

From International Regulation to Local Implementation: Gender Equality for Sustainable Development Goals

Surya Oktaviandra
Universitas Andalas, Indonesia
Email: suryaoktaviandra@law.unand.ac.id

Putri Aulia Arza
Universitas Andalas, Indonesia
Email: putriauliaarza@ph.unand.ac.id

Abstract

This paper discusses gender equality in sustainable development goals as a response to the 2023 United Nations Sustainable Development Goals Report. Through the lens of international environmental law, gender equality achievement is examined both by its international commitment and its implementation at local institutions. This study focuses on elements of the data report that closely relate to human rights and the environment. These include women's global share in national agricultural ownership, their secure tenure rights over agricultural land, and access to fair legal protection. This study then observes the availability of international agendas within international environmental law to promote sustainable development goals. Relevant legal frameworks include those arranged by the 1992 Rio Earth Summit and the 2015 Paris Agreement on Climate Change. To examine local implementation, this study uses the West Sumatra government as a case study, employing questionnaires and interviews with provincial legal actors. Indonesia Investment Law, which covers a broad spectrum of human development, is utilized as a model for assessing the implementation of gender equality at the local level. Ultimately, this study found a lack of gender equality implementation for SDGs at local institutions. It concludes that this could have been anticipated via a more comprehensive international legal framework, which could be implemented through national regulations.

Keywords: *International Environmental Law, Gender Equality, Sustainable Development Goals*

I. INTRODUCTION

The Sustainable Development Goals (SDGs) represent a profound commitment and a roadmap for a sustainable and equitable future. Unlike trends subject to change, the SDGs are a comprehensive set of objectives addressing global urgencies across social, economic, and environmental dimensions. Encompassing 17 goals and 169 targets, the SDGs provide a holistic framework for nations, communities, and individuals to work collaboratively toward a more inclusive, resilient, and environmentally conscious world.¹

Gender equality holds a central position within the SDGs, with Goal 5 dedicated to "achieve gender equality and empower all women and girls." It is not merely a standalone objective but a pervasive theme woven throughout the fabric of sustainable development that extends beyond its own goal, as it is intricately connected to the attainment of several other SDGs.² For example, gender equality contributes to ending poverty (SDG 1), ensuring good health and well-being (SDG 3), providing quality education (SDG 4), and fostering inclusive economic growth (SDG 8). It enhances economic growth, health, and education by empowering women to participate fully in the economy, access healthcare, and receive education, thereby breaking cycles of poverty and fostering inclusive development. This interconnectedness drives progress across multiple Sustainable Development Goals (SDGs), creating a more equitable and prosperous society where recognizing and promoting the rights and contributions of women and girls is integral on this matter.

Studies on the SDGs have been widely published by scholars of various disciplines to discuss gender equality. From a health viewpoint, Gupta et al. have stated that the SDGs agenda must embrace gender equality to improve health outcomes.³ Meanwhile, those emphasizing economic issues, like Rai et al., believe that the SDG focus on decent work and economic growth must also account for the cost and value of social reproduction that ensures social structure continuity.⁴ Another researcher, Meuleman, highlighted the importance and role of public administration and governance.⁵ Koehler also pointed out that the SDGs are not an ambitious initiative and proposed other frameworks to address gender equality and sustainable development issues.⁶ There have been limited studies on how the agenda for gender equality in sustainable development can be optimized through environmental regulations and policies. This research intends

1 David G Hole et al, "Make nature's role visible to achieve the SDGs" (2022) 5 *Glob Sustain*.

2 Paula Hepp, Claire Somerville & Bettina Borisch, "Accelerating the United Nation's 2030 Global Agenda: Why Prioritization of the Gender Goal is Essential" (2019) 10:4 *Glob Policy* 677-685.

3 Geeta Rao Gupta et al, "Gender equality and gender norms: framing the opportunities for health" (2023) *Lancet Comm Peac Soc Health Equity Gend Equal*.

4 Anuradha Rai, "Land Rights of Women in India: How Much Has Changed After 2005" in *Sustain Sci Asia Afr* (Springer, 2023).

5 Louis Meuleman, "Public Administration and Governance for the SDGs: Navigating between Change and Stability" (2021) 13:11 *Sustainability* 5914.

6 Gabriele Koehler, "Tapping the Sustainable Development Goals for progressive gender equity and equality policy?" (2016) 24 *Gend Dev* 1-16.

to bring this discussion to the table. The objectives of this study are to elucidate the existing condition of gender equality implementation in SDGs and the possible effort to improve this via international environmental regulations.

Recognizing that gender equality is fundamental to achieving all SDGs, considerations of gender must extend across various goals to ensure that development efforts uplift all members of society.⁷ Proper regulation in international and national environmental law may assist the implementation of gender equality to support SDGs. Moreover, international environmental law emphasizes inclusive decision-making and gender-responsive approaches. By proxy, this fosters equitable participation and addresses the different impacts of environmental challenges on women and men.⁸ In fact, the post-modern era's development of international environmental law perceived that collaborative work (including gender equality) plays a fundamental role in protecting the world.

The SDGs, international environmental law, and gender equality are deeply interconnected in shaping global development and sustainability. International environmental law provides the legal framework to address pressing environmental issues such as climate change⁹, biodiversity loss¹⁰, and pollution¹¹, all of which are explicitly targeted in various SDGs. These legal agreements, including the Paris Agreement and the Convention on Biological Diversity, transform global environmental goals into actionable and legally binding commitments. Simultaneously, the SDGs, particularly SDG 5 on gender equality, highlight the pivotal role of gender equity in sustainable development (Miotto et al., 2019). The synergy between these pillars underpins a holistic approach to global challenges, promoting both sustainable development and gender equality as indispensable components of a more just and sustainable world.

International environmental regulation presents a substantial opportunity to bolster the realization of SDGs, offering a structured and collaborative framework for addressing global environmental concerns.¹² This potential lies in the facilitation of global coordination through the establishment of common standards and goals. Moreover, these regulations encourage integrated approaches to sustainability, aligning with the

7 Markus Krajewski, Andreas Frewer & Manfred L Pirner, "Interdisciplinary Studies in Human Rights" (2020) 5 Springer Open.

8 Stellina Jolly & KSRoshan Menon, "Climate Change, Disasters and Gender Resilience: A Legal Analysis from India" (2019) 62:4 J Indian Law Inst 420-438.

9 Cinnamon P Carlame & Jd Colavecchio, "Balancing Equity and Effectiveness: The Paris Agreement & The Future of International Climate Change Law" (2019) 27 Environ Law J.

10 Niak Sian Koh, Claudia Ituarte-Lima & Thomas Hahn, "Mind the Compliance Gap: How Insights from International Human Rights Mechanisms Can Help to Implement the Convention on Biological Diversity" (2022) 11:1 Transnatl Environ Law 39-67.

11 Eva Romée Van Der Marel, "Trading Plastic Waste in a Global Economy: Soundly Regulated by the Basel Convention?" (2022) 34:3 J Environ Law 477-497.

12 Riccardo Pavoni & Dario Piselli, "The Sustainable Development Goals and International Environmental Law: Normative Value and Challenges for Implementation" (2016) 13:26 Veredas Direito Direito Ambient E Desenvolv Sustentável 13-60.

SDG principle of simultaneously addressing environmental, social, and economic dimensions of development.¹³ However, this potential is accompanied by significant challenges. The enforcement and compliance of international environmental regulations are paramount; weaknesses in these areas can undermine their effectiveness and impede progress toward SDGs.¹⁴ Divergent national interests present another challenge, as countries often prioritize varied economic, social, and environmental goals. Achieving a delicate balance that addresses common interests is a complex task. Additionally, the lack of universal participation in international agreements can limit their global impact. Adaptability to local contexts is thus crucial for successful implementation, and failure to consider this may hinder progress.

With the release of the 2023 United Nations Sustainable Development Goals Report (Special Edition)¹⁵, an illustration is provided on how SDGs are progressing towards their 2030 targets. The general picture, especially in Goal 5 on Gender Equality, shows slow progression. Given the role of the world's commitments to establish international orders (including international environmental law and how they should be implemented at the local level), the lack of achievement raises questions. The first question is to what extent international environmental law supports the SDGs, especially on gender issues. A second inquiry asks whether international regulations can be fully implemented in local institutions or not. These two elements are crucial and thus become the central discussion of this paper.

This study employs both normative and empirical juridical research to understand how gender equality is currently implemented and regulated in SDGs. The initial stage to pursue this is by examining the 2023 United Nations Sustainable Development Goals Report. Here, the secondary research data used comes from reports that evaluate the progress made toward the Sustainable Development Goals, particularly in the area of gender equality. Reports which especially focus on environmental and human rights issues are the sources of data. Included are figures of women's representation in lower and single chambers of national parliaments and decision-making around the world. To understand women's access to justice in environmental matters, it is crucial to consider data on agricultural ownership, secure tenure rights over agricultural land, and women's access to fair legal protection. Where applicable, these will be compared to the SDGs' 2030 targets. The availability of international agendas, particularly international environmental law in advancing SDGs, will then be highlighted. The section then discusses international legally binding frameworks established from the 1992 Rio de Janeiro Earth Summit in Brazil through the 2015 Paris Agreement on Climate Change.

13 Rakhyun E Kim, "The Nexus between International Law and the Sustainable Development Goals" (2016) 25:1 *Rev Eur Community Int Environ Law* 15-26.

14 Emmanuella Doussis & John Kenneth Galbraith, "Does International Environmental Law Matter in Sustainable Development?" in "Gaps" *Int Environ Law Epoch Anthr Glob Environ Pact Rescue* (2019).

15 The Sustainable Development Goals Report 2023 - Special Edition, by United Nations (United Nations, 2023).

All the above data will then be analyzed qualitatively to compare missing elements of international regulations, which have thus far hindered progress toward the 2023 targets.

The second part of this study seeks to find the gap between international regulation and implementation at the local level. This study utilizes empirical research with a case study from West Sumatra Province that consists of 19 sub-governments. These sub-governments comprise cities and regencies, which are generally called 'local government.' Research is executed through surveys and interviews with these local government employees. Each local government employs four people who exercise authority for legal issues: one head of the legal department and three supervisors with different job specifications (legal drafting, legal aid, and legal dissemination). The determination of sample size of this research employs the Slovin formula where the formulation ($n=N/(1+N(e)^2)$) of sample size (n) is determined by calculating the size of population (N) and margin of error (e). In this study, the margin of error is 20% (0,2) since the population is relatively small. Of the total 76 people in charge, the sample (respondents) of this research is 20 people. Available quantitative data will be analyzed by aggregating the data from respondents both from cities and regencies to count as total respondents in the entire province. Data from this empirical research will then be confronted and compared with the objectives of international regulations to support SDGs.

II. INTERNATIONAL REGULATIONS ON SPECIFIC GENDER EQUALITY ISSUES

Concern for women's existence and rights emerged internationally after the middle of the 20th century, especially since the United Nations launched the UN Decade for Women (1976-1985) and the Convention on the Elimination of All Forms of Discrimination against Women in 1979.¹⁶ Gender equality, where every gender is provided with the same resources and opportunities, is a crucial concept to promote sustainable development.¹⁷ This has been cited and backed in many recent international commitments, particularly in environmental regulations, to support the success of SDGs.¹⁸ Gender equality is not the same and often leads to misperception of 'gender equity'.¹⁹ While gender equality is the desired equal outcome for every gender, gender equity refers to the process to achieve that equality, taking into account the starting point for each gender, with women usually left behind due to social and cultural standards.

16 Caren Grown, Tony Addison & Finn Tarp, "Aid for Gender Equality and Development: Lessons and Challenges" (2016) 28:3 J Int Dev 311-319.

