] L. Govender, K. Pillay, M. Siwela, A. Modi, and T. Mabhaudhi, "Ssfood and nutrition insecurity in selected rural communities of KwaZulu-Natal, South Africa—linking human nutrition and agriculture," Int. J. Environ. Res. Public Health, vol. 14, no. 1, 2017.

[31] J. L. Rothenburger, C. G. Himsworth, N. M. Nemeth, D. L. Pearl, and C. M. Jardine, "Environmental Factors Associated with the Carriage of Bacterial Pathogens in Norway Rats," Ecohealth, vol. 15, no. 1, pp. 82–95, Mar. 2018.

[32] G. Langellotto, A. Melathopoulos, I. Messer, A. Anderson, N. McClintock, and L. Costner, "Garden Pollinators and the Potential for Ecosystem Service Flow to Urban and Peri-Urban Agriculture," Sustainability, vol. 10, no. 6, p. 2047, Jun. 2018.

[33] B. Y. Tesfamariam, E. Owusu-Sekyere, D. Emmanuel, and T. B. Elizabeth, "The impact of the homestead food garden programme on food security in South Africa," Food Secur., vol. 10, no. 1, pp. 95–110, Feb. 2018.

[34] V. Lam, K. Romses, and K. Renwick, "Exploring the Relationship between School Gardens, Food Literacy and Mental Well-Being in Youths Using Photovoice," Nutrients, vol. 11, no. 6, p. 1354, Jun. 2019.

[35] R. Laycock Pedersen, Z. P. Robinson, and E. Surman, "Understanding Transience and Participation in University Student-Led Food Gardens," Sustainability, vol. 11, no. 10, p. 2788, May 2019.

[36] C. M. Porter, A. M. Wechsler, F. Naschold, S. J. Hime, and L. Fox, "Assessing health impacts of home food gardens with Wind River Indian Reservation families: protocol for a randomised controlled trial," BMJ Open, vol. 9, no. 4, p. e022731, Apr. 2019.

[37] A. Sofo and A. Sofo, "Correction to: Converting Home Spaces into Food Gardens at the Time of Covid-19 Quarantine: all the Benefits of Plants in this Difficult and Unprecedented Period," Hum. Ecol., vol. 48, no. 2, pp. 141–141, Apr. 2020.

[38] G. Csortan, J. Ward, and P. Roetman, "Productivity, resource efficiency and financial savings: An investigation of the current capabilities and potential of South Australian home food gardens," PLoS One, vol. 15, no. 4, p. e0230232, Apr. 2020.