



# Hidden Hunger among Indigenous Women: How to Achieve Food Security in Southeast Asia

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**Abstract**—Hidden hunger, characterized by a deficiency of essential micronutrients, remains a critical public health concern in Southeast Asia, particularly among indigenous women. This research delves into the pervasive issue of food insecurity and malnutrition in this demographic and seeks sustainable strategies to mitigate its effects. The study begins by examining the underlying causes of hidden hunger among indigenous women, encompassing socioeconomic disparities, limited access to nutritious foods, and traditional dietary practices. It sheds light on the disproportionate impact on their health and overall well-being, including the intergenerational consequences of maternal malnutrition. The research explores multifaceted approaches to achieve food security in response to these challenges. It highlights the importance of community-based interventions, such as agricultural diversification, nutritional education, and women's empowerment initiatives. Additionally, it advocates for policy changes that promote indigenous land rights and equitable access to resources. By addressing hidden hunger among indigenous women, this study aims to contribute to achieving food security and improved well-being for all in Southeast Asia.

**Keywords**—Hidden Hunger, Indigenous Women, Food Security

## I. INTRODUCTION

Hidden hunger, also called micronutrient deficiency, is a form of undernutrition resulting from a lack of essential vitamins and minerals in the diet [1]. Despite having access to adequate food, individuals suffering from hidden hunger often lack vital nutrients necessary for optimal health and development [2], [3]. Indigenous women, due to various socioeconomic and cultural factors, are particularly vulnerable to hidden hunger in Southeast Asia [4].

Southeast Asia is home to a rich tapestry of indigenous communities, each with its unique culture, language, and traditional practices [5]. Historically, these communities have relied on diverse and locally sourced foods, contributing to a balanced diet that meets their nutritional needs. However, rapid urbanization, globalization, climate change, and shifts in dietary patterns have disrupted traditional food systems, altering the availability and accessibility of nutritious foods [6], [7]. Indigenous women are often at the forefront of these changes, grappling with the consequences of a changing food landscape [8]–[11].

The complexities of hidden hunger among indigenous women in Southeast Asia extend beyond dietary choices. Socioeconomic disparities, limited access to education and healthcare, discrimination, and marginalization further exacerbate their vulnerability to hidden hunger [12]. Additionally, the unequal distribution of resources and power

within society often leaves indigenous women with limited decision-making capabilities regarding food choices and household nutrition [13], [14].

It is crucial to adopt a holistic and context-specific approach to address hidden hunger among indigenous women. This study aims to investigate the multifaceted factors contributing to hidden hunger within indigenous communities in Southeast Asia. By understanding the root causes and intricacies of this issue, targeted interventions and policies can be developed to enhance food security and improve the nutritional status of indigenous women.

This research aims to analyze the dietary patterns and nutritional habits of indigenous women in Southeast Asia and identify the underlying factors that contribute to hidden hunger within this demographic. By shedding light on hidden hunger among indigenous women in Southeast Asia and proposing evidence-based solutions, this study seeks to contribute to the larger discourse on food security and human rights. The insights gained from this research will inform policy recommendations, empower communities, and advance efforts to eradicate hidden hunger, ensuring a healthier and more prosperous future for all.

## II. METHOD

This study uses a non-systematic literature review. Scope and objectives of the literature review, specifying the key focus areas, including hidden hunger, indigenous communities, food security, and the unique challenges experienced by indigenous women in Southeast Asia. Furthermore, the search strategy developed a comprehensive search strategy to identify relevant literature such as academic database. Keywords such as "hidden hunger," "food security," "indigenous women," and "Southeast Asia" will guide the search.

Data collection non-systematically collect from relevant literature based on the established criteria. Categorize the gathered sources into themes such as "Hidden Hunger and Nutrition," "Food Security Policies," "Indigenous Communities," and "Women's Health" to facilitate organization and analysis.

By employing a literature review method, this research aims to consolidate and analyze existing knowledge, providing a foundation for the subsequent stages of the study and informing evidence-based recommendations to address hidden hunger and enhance food security among indigenous women in Southeast Asia.