17 Eun Mee Kim, "Gender and the Sustainable Development Goals" (2017) 17:2 Glob Soc Policy 239-244.

18 Kari Norgaard & Richard York, "Gender Equality and State Environmentalism" (2005) 19:4 Gend Soc 506-522.

19 Martha Minow, "Equality Vs. Equity" (2021) 1 Am J Law Equal 167-193.

This clarification is vital as this paper will focus on gender equality rather than gender equity.

In July 2023, the United Nations Sustainable Development Goals Report 2023 (Special Edition)²⁰ was released. The general finding of this report, especially in Goal 5 on Gender Equality, showed the slow achievement in pursuing the SDGs' 2030 targets. It discussed that, at the point of its publication, states' implementation of SDGs was inadequate. Like the SDGs, international regulations generally do not address how to achieve gender equality, lacking specific policies that states need to implement.²¹ This leaves states the choice to develop their strategies independently. For instance, *Pengarusutamaan Gender (PGU)* was used to implement gender equality in Indonesia.²² Meanwhile, in Gilgit-Baltistan, a region in Pakistan, it is well captured how leading businesses have empowered women to be independent and thus improve social and economic equality with men.²³

The lack of general policy for states to implement their agenda on SDGs can be hypothesized from the perspective of international regulations (particularly environmental law), which closely relate to gender equality issues. The 2023 UN Report has few genders equality-related data for environmental issues. The first set of crucial data from this report surrounds decision-making, followed by data on the right to agricultural land. The last set of data deals with the right to land protection and access to the judicial system. These three data sets will be analyzed and discussed through the lens of international environmental law to identify to what degree the regulations have supported the implementation of gender equality.

a. Women's Decision-Making

With women constituting nearly half the global population, their meaningful representation in decision-making is pivotal. It prevents the disregard for a significant portion of society, fostering a more equitable and inclusive decision-making landscape. In the context of policy formulation, women's participation is key to crafting gender-sensitive policies. Such policies are indispensable for addressing gender disparities, which encompasses areas such as education, healthcare, environmental concerns, and economic opportunities. Furthermore, women's engagement in decision-making transcends gender equity; it serves as a potent catalyst for positive transformations across diverse sectors of society. By recognizing the significance of women's voices and actively

20 United Nations, supra note 15.

21 Shahra Razavi, "The 2030 Agenda: challenges of implementation to attain gender equality and women's rights" (2016) 24:1 Gend Dev 25-41.

22 Mia Siscawati et al, "Gender Equality and Women Empowerment in The National Development of Indonesia" (2020) J Strateg Glob Stud.

23 Humera Dinar, "Women-Led Businesses: An Ethnographic Study of Gendered Entrepreneurship in Gilgit-Baltistan, Pakistan" (2020) 15:3 J South Asian Dev 398-414.

promoting their participation in decision-making, society can collectively forge a more just, equitable, and prosperous world for all.

Globally, there are now 26.5% more women in lower and single houses of national parliaments than in 2015. While this is a marginal 4.2% increase since that year, it indicates an average annual rise of only 0.5%.²⁴ Women held 35.5% of the seats in local governments at the local level in 2023, up from 33.9% in 2020.²⁵ The report assumed it would take more than four decades to close the gender gap in parliamentary representation at the national level, with a target of around 40%.²⁶ Meanwhile, three decades will be needed to do so at the local level if current trends continue, with a target of around 40-60%.²⁷ This report concluded that government-mandated gender quotas have been found to be successful, at least quantitatively. In the parliamentary elections of 2022, women were represented by an average of 30.9% of candidates in quota-applicable countries, compared to 21.2% in non-applicable nations.²⁸ This gender quota policy seemed to show a promising trend despite its mixed motives.²⁹ On the other hand, the worldwide application has shown some considerable problems, such as a lack of women's awareness in Malaysia³⁰, insufficient coordination and strategy to promote women's agenda in Mexico³¹, lack of decision making input from women activist and academics in India³², and insufficient efforts from political parties to educate and train women in Indonesia.³³

Women's involvement in decision-making is essential when the concept of intersectionality is considered. This concept is helpful in understanding how different aspects of a person's social and political identities combine to create unique modes of discrimination and privilege despite relations and patterns that occur within this intersectionality unconsciously created.³⁴ Regarding human rights and the environment, women's inclusion in decision-making brings diverse and holistic perspectives to the forefront, considering the intersectionality of gender, race, ethnicity, and socioeconomic

24 United Nations, *supra* note 15.

25 *Ibid.*

26 United Nations, Technical Note-SDG 5 Global, Regional and Country Assessments. (2022).

27 *Ibid.*

28 United Nations, *supra* note 15.

29 Drude Dahlerup, "Gender Quotas - Controversial But Trendy" (2008) 10:3 *Int Fem J Polit* 322-328.

30 Sharifah Syahirah, "A Gender Quota Policy Implementation and Women Empowerment in The Malaysian Public Sector" (2016) 2:1 *Aust J Sustain Bus Soc* Vol 2 No 1 March 2016 59-68.

31 Pär Zetterberg, "The Downside of Gender Quotas? Institutional Constraints on Women in Mexican State Legislatures" (2008) 61:3 *Parliam Aff* 442-460.

32 Mona Lena Krook & Medha Naniwadekar, "Gender Quotas II Are Quotas a Good Idea? The Indian Experience with Reserved Seats for Women" (2006) 2:1 *Polit Gend* 101-128.

33 Ben Hillman, "The Limits of Gender Quotas: Women's Parliamentary Representation in Indonesia" (2018) 48:2 *J Contemp Asia* 322-338.

34 Mahzarin R Banaji & Anthony G Greenwald, *Blindspot: Hidden biases of good people*, *Blindspot: Hidden biases of good people* (New York: Bantam, 2013); Kimberle Crenshaw, "Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color" (1991) 43:6 *Stanford Law Rev* 1241-1299.

factors. These multifaceted viewpoints lead to more nuanced solutions to complex issues, ensuring that policies address the diverse needs of societies. Additionally, the inclusion of women is pivotal to addressing gender-based violence and discrimination, which are often intertwined with human rights and environmental challenges.³⁵ By actively engaging women in decision-making, systemic gender inequalities can be identified and rectified, leading to policies that protect women's rights and safety.

The first international regulation looking at this issue in this paper can be seen in the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW). In its article 3, the convention stated:

“States Parties shall take in all fields, in particular in the political, social, economic and cultural fields, all appropriate measures, including legislation, to ensure the full development and advancement of women, for the purpose of guaranteeing them the exercise and enjoyment of human rights and fundamental freedoms on a basis of equality with men.”

This article provides a general foundation on how prohibitions against discriminating against women must, as a primary concern of gender equality, be elaborated and implemented at the national level. Parties to this convention must ensure that their national and local legislation is aligned with the desired non-discrimination principle against women. This goal does not emerge without challenges, especially in countries where discrimination has a deeply ridden history due to social and cultural factors. For example, India has a caste system, a traditional social hierarchy that divides people into rigid, hereditary groups based on their occupation and social status, which divides their people into four main categories, known as "*varnas*," and a fifth group outside the varna system.³⁶ This traditional 'caste' system proves as a primary stumbling block, despite their commitment and efforts to implement CEDAW regulations. Women from lower castes still receive different treatment in social, justice, and political realms, including in decision-making. Indonesia, as another party to CEDAW, exhibits another problem. According to Beauregard & Sheppard, though the gender quota for women in parliament has been successfully fulfilled, the weight of their voices in practice is not considered equal to men.³⁷ There is a gender equity problem where women's education in general and in politics is lacking compared with men. Chatun noted that political parties aim to fill the quota quantitatively without seriously considering the

35 Susan Buckingham, "Gender and Climate Change: Impacts, Science, Policy" (2016) 24:1 Gend Dev 151-152; Elisabeth Rehn & Ellen Johnson-Sirleaf, *Women, War Peace: The Independent Experts' Assessment on the Impact of Armed Conflict on Women and Women's Role in Peace Building* (UNIFEM, 2002).

36 Manali Deshpande & Harold Kerbo, "History of the Indian Caste System and its Impact on India Today" (2010) Soc Sci.

37 Katrine Beauregard & Jill Sheppard, "Antiwomen But Proquota: Disaggregating Sexism and Support for Gender Quota Policies" (2021) 42:2 Polit Psychol 219-237.

quality of women's representation.³⁸ Meanwhile, cultural and traditional values also contribute to gender inequality in society. An example of this is visible in West Sumatra's Minangkabau tribe, where the decision-making power for land heritage is still appointed to men.³⁹

Empowerment and representation are equally critical aspects of women's involvement.⁴⁰ Their active participation not only empowers them but also signifies their equal standing in society. This demonstration of agency sends a powerful message that women have the capacity to shape policies impacting their lives, enhancing their status and influence. This matter was acknowledged in The United Nations Conference on Environment and Development (UNCED), otherwise known as Earth Summit Rio 1992 (hereinafter "Rio 1992"). Principle 10 of the summit recognized the importance for all concerned citizens, including women, to participate in environmental issues. Furthermore, women's indispensable role in sustainable resource management and environmental stewardship cannot be overstated. In many communities (especially rural and indigenous ones), as found by Figueiredo & Perkins, women possess invaluable knowledge of ecosystems derived from their duty in collecting and managing available natural resources. Those are pivotal in sustainability efforts that combat climate change.⁴¹ By including women in decision-making, this expertise can be harnessed to address pressing environmental challenges effectively. Principle 20 of Rio 1992 declared that women can play a vital role in the management and development of environmental issues. In turn, they are essential to achieve sustainability in our development. Subsequently, other international agendas, like the 1995 Women's Summit in Beijing and the 2002 Sustainable Development Summit in Johannesburg, have followed with the same assertion.⁴²

As climate change continues to pose a global threat, women bear a disproportionate burden—especially those in vulnerable communities. Environmental degradation can have adverse effects on women's health, and their participation can ensure policies that safeguard their access to healthcare and reproductive rights. A study surrounding the 2020 COVID-19 lockdown by Dhenge et al. shows an intriguing result.⁴³ In an online

38 Sri Chatun, "The Elusive 30%: Analyzing the Barriers to Female Representation in the Indonesian Parliament for East Nusa Tenggara (NTT)" (2023) *KnE Soc Sci* 675-687.

39 Irawati Irawati et al, "The Customary Law of the Communal Property and Sustainability in Coping with the Economic Impact of Covid-19 in Minangkabau Indigenous Peoples, Indonesia" (2024) *12:1 J Law Sustain Dev*.

40 Sudershan Kumar Pathania, "Sustainable Development Goal: Gender Equality for Women's Empowerment and Human Rights" (2017) *5:86 Int J Res* 72-82.

41 Patricia Figueiredo & Patricia E Perkins, "Women and water management in times of climate change: participatory and inclusive processes" (2013) *60 J Clean Prod* 188-194.

42 Tri Nurmega Oktarina & Anisa Yulianti, "The Role of Women in Sustainable Development and Environmental Protection: A Discourse of Ecofeminisme in Indonesia" (2022) *1:2 Indones J Environ Law Sustain Dev* 107-138.

43 S A Dhenge et al, "Gender attitude towards environmental protection: a comparative survey during COVID-19 lockdown situation" (2022) *24:12 Environ Dev Sustain* 13841-13886.

training program, this study surveyed 177 trainees to rate their attitude regarding environmental concerns. It was found that women were more conscious of environmental and health concerns compared with men. This empirical research shall boost policy and effort to include women in decision-making. However, in contrast, women frequently face disparities and discriminatory practices that deny them equal rights and protections. For example, a study conducted by Nayak and Mahanta in Assam, a state in Northeast India, found that the development process in that state is not gender-neutral.⁴⁴ As examined by them, women were not enjoying a favorable status in the decision-making process, and slight improvement took place toward this issue in the last decade. Evidence of women's discrimination practices was also found in Myanmar by Carnegie et al.⁴⁵ They highlight that women have rare access to information about improving land management as this role was assigned traditionally to men. In that regard, inclusive decision-making processes have the potential to reformulate laws and policies that promote gender equality and uphold human rights. Moreover, the active involvement of women in climate policy formulation ensures that gender-specific vulnerabilities and needs are considered and can strengthen grassroots efforts in climate resilience. Otherwise, the low participation of women⁴⁶ and their intelligence and knowledge⁴⁷ in decision-making may leave the state unmotivated to ratify gender-inclusive environmental regulations.

Involving women in decision-making aligns with the United Nations Sustainable Development Goals, where women's participation is especially relevant to Goal 5 (Gender Equality) and Goal 13 (take urgent action to combat climate change and its impacts). However, a multitude of barriers obstruct the pursuit of gender equality in national and local parliaments, hindering women's accommodation in political leadership roles. A primary barrier involves deeply ingrained gender stereotypes casting women as less capable leaders. This, in turn, negatively impacts their public image and electability.⁴⁸ Discrimination may also occur for minority women in political discourse because of party elites' preferences, making it arduous for women to secure political positions.⁴⁹ Additionally, limited access to education and training opportunities constrains

44 Mahanta Bidisha & Purusottam Nayak, Munich Personal RePEc Archive Gender Disparity and Women Empowerment in Assam Gender Disparity and Women Empowerment in Assam (2015).

45 M Carnegie et al, "Gender, decision-making and farm practice change: An action learning intervention in Myanmar" (2020) 78 *J Rural Stud* 503-515.

46 Norgaard & York, *supra* note 18.

47 Anastassia Obydenkova & Rauf Salahodjaev, "Intelligence, democracy, and international environmental commitment" (2016) 147:1 *Environ Res* 82-88.

48 Ana M Castaño, Yolanda Fontanil & Antonio Garcia-Izquierdo, "Why Can't I Become a Manager?'- A Systematic Review of Gender Stereotypes and Organizational Discrimination" (2019) 16:10 *Int J Environ Res Public Health*.

49 Anne Jenichen, "Visible Minority Women in German Politics: Between Discrimination and Targeted Recruitment" (2020) 29:4 *Ger Polit* 545-563.

women's ability to acquire the essential skills and knowledge required for political leadership, perpetuating a lack of qualified female candidates.⁵⁰

Economic disparities also play a pivotal role as a significant deterrent for women. The high costs of political campaigns disadvantage women, who often have less access to financial resources than men, particularly in contexts with limited financial independence and access to funding.⁵¹ Societal expectations around women's caregiving roles create additional challenges, as family responsibilities (including childcare and eldercare) may clash with the demands of a political career.⁵² Further barriers to women's political participation include a lack of support networks, inadequate representation within political parties, and the design of electoral systems that may favor incumbents.⁵³ Legal support for gender equality in politics is also essential, with gender quotas and reserved seats being effective mechanisms to serve as temporary measures to accelerate progress towards gender parity in political representation.⁵⁴ Gender quotas manifest the intent of states to implement global agreements supporting gender inclusion in decision-making sectors. However, a primary issue with this is that international environmental law cannot directly address deeply ingrained cultural and societal barriers that hinder women's participation, such as gender stereotypes and discrimination.⁵⁵ While international environmental law can indirectly contribute to promoting gender equality through its broader goals of sustainable development and inclusive governance, it requires broader societal and policy interventions at national and local levels in the implementation.

Despite being explicitly acknowledged in Principles 10 and 20 of Rio 1992, subsequent legally binding international agreements remained silent on the direct provisions to require states to be obliged to take concrete responsibility in women's decision-making role (including United Nations Framework Convention on Climate Change [UNFCCC] and Convention on Biological Diversity [CBD]). Nevertheless, CBD recognized the vital role of women in its preamble, as well as the need for women's full participation in policymaking. This aligns with the guideline provided in Agenda 21 of Rio 1992, where "ensuring the full participation of women" is stated to be needed (Paragraph 12.56).

Meanwhile, the 2015 Paris Agreement does not incorporate verbiage about women's participation in policymaking despite being the current leading international

50 Kien Le & My Nguyen, "How Education Empowers Women in Developing Countries" (2020) *BE J Econ Anal Policy*.

51 Women And Elections. United Nations, by United Nations (United Nations, 2005).

52 Beniamino Cislighi & Lori Heise, "Gender norms and social norms: differences, similarities and why they matter in prevention science" (2020) *42:2 Sociol Health Illn* 407-422; Jacqueline Lau et al, "Gender equality in climate policy and practice hindered by assumptions" (2021) *11:3 Nat Clim Change* 186-192.

53 Vivien Lowndes, "How Are Political Institutions Gendered?" (2020) *68:3 Polit Stud* 543-564.

54 Juan Fernandez & Celia Valiente, "Gender quotas and public demand for increasing women's representation in politics: an analysis of 28 European countries" (2021) *13:3 Eur Polit Sci Rev* 1-20.

55 Gregg Sparkman, Lauren Howe & Greg Walton, "How social norms are often a barrier to addressing climate change but can be part of the solution" (2021) *5:4 Behav Public Policy* 528-555.

agreement on combating climate change. Nonetheless, the agreement mentioned the concept of “gender-responsive” in several of its articles, such as Article 7 (5) and Article 11 (2). In these, the term is claimed as a strategy for mitigation and adaptation toward climate change.⁵⁶ While the Paris Agreement does not provide greater clarity and concrete application on “gender-responsive” as a term, the treaty itself improves upon this matter compared to its predecessors (the UNFCCC and Kyoto Protocol), which were silent on this issue. The Paris Agreement is also notable as the first international environmental treaty that acknowledges the “obligation on human rights,” as shown in its preamble.⁵⁷

Previous international regulations primarily present the concept of gender equity in decision-making recommendations and encouragement. This is done by employing verbiage such as “should,” “shall,” or “recognizing,” which acts as a slim incentive for implementation. However, the United Nations Convention to Combat Desertification (UNCCD) provides legal recognition for and concretely applies the importance of women's decision-making.⁵⁸ In its preamble, the convention recognizes the important role of women and requires full participation from all genders to combat desertification and mitigate the effects of drought. Additionally, the convention encourages the implementation of women's decision-making as an obligation, as stated in Article 5 (d). Furthermore, this obligation is incorporated in the National Action Programmes, as mandated by the convention in Article 10.2 (f) and Annex I Article 8.2 (c).

Despite the fact that UNCCD regulations have far greater legally enforceable language, it does not provide any sanction for states if they fail to comply. Indeed, the provision of direct sanctions in international environmental regulations is a difficult expectation due to the nature of states' relations to international law.⁵⁹ According to Guzman, states tend to accept and obey sanctions only if the dispute is agreed to be settled in their chosen court or arbitration.⁶⁰ He argued that states are rational actors that make decisions based on cost-benefit analyses. Compliance with international law is seen as a strategic decision where states weigh the potential benefits against the costs. Therefore, with international environmental law regulations being designed as a common commitment to tackle environmental concerns, states were reluctant to provide more details, particularly sanctions, when such obligations failed to comply.

56 Charlotte Kabaseke, “Gender responsive climate financing as a strategy to climate change mitigation and adaptation: a legal analysis” (2023) 2:2 *Kabale Univ Interdiscip Res J KURJ* 77–88.

57 Annalisa Savaresi & Joanne Scott, “Implementing the Paris Agreement: Lessons from the Global Human Rights Regime” (2019) 9:3 *Clim Law* 159–164.

58 Charlotte Kabaseke, “Legal Recognition of Women’s Role in Combating Desertification in Africa: The Case for Uganda” in *Clim Change Manag* (Springer, 2020).

59 Anu Bradford & Omri Ben-Shahar, “Efficient Enforcement in International Law” (2012) 12:2 *Chic J Int Law*.

60 Andrew Guzman, “International Law: A Compliance Based Theory” (2002) 90:6 *Calif Law Rev*.

b. Ownership and Tenure Right of Agricultural Land

It is imperative that women working in agricultural production can gain ownership and secure tenure rights to agricultural land. These rights are instrumental in empowering women, offering them the economic autonomy and decision-making power they need within households and communities. By providing women with a stake in land, these rights enhance their status and self-confidence, enabling them to assert themselves in various aspects of life, such as economic decision-making, community leadership, and educational pursuits. The impact extends beyond individual empowerment. It plays a pivotal role in poverty reduction by granting women opportunities to engage in agriculture, generate income, and improve their livelihoods.⁶¹ This not only benefits their families but also contributes to overall economic development. Additionally, secure land tenure for women enhances food security, as women are key contributors to agricultural production worldwide.⁶² This is seen as women often reinvest their income from farming into their communities, leading to improved infrastructure, healthcare, and education in rural areas.⁶³ Moreover, gender equality is significantly advanced through these rights, challenging entrenched norms and stereotypes that have historically limited women's rights and opportunities.⁶⁴

Secure land tenure encourages environmental sustainability. Granting women ownership and secure tenure rights over agricultural land is not only equitable but also strategically sound by promoting food security, poverty reduction, rural development, gender equality, and sustainable agriculture.⁶⁵ It empowers women to enhance agricultural productivity, adopt sustainable practices, and access financial resources. This leads to improved nutrition, economic growth, and better health and education outcomes for families. Additionally, it strengthens community resilience by fostering inclusive governance and environmental stewardship, contributing to overall societal stability and prosperity. However, women's land ownership remains an unresolved issue. In India, for example, a pre-existing social, cultural, and patriarchal paradigm has hindered work to promote equitable land ownership despite government efforts to implement women-friendly policies.⁶⁶ Another example of land ownership inequality also occurs in Madura,

61 Uwacu Alban Singirankabo & Maurits Willem Ertsen, "Relations between Land Tenure Security and Agricultural Productivity: Exploring the Effect of Land Registration" (2020) 9:5 Land 1-18.

62 Deborah Espinosa, "Secure Land Tenure: Food Security Depends on It" (2019) 3 Gates Open Res.

63 Evelyn Namubiru-Mwaura, "Land Tenure and Gender : Approaches and Challenges for Strengthening Rural Women's Land Rights" (2014) 6 Women's Voice Agency Particip Res Ser (Women's Voice, Agency, & Participation Research Series) .

64 Nancy Kankam Kusi et al, "Discourse on women and land tenure in Ghana: does a matrilineal land tenure system make a difference for women?" (2021) Land Gov Gend Tenure-Gend Nexus Land Manag Land Policy 129-142 CABI International.