### III. RESULT AND DISCUSSION

Hidden hunger, also known as micronutrient deficiency, is pervasive among indigenous women in Southeast Asia [12]. Despite living in regions with biodiversity and traditional knowledge of local foods, these women face significant challenges in accessing and consuming a nutritionally adequate diet. This study delves into the depths of hidden hunger among indigenous women, aiming to shed light on its prevalence, contributing factors, and propose strategies to achieve food security in Southeast Asia.

#### A. Prevalence of Hidden Hunger in Southeast Asia

The research revealed a concerning prevalence of hidden hunger among indigenous women in Southeast Asia. Micronutrient deficiencies, including iron, zinc, vitamin A, iodine, and folate, were identified as common nutritional gaps [4], [15], [16]. These deficiencies were primarily attributed to monotonous diets, low intake of fruits and vegetables, limited access to fortified foods, and poor dietary diversity. The prevalence of hidden hunger not only affects the physical health of indigenous women but also has far-reaching implications for maternal and child health within these communities [3], [17]–[20].

Based on our literature review finding, we can state that several interconnected factors contribute to hidden hunger among indigenous women are socio-economic factors, cultural practices and dietary patterns, lack of nutrition education, limited access to healthcare and nutrition services, and climate change and environmental degradation.

Poverty and limited economic resources make it challenging for indigenous women to afford a diverse and nutritious diet. Financial constraints restrict their ability to purchase nutrient-rich foods [21], [22].

Traditional dietary habits often lack diversity and may not provide adequate micronutrients. Reliance on staple crops and limited consumption of animal-source foods contribute to nutritional deficiencies [15], [21], [23].

Insufficient knowledge about proper nutrition and its importance leads to suboptimal dietary practices. Many indigenous women are unaware of the nutritional value of various foods and the importance of a balanced diet [24]–[27].

Geographical remoteness and inadequate healthcare infrastructure prevent many indigenous women from receiving proper health and nutrition guidance. This lack of access perpetuates the cycle of hidden hunger [28]–[30].

Environmental changes affect food availability and quality. Climate-related events disrupt agricultural practices and food production, directly impacting the food security of indigenous communities [8], [31]–[34].

#### B. Strategies for Achieving Food Security:

Addressing hidden hunger and achieving food security among indigenous women requires a multi-faceted approach. Encouraging the consumption of locally available, nutrient-dense foods such as indigenous fruits, vegetables, and traditional grains can enhance dietary diversity and mitigate hidden hunger. Educational campaigns can raise awareness about the nutritional value of these indigenous foods [27].

Empowering indigenous women with knowledge and resources to diversify their agricultural practices can enhance food production and income generation [35]–[37]. Training in sustainable farming techniques and supporting the cultivation of diverse crops can improve dietary diversity and food security.

Implementing community-level nutrition education programs can enhance understanding of the importance of a balanced diet and micronutrient-rich foods [20], [27], [38], [39]. These programs should consider cultural norms and indigenous practices to ensure relevance and effectiveness.

Improving healthcare access through mobile clinics, community health workers, and awareness campaigns can aid in early detection and management of hidden hunger [8], [40]. Regular health check-ups and access to prenatal and postnatal care are critical for the well-being of both mothers and infants.

Advocating for policies prioritizing indigenous populations' nutrition and well-beings crucial [41], [42]. Policymakers should collaborate with indigenous communities to design and implement culturally sensitive strategies that address hidden hunger and enhance food security.

Encouraging climate-resilient agricultural practices and promoting climate-smart food systems can mitigate the impact of environmental changes on food production [32], [43]–[45]. Diversification and adaptation of agriculture to changing climate patterns can enhance food availability and security.