65 Cheryl Doss & Ruth Meinzen-Dick, "Land tenure security for women: A conceptual framework" (2020) 99 Land Use Policy.

66 Charu Jain, "Women's land ownership in India: Evidence from digital land records" (2023) 133 Land Use Policy 106835.

Indonesia, where men are more likely to obtain land ownership.⁶⁷ A part of cultural, societal, and structural barriers, legal barriers often discriminate against women's land rights, with inheritance laws and property regulations often favouring men.⁶⁸ In some countries that adhere to Islamic law (such as Saudi Arabia, Iran, and Pakistan), inheritance laws have been criticized for discriminating against women in terms of land ownership. These laws are based on interpretations of Islamic Sharia principles and typically grant women a smaller share of inheritance compared to men.⁶⁹ Meanwhile, in some South Asian countries (such as India, Pakistan, and Bangladesh), land tenure laws have historically discriminated against women's land ownership rights. For instance, the Hindu Succession Act of 1956 (amended in 2005) governed inheritance rights for Hindus, Sikhs, Jains, and Buddhists but initially limited women's inheritance rights.⁷⁰ While amendments have been made to improve women's rights under this law, discriminatory practices still exist in certain regions or communities.⁷¹

The 2023 UN Report showed that many women and men working in agricultural production lack ownership or secure tenure rights over agricultural land. According to its 2009-2020 statistics on 46 countries, less than 50% of women and men own land or have secure rights in a third of these nations. At the same time, in almost half of these nations, men hold at least twice as many ownership positions as women.⁷²

The lesser figure on women's ability to secure rights over agricultural land is in line with state reluctance to materialize these rights concretely. There is no single international framework that deals with this concern, especially since Rio 1992 marked global attention to the interconnectedness of economic development and environmental protection. International agreements remained less motivated to find a solution on this matter, as demonstrated by abstract wording on gender equality and land management regulations. In Agenda 21 of Rio 1992, paragraph 12.24 only states that governments must establish a mechanism for land users, especially women, to be the main actors in land use management. Similarly, paragraph 12.37 of Agenda 21 only urges the government to implement land management policies by involving women with the support of relevant international and regional organizations. There were no subsequent articles in the agenda to describe or regulate how this implementation should be executed.

67 Umi Supraptiningsih et al, "Inequality as a cultural construction: Women's access to land rights in Madurese society" (2023) 9:1 Cogent Soc Sci.

68 Anselm Hager & Hanno Hilbig, "Do Inheritance Customs Affect Political and Social Inequality?" (2019) 63:4 Am J Polit Sci 758-773.

69 Syabbul Bachri, "The Differences of Men's and Women's Shares in Islamic Inheritance Law Defense to Criticism and Blasphemy" (2022) 22:1 Nurani J Kaji Syariah Dan Masy 17-30.

70 Klaus Deininger, Aparajita Goyal & Hari Nagarajan, "Inheritance Law Reform and Women's Access to Capital: Evidence from India's Hindu Succession Act" (2010) World Bank Policy Res Work Pap No 5338.

71 Sarita Kumari, "Women Inheritance Rights In India: Some Reflections" (2019) 6:1 IntJ Res Anal Rev; Rai, supra note 4.

72 United Nations, supra note 15.

The regulation of land ownership primarily occurs at the national level rather than through international law, largely due to the principle of sovereignty. This principle grants each nation the authority to govern its territory independently, without external interference.⁷³ National governments enact laws and regulations concerning land ownership tailored to their specific legal systems, cultural contexts, and historical backgrounds. The diversity of legal frameworks worldwide, alongside the deeply ingrained cultural and historical significance of land ownership, makes it challenging for international law to effectively regulate this complex issue.⁷⁴ Moreover, enforcing international regulations on land ownership would generate difficulties, considering the variance between nations' enforcement capacities and the practical challenges of monitoring cross-national land ownership. Additionally, nations may be hesitant to relinquish control over matters as fundamental as land ownership to international bodies, as it could be seen as an encroachment on their sovereignty and national interests. While there are international agreements addressing broader issues that indirectly impact land ownership (such as environmental protection and indigenous rights), the specifics of land ownership regulations largely remain within the purview of national governments.⁷⁵

With the lack of support from international environmental law, the barriers hindering women from attaining ownership and secure tenure rights over agricultural land have critical implications for the environment. One foremost challenge lies in the promotion of equality in land management. In such circumstances, the incentive for long-term and environmentally responsible farming practices can diminish, potentially leading to land degradation, deforestation, and overuse of natural resources. These are all incongruent with the principles of sustainable land management upheld in international environmental law. Additionally, insecure land tenure can generate disincentives for environmental conservation, as women may lack the motivation to protect and preserve natural resources on the land they use. This may potentially result in habitat destruction, soil erosion, and a decline in biodiversity.⁷⁶ Moreover, land-related conflicts, which often arise in regions with gender disparities in land tenure, can exacerbate environmental harm. This is because disputes may lead to deforestation, habitat destruction, and soil degradation.⁷⁷ Climate vulnerability, often exacerbated by gender inequalities in land

73 Seyed Masoud Noori & Soheila Louyeh, "When Environmental Obligations Collide with State Sovereignty: An International and Sharia Law Perspective" (2020) 41:1 *Consensus*.

74 Stephen Hodgson, Cormac Cullinan & Karen Campbell, *Land Ownership and Foreigners: A Comparative Analysis of Regulatory Approaches to the Acquisition and Use of Land by Foreigners* (FAO Legal Papers Online, 1999).

75 Lorenzo Cotula, "Securing Land Rights in Africa - Trends in National and International Law" in Jan Michiel Otto & André Hoekema, eds, *Fair Land Gov Leg Land Rights Rural Dev* (Leiden University Press, 2012); Lorenzo Cotula, "Land, Property and Sovereignty in International Law" (2016) *J Int'l Comp L*.

76 Beatrice Ekesa et al, "Relationships between Land Tenure Insecurity, Agrobiodiversity, and Dietary Diversity of Women of Reproductive age: Evidence from Acholi and Teso subregions of Uganda" (2020) 16 *Matern Child Nutr*.

77 Michael Levien, "Gender and Dispossession: A Comparative Analysis" (2017) 44:6 *J Peasant Stud* 1111-1134.

tenure, can furthermore directly affect agricultural productivity and land use sustainability.⁷⁸

c. Legal Protection and Access to Justice

Protection for women's land rights is essential for advancing gender equality, promoting economic empowerment, ensuring food security, fostering rural development, and contributing to environmental sustainability. Recognizing and safeguarding these rights not only empowers women but also leads to more equitable and sustainable societies, driving progress toward a just and inclusive future.⁷⁹ Legal protection promotes gender equality by rectifying deeply entrenched discriminatory practices and laws that have historically denied women the right to own, inherit, or control land.⁸⁰ By granting women legal rights to land, societies challenge traditional gender norms and stereotypes and dismantle barriers that perpetuate gender disparities.

Women's land rights are also directly linked to their economic empowerment. Land ownership or secure tenure allows women to engage in agricultural activities, generate income, and improve their livelihoods.⁸¹ This economic autonomy not only benefits women individually but also has a ripple effect on their families and communities, contributing to overall economic development. Legal protection for women's land rights also plays a pivotal role in ensuring food security.⁸² Women are key contributors to global food production, and their access to and control over land are crucial in enhancing food production and availability. Secure land tenure empowers women to invest in sustainable farming practices, contributing to increased agricultural productivity and food security.

Additionally, legal protection for women's land rights is fundamental for environmental sustainability.⁸³ Women are often more inclined to adopt sustainable and environmentally friendly farming practices (Jadhav et al., 2024; Nirmala 2015). When they have secure land tenure, they are more likely to invest in long-term land stewardship and conservation, contributing to the preservation of ecosystems and natural resources.

78 Austin T Phiri et al, "A review of gender inclusivity in agriculture and natural resources management under the changing climate in sub-Saharan Africa" (2022) 8:1 Cogent Soc Sci; Jessica M Smith, Lauren Olosky & Jennifer Grosman Fernández, "The Climate-Gender-Conflict Nexus Amplifying Women's Contributions at the Grassroots", (2021), online: GIWPS.

79 Isaac Sohn Leslie, Jaclyn Wypler & Michael Mayerfeld Bell, "Relational Agriculture: Gender, Sexuality, and Sustainability in U.S. Farming" (2019) 32:8 Soc Nat Resour 853–874.

80 Helle Munk Ravnborg et al, "Land Governance, Gender Equality and Development: Past Achievements and Remaining Challenges" (2016) 28:3 J Int Dev 412–427.

81 Singirankabo & Ertsen, supra note 61.

82 Espinosa, supra note 62.

83 Hanafi Adekunle, "Legal Protection on Women's Property Rights as Panacea to Poverty Reduction and Environmental Sustainability in Uganda" (2022) 4:1 GLS Law J 5–21.

Although the concept of women's land rights is critical, as described above, unfavorable conditions were depicted in United Nations data. The 2023 report showed that nearly 60% of the 71 reporting nations lack any legal protection for women's land rights or only provide minimal protection.⁸⁴ In all regions, however, there are instances of laws and policies that positively support women's land rights, notably in the areas of marital property and inheritance. Furthermore, women's land rights are specifically protected in 51% of the 41 nations that have legislation acknowledging customary law or customary land tenure.

These findings suggest that countries are making efforts to address gender disparities in land rights, possibly reflecting cultural and political differences. The mention of protection in countries that recognize customary law or customary land tenure is significant.⁸⁵ Customary law is often rooted in traditional practices and cultural norms. The fact that women's land rights are acknowledged and safeguarded in some of these contexts indicates the possibility of cultural shifts and legal reforms occurring in these nations to rectify gender inequalities. The findings also underscore the urgent need for legal reform in many countries to provide more comprehensive and robust protections for women's land rights. In places where laws and policies are lacking, there is a clear need for advocacy, legislative changes, and awareness campaigns—to rectify this imbalance and promote gender equality in land ownership and control.

Numerous barriers hinder the effective protection of women's land rights, perpetuating gender disparities and undermining broader social and economic development goals. Firstly, deep-rooted cultural and customary norms often prioritize male land ownership, relegating women to secondary roles in land-related matters.⁸⁶ These entrenched beliefs can create resistance to legal reforms aimed at rectifying gender inequalities in land tenure systems. Secondly, legal barriers persist in many regions, where discriminatory land laws and inheritance practices favor male heirs, limiting women's ability to assert their land rights.⁸⁷ Even when legal frameworks exist to protect women's land rights, weak enforcement mechanisms, inadequate legal representation, and lack of awareness often hinder women from accessing these protections. Lastly, gender-based violence and intimidation often prevent women from claiming land rights.⁸⁸ In patriarchal societies, women who assert their rights may face threats, harassment, or physical violence, discouraging them from pursuing legal remedies.

84 United Nations, *supra* note 15.

85 Maty Konte & Nyasha Tirivayi, eds, *Women and Sustainable Human Development: Empowering Women in Africa, Gender, Development and Social Change* (Springer International Publishing, 2020).

86 Patricia Kameri-Mbote, "The Land Has Its Owners! Gender Issues in Land Tenure under Customary Law in Kenya" (2005) UNDP-Int Land Coalit Workshop Land Rights Afr Dev.

87 Hager & Hilbig, *supra* note 68.

88 Mamo Hebo & Getaneh Mahari, "Land Tenure Reforms and Women's Land Rights in Plural 'Legal' and Cultural Settings: A Comparative Study of the Arsii Oromo and Dorze-Gamo, Ethiopia" (2022) 44:1 *Ethiop J Dev Res* 39-76.

Addressing these barriers requires a multifaceted approach involving legal reforms, awareness campaigns, capacity building, and efforts to challenge discriminatory cultural norms. Protecting women's land rights and gender equality in land tenure systems necessitates strengthened legal frameworks, access to justice, legal support for women, and gender-responsive governance. Women's land rights are not isolated; they intersect with broader issues of gender equality and social justice. Lack of land rights can have far-reaching implications for women's economic independence, security, and overall well-being.⁸⁹

International agendas such as the Sustainable Development Goals highlight the need for gender-responsive land tenure systems, as well as integrated gender considerations into environmental policies. This recognition fosters an environment where gender-sensitive approaches to land rights are encouraged, promoting women's access to and control over land as a means of ensuring environmental sustainability. These actions can be supported by international environmental law; however, international environmental law often falls short in terms of enforcement and implementation.⁹⁰ While it may endorse gender-responsive principles, it lacks robust mechanisms to ensure compliance at the national level. In Agenda 21 of Rio 1992 (Paragraph. 12.28), gender equity was acknowledged within land rights to be adhered to by the states. The provision suggests governments consider the protection of women's property rights when developing mechanisms to handle environmental issues. In addition, Paragraph 14.14 of Agenda 21 also encourages governments to provide a legal framework to promote women's access to land. These two provisions showcase Rio 1992's expectation of women's protection and access to land. However, countries struggle to translate these guidelines into concrete actions, leading to a gap between international commitments and domestic practices.⁹¹ There are no subsequent articles in Agenda 21 dedicated to explaining or regulating justice or protections for women's land rights. Similarly, binding international agreements that emerged after Rio 1992 also failed to translate guidelines into hard law. Well-known regulations of this category include CBD, UNFCCC, Kyoto Protocol, and the Paris Agreement, all of which do not address women's land rights as a concern. Meanwhile, though the UNCCD's primary concern is about land, concrete regulations only include how to avoid land degradation.

When the authors criticize the shortcomings of international environmental laws in providing gender equality-specific provisions, this paper recognizes the limitations of international law in regulating state conduct.⁹² We understand that these may intersect with a country's sovereignty in implementing regulations at the domestic level (Besson,

89 Julia Behrman, Ruth Meinzen-Dick & Agnes Quisumbing, "The gender implications of large-scale land deals" (2011) 39:1 *J Peasant Stud* 49-79.

90 Daniel A Farber, ed, "The Implementation Gap in Environmental Law" (2016) 16 *J Korean Law*.

91 Gregory L Rose, "Gaps in the Implementation of Environmental Law at the National, Regional and Global Level" in *World Congr Justice Gov Law Environ Sustain* (2011).

92 Jana Von Stein, *Compliance with International Law* (Oxford Research Encyclopedia of International Studies, 2010).

2011). However, various provisions can be provided in more comprehensive detail, depending on what can be included in the agreement. Possible details include specific targets, mechanisms, time frames, and institutions a country must have when implementing the rules of international laws to which they agree. Authors identify positive examples of such applications in the Paris Agreement regarding its targets (Article 2) and mechanisms (Article 15), the UNCCD provisions on action programmes (Articles 9-11), and supporting measures (Article 19-21). These examples should also be applied in matters directly related to gender issues: decision-making, land ownership, legal protection, and access to justice.

When the implementation of international law entirely relies on the policy of each country, implementation will not be uniform and thus difficult to monitor.⁹³ Gender equality issues in international environmental law must thereby be regulated in detail, with space left for state sovereignty in the implementation process. Several key provisions must be attached and made via consensus. These include targets, mechanisms, time frames, and implementing institutions. Further technical implementation will then need to be adjusted to every country's specific legal system and public policies as part of its sovereignty in domestic affairs. This power can be exercised when considering that international law may regulate matters of state affairs as long as it does not impose upon technical or procedural matters.⁹⁴

We also understand the problem in regard to this method. Bias may occur when an agreement stresses gender issues alongside core objectives like climate change, biodiversity, and desertification. With this method, there might also be deviations in each of the international agreements with regard to gender equality provisions. They may vary in levels of detail or rigidity, raising uniformity as a considerable challenge. Another method is possible when gathering all gender-related issues in one central international agreement: integrating the provisions into an existing agreement such as CEDAW or establishing a new international agreement whose main objective is gender equality. Both are possible, albeit not without shortcomings. One international agreement dedicated to regulating this issue may evoke real-life, non-applicable rules. Differences can occur when one main objective (like climate change) is regulated with its inherent gender-related issues (such as women's decision-making and access to agricultural land). This method provides a clear idea of how decision-making involving women can affect that agreement's main objective.

With different methods emerging alongside their benefits and drawbacks, it is almost certain that provisions on gender-related issues must be further elaborated in an agreement. The absence of this will lead to problems in state implementation—such as a

93 Malgosia Fitzmaurice, "Environmental Compliance Control" (2018) 8:2 *Wroclaw Rev Law Adm Econ* 372-394; Antonia Handler, "The New Sovereignty: Compliance with International Regulatory Agreements" (1995) 11 *Yearb Int Environ Law* 1-43.

94 Surya Oktaviandra, "Three Arguments to Support International Binding Treaty on Business and Human Rights" (2022) 13:2 *J HAM* 253.

lack of guidance, uniformity in enforcement, and ultimately progress toward implementation. When states are reluctant to provide greater certainty on the objective of an issue or unable to regulate it, legal loopholes will be left in the agreement.⁹⁵ When this loophole emerges in practice, no regulation or infringement without punishment may occur.⁹⁶ International law exemplifies this in its inability to regulate business and human rights.⁹⁷

III. LOCAL KNOWLEDGE AND IMPLEMENTATION

Previous sections of this paper have discussed the gap of hard law on international levels, particularly environmental law, to support SDGs. It also highlighted the problem of asserting concrete rules to further elaborate principal guidelines. This section will discuss the issue of implementation from the local perspective.

Implementing the Sustainable Development Goals within local institutions presents both significant possibilities and challenges. From a positive viewpoint, there is an opportunity to tailor the SDGs to the specific needs and characteristics of local communities to achieve social, economic, and environmental development.⁹⁸ By integrating the goals into local policies and strategies, institutions at the community level can contribute meaningfully to sustainable development. Capacity-building programs can empower local leaders to understand and effectively implement SDGs, fostering a sense of ownership and commitment.⁹⁹ Moreover, partnerships and collaborations with NGOs, businesses, and community groups can amplify the impact of initiatives, creating a collaborative ecosystem for shared responsibility.

The effective implementation of international commitments, exemplified by initiatives like the SDGs, is paramount at the local level to ensure meaningful progress. Customizing these global frameworks to suit local contexts allows for targeted strategies that directly address the unique challenges and opportunities within a community. Engaging local communities in the implementation process not only fosters a sense of ownership but also ensures that interventions align closely with the priorities of the residents, enhancing the prospects of sustainable success. The localization of international commitments enables a focused approach to issues directly impacting the community, allowing for the efficient allocation of resources to areas of greatest need (Husein et al., 2021). It also demands the capacity building of local institutions and

95 Surya Oktaviandra, "Closing Legal Loopholes on Indonesia Investment Law in Digital Age" (2022) 15:1 *Indones Law J* 19-36.

96 *Ibid.*

97 Jasmiina Jokinen, *Human Rights Abuses of Transnational Corporations under International Law-On the Legal Loopholes* University of Helsinki., 2016) [unpublished].

98 Sofyan Sjaf et al, "Measuring Achievement of Sustainable Development Goals in Rural Area: A Case Study of Sukamantri Village in Bogor District, West Java, Indonesia" (2021) 9:2 *Sodality J Sociol Pedesaan*.

99 Siscawati et al, *supra* note 22.

leaders, empowering communities to actively participate in and drive sustainable development. Establishing partnerships among local governments, non-governmental organizations, businesses, and other stakeholders is vital, promoting collaboration that leverages diverse expertise and resources for effective implementation. Monitoring progress through local indicators and evaluation mechanisms ensures ongoing alignment with international commitments while responding to evolving local dynamics.

Mobilizing financial and technical resources at the local level is critical for successful implementation and may involve innovative financing models, public-private partnerships, and leveraging existing community assets (like corporate social responsibility).¹⁰⁰ Raising awareness about international commitments and their relevance at the local level through educational programs and communication strategies empowers residents to actively contribute to global goals.¹⁰¹ Aligning local policies with international commitments creates a supportive environment for implementation, promoting coherence between local regulations and global objectives. Ultimately, applying international commitments like the SDGs at the local level underscores a community's commitment to global citizenship and contributes to the collective effort toward sustainable development.

The failure to implement gender-responsive strategies for the SDGs at national and local levels can be attributed to a complex interplay of conditions and reasons. Firstly, limited political will and commitment from governments often hinder the integration of gender-responsive approaches to SDG implementation.¹⁰² In some cases, political leaders may not prioritize gender equality, viewing it as a secondary concern to other pressing issues. Secondly, a lack of comprehensive policy frameworks and institutional capacity can impede progress.¹⁰³ Many countries lack the necessary legal and policy structures to guide gender-responsive SDG implementation, leading to inconsistencies and inefficiencies in efforts to mainstream gender considerations. Thirdly, inadequate financial resources allocated to gender-responsive initiatives pose a significant barrier.¹⁰⁴ Implementing gender-sensitive policies and programs requires funding for capacity building, data collection, and targeted interventions. When budgets fall short, it becomes challenging to translate commitments into concrete actions. Fourthly, a lack of gender-disaggregated data and monitoring mechanisms inhibits progress tracking and accountability.¹⁰⁵ Without accurate data, it is difficult to assess the impact of policies on

100 Juniati Gunawan, Paulina Permatasari & Carol Tilt, "Sustainable development goal disclosures: Do they support responsible consumption and production?" (2020) 246 *J Clean Prod*.

101 Siscawati et al, *supra* note 22.

102 Wafa Aftab et al, "Implementation of Health and Health-Related Sustainable Development Goals: Progress, Challenges and Opportunities-a Systematic Literature Review" (2020) 5:8 *BMJ Glob Health*.

103 Meuleman, *supra* note 5.

104 Tobias Polzer, Isabella M Nolte & Johann Seiwald, "Gender budgeting in public financial management: a literature review and research agenda" (2023) 89:2 *Int Rev Adm Sci* 450-466.

105 Anna Tabitha Bonfert et al, *Leveraging Gender Data to Accelerate Gender Equality* (Washington, DC: World Bank, 2023).

gender equality and make informed decisions for SDG implementation. Fifthly, cultural and societal norms that perpetuate gender disparities can pose resistance to gender-responsive approaches.¹⁰⁶ Deep-seated gender stereotypes and discrimination may persist, hindering efforts to challenge existing power structures and promote equitable participation. Sixthly, limited awareness and understanding of the benefits of gender-responsive SDG implementation among stakeholders (including policymakers, civil society, and communities) can lead to insufficient buy-in and support for such initiatives.¹⁰⁷ Lastly, the absence of meaningful participation of women in decision-making processes at both the national and local levels is a significant barrier. When women are excluded from the planning and implementation of SDG programs, their perspectives and needs may not be adequately addressed, leading to ineffective policies.

This study particularly focuses on the sixth factor, being “limited awareness and understanding of the benefits of gender-responsive SDG implementation among stakeholders,”— especially by local government employees, as this gap remains a challenge for Indonesia.¹⁰⁸ The rationale for determining this stakeholder is because of its central role in translating available applicable rules to the local level. This is especially true in Indonesia, where local governments have great authority over their territories. In addition to executing national laws, local governments also maintain the authority to enact local regulations. With their dedicated employees, they may also execute regulations and policies directly to residents.

To understand the level of awareness and knowledge in implementing international regulations into local policies or actions, this study employed empirical research with local government employees in the legal department. Respondents were selected on the conditions that they: (1) hold a key position in the legal department; (2) have a minimum of three years of experience in that department; and (3) have a minimum of five years of experience working in the institution as a whole. The first criterion ensures that respondents have the knowledge and capability to execute three main responsibilities in the legal department to apply laws: (1) drafting local regulations, (2) solving legal disputes, and (3) disseminating the applicable rules. These responsibilities are their embodied responsibilities in local regulation. Meanwhile, the second and third criteria indicate that the respondents have or ought to have sufficient experience to understand situations and problems in local institutions, including the importance and necessity of implementing SDGs within gender issues.