### IV. CONCLUSION

Hidden hunger among indigenous women in Southeast Asia is a complex issue influenced by various socio-economic, cultural, and environmental factors. Achieving food security requires a comprehensive, context-specific approach that considers these communities' unique needs and challenges. By implementing targeted strategies that encompass nutrition education, sustainable agriculture, healthcare access, and policy advocacy, it is possible to alleviate hidden hunger and improve the overall well-being of indigenous women in the region. This research underscores the importance of collaborative efforts involving governments, NGOs, communities, and other stakeholders to ensure a sustainable and nourished future for indigenous women in Southeast Asia.

#### REFERENCES

- [1] V. N. Ibeanu, C. G. Edeh, and P. N. Ani, "Evidence-based strategy for prevention of hidden hunger among adolescents in a suburb of Nigeria," *BMC Public Health*, vol. 20, no. 1, Dec. 2020, doi: 10.1186/s12889-020-09729-8.
- [2] "THE PROBLEM," 2015. [Online]. Available: [www.HarvestPlus.org](http://www.HarvestPlus.org)
- [3] N. S. Scrimshaw, "The consequences of hidden hunger for individuals and societies," 1994.
- [4] A. Redón, L. Bachelor's Thesis, and L. Review, "HIDDEN HUNGER IN THE CURRENT WORLD," 2021.
- [5] G. Clarke, "From ethnocide to ethnodevelopment? Ethnic minorities and indigenous peoples in Southeast Asia," *Third World Q.* vol. 22, no. 3, pp. 413–436, 2001, doi: 10.1080/01436590120061688.
- [6] R. R. B. Leakey *et al.*, "The Future of Food: Domestication and Commercialization of Indigenous Food Crops in Africa over the Third Decade (2012–2021)," *Sustainability (Switzerland)*, vol. 14, no. 4, 2022, doi: 10.3390/su14042355.
- [7] L. E. Johnson, "Understanding the livelihoods of women in the local foodscape: A case study of Accra, Ghana," *ProQuest Dissertations and Theses*, no. December, p. 124, 2014, [Online].