Respondents were initially asked whether their educational background relates to their jobs as legal officers, as it is possible that an employee of a government institution comes from an educational background in a different field. In our research, this can be

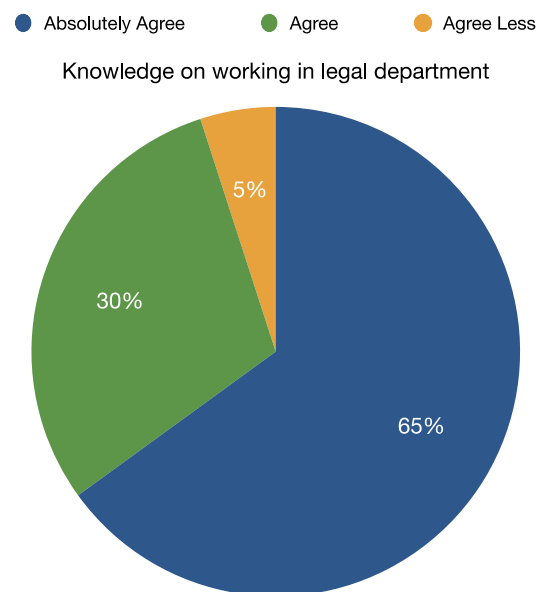
106 Gupta et al, *supra* note 3.

107 Sean Fox & Allan Macleod, “Localizing the SDGs in cities: reflections from an action research project in Bristol, UK” (2023) 44:3 *Urban Geogr* 517–537.

108 Kanako Morita, Mahesti Okitasari & Hiromi Masuda, “Analysis of national and local governance systems to achieve the sustainable development goals: case studies of Japan and Indonesia” (2020) 15:1 *Sustain Sci* 179–202.

critical. Specifically, we asked them to rate the statement “*Pekerjaan saya saat ini telah sesuai dengan latar belakang Pendidikan*” (“My current job relates to my educational background”). Thirteen out of 20 respondents (65%) “absolutely agree” that their educational background (law degree) is relevant to their current job. Six others (30%) selected “agree,” while only one respondent (5%) chose “agree less.” When we clarified this with their official degree, it was found that 19 out of 20 respondents (95%) graduated with a law degree. Though working in legal departments of local governments does not strictly require a law degree, a different education other than a law degree might affect certain misunderstandings in exercising legal actions. From this data, we spot that around 95% of respondents believe that their educational background is suitable for their current occupation. 65% of them strongly believe that they can tackle many issues in the legal department.

Figure 1. Level of working knowledge in the legal department.

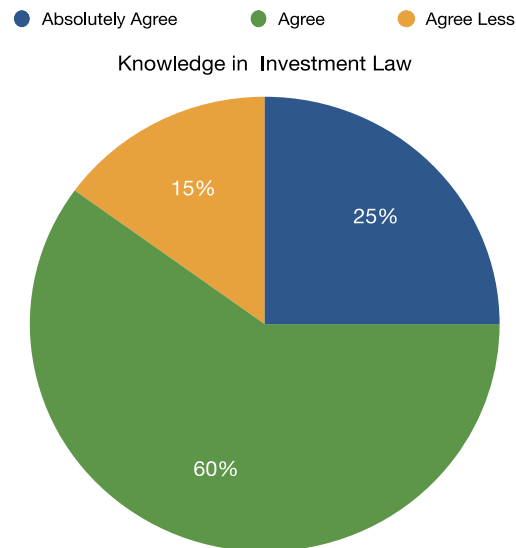


By collecting data from respondents, the goal is to understand how specific laws which relate to gender to SDGs are understood by the local apparatus. Before doing so, levels of knowledge on how international law applies to national law should be measured. To accomplish this, investment law was chosen as a sample of law. Unlike other common national laws, current Indonesian investment law presents and embraces foreign elements (including international law) because of its regulation on foreign direct

investment.¹⁰⁹ Therefore, it is ideal for identifying how international concerns are understood in national law. Investment law is also ideal for its familiarity with general Indonesian law graduates, as it is taught in most higher education programs in Indonesia.¹¹⁰ Investment is also a relatively popular strategy for local governments for funding regional development.¹¹¹ Therefore, legal actors in local governments are expected by the researchers to be familiar with this law. With these considerations, our initial assumption was that the legal apparatus would have a general understanding of investment law. Investigating their knowledge of investment law, respondents were asked to identify with the statement: “*Saya sudah mengetahui terdapat Undang-Undang Nomor 25 Tahun 2007 tentang penanaman modal*” (“I know that there is Law Number 25 of 2007 concerning investment”). According to the results, only 25% of respondents (5 people) fully agree that they are knowledgeable about investment law, down from 95% of respondents (19 people) who consider their education appropriate for working in a legal department and 65% of respondents (13 people) who believe they have a solid basis in law. This figure was below the expectations of the researchers. This raises concerns as to how the local apparatus can be relied on to understand issues with investment activity if they do not understand the law itself. When further questioned, one respondent who claimed to know about investment law beforehand clarified that this was because they were assigned to a specific legal drafting task that required this knowledge. Others noted that they had a specific personal interest in this law during their legal education at university. Therefore, we can conclude that when legal actors do not have specific reasons to learn about investment law, they may not possess a comfortable level of knowledge. However, most participants (17 out of 20 or 85%) “agree” that they know investment law exists to regulate investment activity in the region. The rest of them chose “agree less,” showing they have minimal understanding of this law.

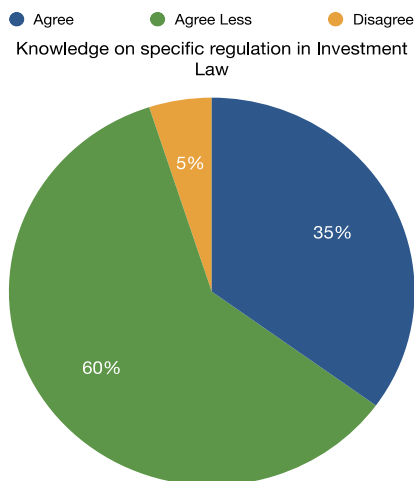
-
- 109 Surya Oktaviandra, “Penataan Ulang Pengaturan Penanaman Modal Asing di Indonesia Melalui Momentum Pembangunan Ibu Kota Negara (Remodeling of Foreign Investment Regulations in Indonesia Through the National Capital Development Momentum)” (2022) 52:1 Maj Huk Nas 127-145; Prabhaskaran & Pushkar Anand, “Determination of Indirect Expropriation and Doctrine of Police Power in International Investment Law: A Critical Appraisal” (2016) Leila Choukroune Ed *Judg State Int Trade Invest Law* 2016 127-151; Surya Oktaviandra, “Creating a Balance in Bilateral Investment Treaty: A Perspective from Indonesia” (2022) 4:1 *Andalas Int J Socio-Humanit* 8-15.
- 110 Hikmahanto Juwana, “Teaching International Law in Indonesia” (2001) 5 *Singap J Int Comp Law* 412.
- 111 James Alm & Sri Mulyani Indrawati, “Decentralization and local government borrowing in Indonesia” in *Reforming Intergov Fisc Relat Rebuilding Indones* (Edward Elgar Publishing Ltd., 2003) 234.

Figure 2. Level of general investment law knowledge in the region.



Next, participants were asked a more specific question: “*Saya mengetahui aturan-aturan mengenai persyaratan, perlindungan, insentif dan lembaga-lembaga yang berwenang dalam memberikan izin usaha untuk kegiatan penanaman modal asing.*” (“I know the rules regarding requirements, protections, incentives, and authorized institutions, in granting business licenses for foreign investment activities”). Compared to previous questions, less knowledge was apparent here. As a whole, no respondents agreed to have concrete or specified knowledge of national investment laws that incorporate international regulations. Meanwhile, 7 out of 20 respondents (35%) “agree,” 12 respondents (60%) “agree less,” and one respondent (5%) “disagrees” with the statement that they have full knowledge of specific regulations.

Figure 3. Level of knowledge on specific investment regulations (including international environmental and human rights concerns) in the region.



This data demonstrates that specific investment regulations, especially those incorporating foreign elements, are poorly understood by legal actors. It indicates that the addition of foreign or international elements to national regulation generates a knowledge gap. International law itself is a complex legal system that regulates law between nations.¹¹² It is possible to find international law difficult to understand as its development over time has not been followed. For example, if someone had learned about climate change conventions before 2010, they would have been exposed to the Kyoto Protocol standards of 1997. Thus, they would not be aligned with the current international climate change standards set forward by the 2015 Paris Agreement.

When asked for the reasons that they have not learned about international aspects of their job, various answers emerged. First, they asserted that knowledge of international law is not a requirement for their job. This argument may hold validity, considering the exam system for applying for legal officer jobs at local government in Indonesia, which only focuses on examining applicants' character and general law knowledge, where international law is not required. This condition also occurs with the job application system for the central government, with the exception possibly only when applying for trade or foreign ministry where international law knowledge is essential. Second, they were not at any point equipped with international-specific knowledge by local institutions. Respondents clarified here that there were some seminars and legal training provided by the local government, but these did not expand on international elements that could affect their work. One crucial issue arises: the department at a local institution that must disseminate available regulations to government employees is the legal department,

112 Robert Howse & Ruti Teitel, "Beyond Compliance: Rethinking Why International Law Really Matters" (2010) 1:2 Glob Policy 127-136.

which the respondents occupy. Third, respondents stated that the central government did not provide them with knowledge of specific international regulations. When clarifying this with the Investment Coordinating Board (*Badan Koordinasi Penanaman Modal* - BKPM) at the central level, it was confirmed that BKPM does not provide any seminars or legal dissemination related to specific foreign investment elements. BKPM routinely (usually annually) provides seminars or other types of socialization, but mainly on technical aspects of investment. This knowledge is provided to another body that deals with regional technical investment, called The Investment and One-Stop Integrated Services Agency (*Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu* - DPMPSTP). This fact leads to the condition that legal knowledge and capabilities related to foreign direct investment remain in limbo for legal officers as both local and central government bodies failed to provide the required knowledge. Fourth, they do not have additional time to study specific regulations outside their main tasks and functions. The responsibilities of legal departments in local governments are broad and cover all legal issues within their institutions. Meanwhile, they lack the necessary number of employees to deal with many legal problems, including drafting regulations, advocating for legal issues, and disseminating applicable regulations. Therefore, their work is limited to only coping with general issues, where their main task is administrative, rather than applying the law by themselves. Lastly, they argued that they had little incentive to study something that is not a direct concern of their work. This is a classic problem present in many local governments in Indonesia, where the current system is unable to appropriately reward the achievements of individuals.¹¹³ The merit system in career development remains questionable to be aligned with civil servant competencies, particularly open recruitment in higher positions, which provides less incentive for employees to exceed work expectations.¹¹⁴

Having investigated knowledge of international law within investment law, we proceeded to examine specific gender issues herein. This examination is possible because, after Rio 1992 (which blends environmental concerns with economic and human development), international environmental commitments have begun to intertwine with other fields like trade and investment.¹¹⁵ This setup allows and urges national investment law to address international concerns, including environmental, human rights, and gender issues. Therefore, in understanding and implementing gender equality in practice to residents, local institutions with their legal apparatus shall understand laws concerning gender. Legal officers must know to what extent gender issues are already included in investment law. This knowledge is essential for them to

113 Ajib Rakhmawanto, Budiman Rusli & Sintaningrum Sintaningrum, "Merit System Selection for Pratama Senior Executive Service State Civil Apparatus in Central Java Provincial Government" (2019) 11:1 J Bina Praja 31-41.