- Available:  
[http://search.proquest.com/docview/1652855800?accountid=10906%5Chttp://zsfx.lib.iastate.edu:3410/sfxlcl41?url\\_ver=Z39.88-2004&rft\\_val\\_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations+%26+theses&sid=ProQ:ProQuest+Dissertations+%26+Theses+Global&a](http://search.proquest.com/docview/1652855800?accountid=10906%5Chttp://zsfx.lib.iastate.edu:3410/sfxlcl41?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations+%26+theses&sid=ProQ:ProQuest+Dissertations+%26+Theses+Global&a)
- [8] D. E. Johnson, K. Fisher, and M. Parsons, "Diversifying Indigenous Vulnerability and Adaptation: An Intersectional Reading of Māori Women's Experiences of Health, Wellbeing, and Climate Change," *Sustainability*, vol. 14, no. 9, p. 5452, 2022, doi: 10.3390/su14095452.
- [9] A. Bajracharya, K. K. Shrestha, A. B. Zwi, and E. Baldry, "Reframing Gendered Disaster: Lessons from Nepal's Indigenous women," *International Journal of Disaster Risk Reduction*, vol. 83, 2022, doi: 10.1016/j.ijdr.2022.103422.
- [10] V. Poonacha, "Women resist indigenous cultural oppression in gadchiroli, India," *Int Fem J Polit*, vol. 12, no. 1, pp. 80–88, 2010, doi: 10.1080/14616740903429148.
- [11] J. Parmenter, "5 . Experiences of Indigenous Women in the Australian Mining Industry".
- [12] A. Hirata Kimura, "HIDDEN HUNGER."
- [13] I. Altamirano-Jiménez, "Privatisation and dispossession in the name of indigenous women's rights," *The Neoliberal State, Recognition and Indigenous Rights*, pp. 43–58, 2018, doi: 10.22459/caepr40.07.2018.02.
- [14] K. C. da Silva, "Women, gender and power among indigenous peoples of Portuguese Timor," *Anuário Antropológico*, no. v.42 n.2, pp. 183–205, 2017, doi: 10.4000/aa.2240.
- [15] J. Hodge, "Hidden Hunger Approaches to Tackling Micronutrient Deficiencies."
- [16] A. J. Stein and M. Qaim, "The human and economic cost of hidden hunger," 2013.
- [17] N. M. Lowe, "The global challenge of hidden hunger: Perspectives from the field," in *Proceedings of the Nutrition Society*, Cambridge University Press, Aug. 2021, pp. 283–289. doi: 10.1017/S0029665121000902.
- [18] T. Gödecke, A. J. Stein, and M. Qaim, "The global burden of chronic and hidden hunger: Trends and determinants," *Global Food Security*, vol. 17. Elsevier B.V., pp. 21–29, Jun. 01, 2018. doi: 10.1016/j.gfs.2018.03.004.
- [19] S. Muthayya, J. H. Rah, J. D. Sugimoto, F. F. Roos, K. Kraemer, and R. E. Black, "The Global Hidden Hunger Indices and Maps: An Advocacy Tool for Action," *PLoS One*, vol. 8, no. 6, Jun. 2013, doi: 10.1371/journal.pone.0067860.
- [20] K. L. Harding, V. M. Aguayo, and P. Webb, "Hidden hunger in South Asia: A review of recent trends and persistent challenges," *Public Health Nutrition*, vol. 21, no. 4. Cambridge University Press, pp. 785–795, Mar. 01, 2018. doi: 10.1017/S1368980017003202.
- [21] E. O'Boyle and M. O'Boyle, "Global poverty, hunger, death, and disease," *Int J Soc Econ*, vol. 39, no. 1–2, pp. 4–17, 2011, doi: 10.1108/03068291211188848.
- [22] L. Osberg, "The Hunger of Old Women in Rural Tanzania: Can Subjective Data Improve Poverty Measurement?," *Review of Income and Wealth*, vol. 61, no. 4, pp. 723–738, 2015, doi: 10.1111/roiw.12128.
- [23] T. Gödecke, A. J. Stein, and M. Qaim, "Corrigendum to 'The global burden of chronic and hidden hunger: Trends and determinants' (Global Food Security (2018) 17 (21–29), (S2211912417301578), (10.1016/j.gfs.2018.03.004))," *Global Food Security*, vol. 22. Elsevier B.V., p. 46, Sep. 01, 2019. doi: 10.1016/j.gfs.2019.09.001.
- [24] C. Rondoni, "Extractivism and Unjust Food Insecurity for Peru 's Loreto Indigenous Communities," 2022.
- [25] L. Kepkiewicz and B. Dale, "Keeping 'our' land: property, agriculture and tensions between Indigenous and settler visions of food sovereignty in Canada," *Journal of Peasant Studies*, vol. 46, no. 5, pp. 983–1002, 2019, doi: 10.1080/03066150.2018.1439929.
- [26] K. Skinner, E. Pratley, and K. Burnett, "Eating in the city: A review of the literature on food insecurity and indigenous people living in urban spaces," *Societies*, vol. 6, no. 2, 2016, doi: 10.3390/soc6020007.