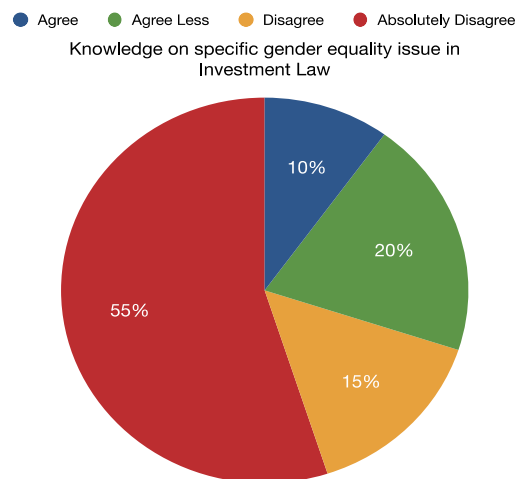
114 Septiana Dwiputrianti, "Challenges With Implementation Of The Merit System In The Open Recruitment Of Government High Positions: The Case In Indonesia" (2018) Adv Soc Sci Educ Humanit Res 191.

115 Lise Johnson, Lisa Sachs & Nathan Lobel, "Aligning International Investment Agreements with the Sustainable Development Goals" (2019) 58 Columbia J Transnatl Law; Oktaviandra, supra note 94.

determine if there exist national regulations on gender issues to be implemented. Additionally, if they can understand which rules are missing, they can enact local regulations to advocate for better implementation. Indonesia's legal system allows for local bodies to enact regulations as long as it does not conflict with higher regulations based on the *Lex Superior Derogat Legi Inferiori* principle, where in case of conflict between laws, a higher law repeals a lower law.

While gender equality is not explicitly stated in investment law, there are several norms that embody the concept of equality, such as the use of the term “*kebersamaan*” (“togetherness”) in Article 3.1(e) of the investment law principles. Sustainability concepts are explicitly mentioned in Article 3.1(g) and (h) regarding investment principles, Article 15(b) and (d) regarding investor obligation, and Article 16(d) regarding investor responsibility. However, legal actors’ knowledge of current investment law seems to be limited to gender-related issues. This was demonstrated through responses to the survey question, “*Saya memahami bagaimana hukum Penanaman Modal di daerah telah memberikan akses secara khusus untuk partisipasi dan peran serta perempuan*” (“I understand how investment law provides special access to women's participation”). Results showed a lower level of knowledge, as respondents were unable to affirm their absolute understanding. Only 2 out of 20 respondents (10%) “agreed” that they understand the availability of gender issues on this law. Eighteen respondents (90%) showed a lack of understanding on this issue, with 4 (20%) choosing “agree less,” 3 (15%) choosing “disagree,” and 11 (55%) choosing “absolutely disagree.”

Figure 4. Level of knowledge on specific gender equality issues in the region.



Despite not being entirely familiar with the rules, the majority of respondents (90%) thought that gender equality was an autonomous rule in every national law, including investment. They seemed to trust that the law certainly contains issues of gender equality as a presently important concern. The reality is that women's specific participation and gender equality are not regulated explicitly in investment law. Fourteen of our respondents (70%) are female. Alongside the survey responses, this indicates that there can be a lack of knowledge on gender concerns, even with women in charge. Thus, these findings are among the main factors influencing the lack of implementation of gender issues at local institutions. Additional factors include the absence of requirements, obligations, and incentives to understand international regulations and knowledge of how gender equality could be implemented at the domestic level.

Based on the provided data, we can summarize local government knowledge from general concepts to specific gender issues (Table 1).

Table 1. The diminishing figure of regional actors' understanding (out of 20 respondents)

No.	Level	General knowledge of working in legal department (Suitability between Job and Education)	General Knowledge of investment law	Specific Knowledge of investment law (including environmental and human rights concern)	Specific Knowledge of gender issues in investment law
		(1)	(2)	(3)	(4)
1.	Absolutely Agree	13	5	0	0
2.	Agree	6	12	7	2
3.	Agree Less	1	3	12	4
4.	Disagree	0	0	1	3
5	Absolutely Disagree	0	0	0	11

From the table, it is clear that legal actors' perceived understanding decreases steadily in each level of inquiry, ranging from general (columns 1&2) to specific issues (columns 3&4). This empirical data implies that the lack of knowledge on specific gender issues could influence the lack of implementation of SDGs. Thus, implementation can be slow or even misjudged.

The government has legal power, so knowledge of the law can impact political decisions and policymaking.¹¹⁶ Therefore, a better understanding will lead to better implementation.¹¹⁷ Meanwhile, local government reorganization has made the role of the government to be more complex and influential in society.¹¹⁸ As a result, institutional capabilities must also be enhanced, including the knowledge of its legal actors.

As knowledge is not an autonomous concept, it must be managed.¹¹⁹ Knowledge management can thus be used to improve the performance of local government apparatus and to supervise their understanding.¹²⁰ This could be done first by exhausting their existing knowledge and experience.¹²¹ As identified by this research, apparatus knowledge drops steadily when the matters become more specific. Therefore, institutions must be able to manage this by expanding their apparatus' knowledge on more diverse and specific issues—general or gender-specific and national or international.

The management system must be able to identify and embed the best value in that institution to lead to comprehensive management. In other words, Total Quality Management (TQM) is required as it provides a comprehensive and structured approach to organizational management. This method aims to improve the quality of products and services through ongoing refinements in response to continuous feedback.¹²² Performance will likely improve when the TQM approach is implemented with the best value framework, an approach that focuses on delivering the highest possible value

116 Davina Cooper, "Local Government Legal Consciousness in the Shadow of Juridification" (1995) 22:4 *J Law Soc* 506-526.

117 Agustina Setiawan, Widuri Wulandari & Siti Munawaroh, "Kemampuan Aparatur Pemerintah Desa dalam Pengelolaan Keuangan Desa di Desa Cempakamekar Kecamatan Padalarang Kabupaten Bandung Barat" (2022) 8:1 *Moderat J Ilm Ilmu Pemerintah* 171-183.

118 Francesco Kjellberg, "The Changing Values of Local Government" (1995) 540 *Ann Am Acad Pol Soc Sci* 40-50.

119 Liestyodono Bi Enceng & Mw Purwaningdyah, "Meningkatkan Kompetensi Aparatur Pemerintah Daerah dalam Mewujudkan Good Governance" (2008) 2:1 *Pus Pengkaj Dan Penelit Kepegawai BKN*.

120 Anwar Sadat, "Knowledge Management to Improve Local Government Services: Knowledge Management" (2021) 2:3 *Int J Sci Technol Amp Manag* 582-591.

121 *Ibid.*

122 Jamaluddin Ahmad, "Local Government Bureaucracy and Implementation of Total Quality Management in Free Education Services in South Sulawesi Province" in MA Suhaini, M Saleh, & MA Sudiyono, eds, *Indones Proceeding Int Conf Fundam Implement Educ* (Yogyakarta: Yogyakarta State University, 2014) 127; Danny Samson & Mile Terziovski, "The relationship between total quality management practices and operational performance" (1999) 17:4 *J Oper Manag* 393-409; Radosław Wolniak, *Process Management Level In Local Government* (Philadelphia: CreateSpace Independent Publishing Platform, 2018).

through the efficient use of resources.¹²³ Good performance means actors should be able to understand, analyze, and implement regulation. Any mitigation or action can be executed to prevent any damage occurred or promote the desired value of that institution.¹²⁴ This can be crucial for the achievement of gender equality as encouraged by SDGs.

IV. CONCLUSION

This paper demonstrates a growing awareness of the vital role women play in environmental protection and sustainable management. However, several shortcomings persist within international environmental law efforts to support women in decision-making (and other essential rights) for gender equality in SDGs. National and local-level implementations of gender-responsive policies often lack compared to more progressive provisions of international agreements. Enforcing these policies remains challenging, as many agreements lack robust mechanisms to ensure compliance. While the international binding agreements exhibited loopholes in international-level regulations, transferring knowledge to local institutions also emerged as an issue. This empirical research suggests that local institutions, with their current human resources, might not be able to fully implement what has been regulated at the international level. This is exhibited in a lack of knowledge or understanding of the law. Successful implementation requires concerted efforts at multiple levels, including the government's political will, to ensure national laws that support coherent implementations of gender equity at the local level.

Future studies may further elaborate methods and concrete solutions to tackle the gap in implementing SDGs at local institutions. Fundamentally, this research finds that harmonization between laws and coordination between central and local government is crucial to be addressed, as well as the improvement of legal officers' knowledge. In addition, other factors should also be valued in shaping sustainable policies and promoting gender equality—such as active engagement by governments, civil society, and international organizations.

123 George A Boyne et al, "Best value - Total quality management for local government?" (2002) 22:3 *Public Money Manag* 9-16.

124 Bevaola Kusumasari & Quamrul Alam, "Bridging the gaps: The role of local government capability and the management of a natural disaster in Bantul, Indonesia" (2012) 60:2 *Nat Hazards* 761-779.

BIBLIOGRAPHY

- Adekunle, Hanafi, "Legal Protection on Women's Property Rights as Panacea to Poverty Reduction and Environmental Sustainability in Uganda" (2022) 4:1 GLS Law J 5-21.
- Aftab, Wafa et al, "Implementation of Health and Health-Related Sustainable Development Goals: Progress, Challenges and Opportunities-a Systematic Literature Review" (2020) 5:8 BMJ Glob Health.
- Ahmad, Jamaluddin, "Local Government Bureaucracy and Implementation of Total Quality Management in Free Education Services in South Sulawesi Province" in MA Suhaini, M Saleh, & MA Sudiyono, eds, *Indones Proceeding Int Conf Fundam Implement Educ* (Yogyakarta: Yogyakarta State University, 2014) 127.
- Alm, James & Sri Mulyani Indrawati, "Decentralization and local government borrowing in Indonesia" in *Reforming Intergov Fisc Relat Rebuilding Indones* (Edward Elgar Publishing Ltd., 2003) 234.
- Bachri, Syabbul, "The Differences of Men's and Women's Shares in Islamic Inheritance Law Defense to Criticism and Blasphemy" (2022) 22:1 Nurani J Kaji Syariah Dan Masy 17-30.
- Banaji, Mahzarin R & Anthony G Greenwald, *Blindspot: Hidden biases of good people, Blindspot: Hidden biases of good people* (New York: Bantam, 2013).
- Beauregard, Katrine & Jill Sheppard, "Antiwomen But Proquota: Disaggregating Sexism and Support for Gender Quota Policies" (2021) 42:2 Polit Psychol 219-237.
- Behrman, Julia, Ruth Meinzen-Dick & Agnes Quisumbing, "The gender implications of large-scale land deals" (2011) 39:1 J Peasant Stud 49-79.
- Bidisha, Mahanta & Purusottam Nayak, *Munich Personal RePEc Archive Gender Disparity and Women Empowerment in Assam Gender Disparity and Women Empowerment in Assam* (2015).
- Bonfert, Anna Tabitha et al, *Leveraging Gender Data to Accelerate Gender Equality* (Washington, DC: World Bank, 2023).
- Boyne, George A et al, "Best value - Total quality management for local government?" (2002) 22:3 Public Money Manag 9-16.
- Bradford, Anu & Omri Ben-Shahar, "Efficient Enforcement in International Law" (2012) 12:2 Chic J Int Law.
- Buckingham, Susan, "Gender and Climate Change: Impacts, Science, Policy" (2016) 24:1 Gend Dev 151-152.
- Carlarne, Cinnamon P & Jd Colavecchio, "Balancing Equity and Effectiveness: The Paris Agreement & The Future of International Climate Change Law" (2019) 27 Environ Law J.