- [27] C. de B. Q. Gonçalves, M. M. Schlindwein, and G. D. C. Martinelli, "Agroforestry systems: A systematic review focusing on traditional indigenous practices, food and nutrition security, economic viability, and the role of women," *Sustainability (Switzerland)*, vol. 13, no. 20, 2021, doi: 10.3390/su132011397.
- [28] Atem and N. Niko, "Persoalan Kerawanan Pangan pada Masyarakat Miskin di Wilayah Perbatasan Entikong (Indonesia-Malaysia) Kalimantan Barat," *Jurnal Surya Masyarakat*, vol. 2, no. 2, pp. 94–104, 2020.
- [29] N. Niko, "Perempuan Adat dan Kemiskinan: Pengalaman, Dilema, dan Tantangan dalam Penelitian Etnografi," 2022. [Online]. Available: <https://scholarhub.ui.ac.id/jai>
- [30] N. Niko, "Poor and Hunger: How Do Indigenous Peoples ' Respond to COVID - 19 in Indonesia?," vol. 14, no. 1, pp. 81–92, 2021.
- [31] N. Niko, "Gender Struggle : What Can We Learn from the Dayak Benawan Women ? Gender Struggle : What Can We Learn from," vol. 13, no. 2, pp. 269–292, 2020.
- [32] G. Oviedo, S. Gotheil, K. Cross, A. Boedhihartono, C. Wolfangel, and M. Howell, "Indigenous and Traditional Peoples and Climate Change Issues Paper," *Diversity (Basel)*, no. March, pp. 1–64, 2008, [Online]. Available: [http://cmsdata.iucn.org/downloads/indigenous\\_peoples\\_climate\\_change.pdf](http://cmsdata.iucn.org/downloads/indigenous_peoples_climate_change.pdf)
- [33] M. Kalanda-Joshua, C. Ngongondo, L. Chipeta, and F. Mpembeka, "Integrating indigenous knowledge with conventional science: Enhancing localised climate and weather forecasts in Nessa, Mulanje, Malawi," *Physics and Chemistry of the Earth*, vol. 36, no. 14–15, pp. 996–1003, 2011, doi: 10.1016/j.pce.2011.08.001.
- [34] M. Pimid et al., "Indigenous Kinabatangan Perspectives on Climate Change Impacts and Adaptations : Factors Influencing Their Support and Participation," 2022.
- [35] C. Hughes, M. Bolis, R. Fries, and S. Finigan, "Women's economic inequality and domestic violence: exploring the links and empowering women," *Gen Dev*, vol. 23, no. 2, pp. 279–297, 2015, doi: 10.1080/13552074.2015.1053216.
- [36] G. Sen, "Gender Equality and Women's Empowerment: Feminist Mobilization for the SDGs," *Glob Policy*, vol. 10, no. January, pp. 28–38, 2019, doi: 10.1111/1758-5899.12593.
- [37] I. Rahatmawati and P. Wahyuni, "People empowering: Sebagai strategi membangun ketahanan ekonomi dalam rangka ketahanan nasional (studi pada masyarakat perbatasan)".
- [38] "From Assessment to Solutions Hunger International C o n g r e s s Hidden Institute of Biological Chemistry and Nutrition." [Online]. Available: <http://www.kukm.de>
- [39] G. Alliance for Improved Nutrition, "New Global Estimates for Hidden Hunger ACTION NEEDED TO ADDRESS ALARMING MICRONUTRIENT DEFICIENCY LEVELS WORLDWIDE."
- [40] R. Schultz, T. Abbott, J. Yamaguchi, and S. Cairney, "Indigenous land management as primary health care: Qualitative analysis from the Interplay research project in remote Australia," *BMC Health Serv Res*, vol. 18, no. 1, pp. 1–10, 2018, doi: 10.1186/s12913-018-3764-8.
- [41] M. Quintal-Marineau and Pauktutit Inuit Women of Canada, "Living in the South, Caring in the North: Exploring Inuit Women's Care Responsibilities," *Int Indig Policy J*, vol. 11, no. 4, pp. 1–19, 2020, doi: 10.18584/iipj.2020.11.4.8192.
- [42] N. Lachance and T. Rose, "More than words: Outlining preconditions to collaboration among first nations, the federal government, and the provincial government," *Int Indig Policy J*, vol. 11, no. 2, pp. 1–26, 2020, doi: 10.18584/IIPJ.2020.11.2.10692.
- [43] C. J. Pierce Colfer, B. S. Basnett, and M. Elias, *Gender and forests: Climate change, tenure, value chains and emerging issues*, no. December 2017. 2016. doi: 10.4324/9781315666624.
- [44] M. Bunce, S. Rosendo, and K. Brown, *Perceptions of climate change, multiple stressors and livelihoods on marginal African coasts*, vol. 12, no. 3. 2010. doi: 10.1007/s10668-009-9203-6.
- [45] S. Wong, "Climate change and sustainable technology: Re-linking poverty, gender, and governance," *Gen Dev*, vol. 17, no. 1, pp. 95–108, 2009, doi: 10.1080/13552070802696953.

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