- Carnegie, M et al, "Gender, decision-making and farm practice change: An action learning intervention in Myanmar" (2020) 78 *J Rural Stud* 503–515.
- Castaño, Ana M, Yolanda Fontanil & Antonio Garcia-Izquierdo, "“Why Can’t I Become a Manager?”-A Systematic Review of Gender Stereotypes and Organizational Discrimination" (2019) 16:10 *Int J Environ Res Public Health*.
- Chatun, Sri, "The Elusive 30%: Analyzing the Barriers to Female Representation in the Indonesian Parliament for East Nusa Tenggara (NTT)" (2023) *KnE Soc Sci* 675–687.
- Cislaghi, Beniamino & Lori Heise, "Gender norms and social norms: differences, similarities and why they matter in prevention science" (2020) 42:2 *Sociol Health Illn* 407–422.
- Cooper, Davina, "Local Government Legal Consciousness in the Shadow of Juridification" (1995) 22:4 *J Law Soc* 506–526.
- Cotula, Lorenzo, "Land, Property and Sovereignty in International Law" (2016) *J Int’l Comp L*.
- , "Securing Land Rights in Africa – Trends in National and International Law" in Jan Michiel Otto & André Hoekema, eds, *Fair Land Gov Leg Land Rights Rural Dev* (Leiden University Press, 2012).
- Crenshaw, Kimberle, "Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color" (1991) 43:6 *Stanford Law Rev* 1241–1299.
- Dahlerup, Drude, "Gender Quotas - Controversial But Trendy" (2008) 10:3 *Int Fem J Polit* 322–328.
- Deininger, Klaus, Aparajita Goyal & Hari Nagarajan, "Inheritance Law Reform and Women’s Access to Capital: Evidence from India’s Hindu Succession Act" (2010) *World Bank Policy Res Work Pap No 5338*.
- Deshpande, Manali & Harold Kerbo, "History of the Indian Caste System and its Impact on India Today" (2010) *Soc Sci*.
- Dhenge, S A et al, "Gender attitude towards environmental protection: a comparative survey during COVID-19 lockdown situation" (2022) 24:12 *Environ Dev Sustain* 13841–13886.
- Dinar, Humera, "Women-Led Businesses: An Ethnographic Study of Gendered Entrepreneurship in Gilgit-Baltistan, Pakistan" (2020) 15:3 *J South Asian Dev* 398–414.
- Doss, Cheryl & Ruth Meinzen-Dick, "Land tenure security for women: A conceptual framework" (2020) 99 *Land Use Policy*.

- Doussis, Emmanuella & John Kenneth Galbraith, "Does International Environmental Law Matter in Sustainable Development?" in "Gaps" *Int Environ Law Epoch Anthr Glob Environ Pact Rescue* (2019).
- Dwiputrianti, Septiana, "Challenges With Implementation Of The Merit System In The Open Recruitment Of Government High Positions: The Case In Indonesia" (2018) *Adv Soc Sci Educ Humanit Res* 191.
- Ekesa, Beatrice et al, "Relationships between Land Tenure Insecurity, Agrobiodiversity, and Dietary Diversity of Women of Reproductive age: Evidence from Acholi and Teso subregions of Uganda" (2020) *16 Matern Child Nutr*.
- Enceng, Liestyodono Bi & Mw Purwaningdyah, "Meningkatkan Kompetensi Aparatur Pemerintah Daerah dalam Mewujudkan Good Governance" (2008) *2:1 Pus Pengkaj Dan Penelit Kepegawai BKN*.
- Espinosa, Deborah, "Secure Land Tenure: Food Security Depends on It" (2019) *3 Gates Open Res*.
- Farber, Daniel A, ed, "The Implementation Gap in Environmental Law" (2016) *16 J Korean Law*.
- Fernandez, Juan & Celia Valiente, "Gender quotas and public demand for increasing women's representation in politics: an analysis of 28 European countries" (2021) *13:3 Eur Polit Sci Rev* 1-20.
- Figueiredo, Patricia & Patricia E Perkins, "Women and water management in times of climate change: participatory and inclusive processes" (2013) *60 J Clean Prod* 188-194.
- Fitzmaurice, Malgosia, "Environmental Compliance Control" (2018) *8:2 Wroclaw Rev Law Adm Econ* 372-394.
- Fox, Sean & Allan Macleod, "Localizing the SDGs in cities: reflections from an action research project in Bristol, UK" (2023) *44:3 Urban Geogr* 517-537.
- Grown, Caren, Tony Addison & Finn Tarp, "Aid for Gender Equality and Development: Lessons and Challenges" (2016) *28:3 J Int Dev* 311-319.
- Gunawan, Juniati, Paulina Permatasari & Carol Tilt, "Sustainable development goal disclosures: Do they support responsible consumption and production?" (2020) *246 J Clean Prod*.
- Gupta, Geeta Rao et al, "Gender equality and gender norms: framing the opportunities for health" (2023) *Lancet Comm Peac Soc Health Equity Gend Equal*.
- Guzman, Andrew, "International Law: A Compliance Based Theory" (2002) *90:6 Calif Law Rev*.
- Hager, Anselm & Hanno Hilbig, "Do Inheritance Customs Affect Political and Social Inequality?" (2019) *63:4 Am J Polit Sci* 758-773.

- Handler, Antonia, "The New Sovereignty: Compliance with International Regulatory Agreements" (1995) 11 *Yearb Int Environ Law* 1-43.
- Hebo, Mamo & Getaneh Mahari, "Land Tenure Reforms and Women's Land Rights in Plural 'Legal' and Cultural Settings: A Comparative Study of the Arsii Oromo and Dorze-Gamo, Ethiopia" (2022) 44:1 *Ethiop J Dev Res* 39-76.
- Hepp, Paula, Claire Somerville & Bettina Borisch, "Accelerating the United Nation's 2030 Global Agenda: Why Prioritization of the Gender Goal is Essential" (2019) 10:4 *Glob Policy* 677-685.
- Hillman, Ben, "The Limits of Gender Quotas: Women's Parliamentary Representation in Indonesia" (2018) 48:2 *J Contemp Asia* 322-338.
- Hodgson, Stephen, Cormac Cullinan & Karen Campbell, *Land Ownership and Foreigners: A Comparative Analysis of Regulatory Approaches to the Acquisition and Use of Land by Foreigners* (FAO Legal Papers Online, 1999).
- Hole, David G et al, "Make nature's role visible to achieve the SDGs" (2022) 5 *Glob Sustain*.
- Howse, Robert & Ruti Teitel, "Beyond Compliance: Rethinking Why International Law Really Matters" (2010) 1:2 *Glob Policy* 127-136.
- Irawati, Irawati et al, "The Customary Law of the Communal Property and Sustainability in Coping with the Economic Impact of Covid-19 in Minangkabau Indigenous Peoples, Indonesia" (2024) 12:1 *J Law Sustain Dev*.
- Jain, Charu, "Women's land ownership in India: Evidence from digital land records" (2023) 133 *Land Use Policy* 106835.
- Jenichen, Anne, "Visible Minority Women in German Politics: Between Discrimination and Targeted Recruitment" (2020) 29:4 *Ger Polit* 545-563.
- Johnson, Lise, Lisa Sachs & Nathan Lobel, "Aligning International Investment Agreements with the Sustainable Development Goals" (2019) 58 *Columbia J Transnatl Law*.
- Jokinen, Jasmiina, *Human Rights Abuses of Transnational Corporations under International Law-On the Legal Loopholes* University of Helsinki., 2016 [unpublished].
- Jolly, Stellina & KSRoshan Menon, "Climate Change, Disasters and Gender Resilience: A Legal Analysis from India" (2019) 62:4 *J Indian Law Inst* 420-438.
- Juwana, Hikmahanto, "Teaching International Law in Indonesia" (2001) 5 *Singap J Int Comp Law* 412.
- Kabaseke, Charlotte, "Gender responsive climate financing as a strategy to climate change mitigation and adaptation: a legal analysis" (2023) 2:2 *Kabale Univ Interdiscip Res J KURJ* 77-88.

- Kabaseke, Charlotte,——, “Legal Recognition of Women’s Role in Combating Desertification in Africa: The Case for Uganda” in *Clim Change Manag* (Springer, 2020).
- Kameri-Mbote, Patricia, “The Land Has Its Owners! Gender Issues in Land Tenure under Customary Law in Kenya” (2005) UNDP-Int Land Coalit Workshop Land Rights Afr Dev.
- Kim, Eun Mee, “Gender and the Sustainable Development Goals” (2017) 17:2 *Glob Soc Policy* 239-244.
- Kim, Rakhyun E, “The Nexus between International Law and the Sustainable Development Goals” (2016) 25:1 *Rev Eur Community Int Environ Law* 15-26.
- Kjellberg, Francesco, “The Changing Values of Local Government” (1995) 540 *Ann Am Acad Pol Soc Sci* 40-50.
- Koehler, Gabriele, “Tapping the Sustainable Development Goals for progressive gender equity and equality policy?” (2016) 24 *Gend Dev* 1-16.
- Koh, Niak Sian, Claudia Ituarte-Lima & Thomas Hahn, “Mind the Compliance Gap: How Insights from International Human Rights Mechanisms Can Help to Implement the Convention on Biological Diversity” (2022) 11:1 *Transnatl Environ Law* 39-67.
- Konte, Maty & Nyasha Tirivayi, eds, *Women and Sustainable Human Development: Empowering Women in Africa, Gender, Development and Social Change* (Springer International Publishing, 2020).
- Krajewski, Markus, Andreas Frewer & Manfred L Pirner, “Interdisciplinary Studies in Human Rights” (2020) 5 *Springer Open*.
- Krook, Mona Lena & Medha Nanivadekar, “Gender Quotas II Are Quotas a Good Idea? The Indian Experience with Reserved Seats for Women” (2006) 2:1 *Polit Gend* 101-128.
- Kumari, Sarita, “Women Inheritance Rights In India: Some Reflections” (2019) 6:1 *Int J Res Anal Rev*.
- Kusi, Nancy Kankam et al, “Discourse on women and land tenure in Ghana: does a matrilineal land tenure system make a difference for women?” (2021) *Land Gov Gend Tenure-Gend Nexus Land Manag Land Policy* 129-142.
- Kusumasari, Bevaola & Quamrul Alam, “Bridging the gaps: The role of local government capability and the management of a natural disaster in Bantul, Indonesia” (2012) 60:2 *Nat Hazards* 761-779.
- Lau, Jacqueline et al, “Gender equality in climate policy and practice hindered by assumptions” (2021) 11:3 *Nat Clim Change* 186-192.

- Le, Kien & My Nguyen, "How Education Empowers Women in Developing Countries" (2020) *BEJ Econ Anal Policy*.
- Leslie, Isaac Sohn, Jaclyn Wypler & Michael Mayerfeld Bell, "Relational Agriculture: Gender, Sexuality, and Sustainability in U.S. Farming" (2019) 32:8 *Soc Nat Resour* 853-874.
- Levien, Michael, "Gender and Dispossession: A Comparative Analysis" (2017) 44:6 *J Peasant Stud* 1111-1134.
- Lowndes, Vivien, "How Are Political Institutions Gendered?" (2020) 68:3 *Polit Stud* 543-564.
- Meuleman, Louis, "Public Administration and Governance for the SDGs: Navigating between Change and Stability" (2021) 13:11 *Sustainability* 5914.
- Minow, Martha, "Equality Vs. Equity" (2021) 1 *Am J Law Equal* 167-193.
- Morita, Kanako, Mahesti Okitasari & Hiromi Masuda, "Analysis of national and local governance systems to achieve the sustainable development goals: case studies of Japan and Indonesia" (2020) 15:1 *Sustain Sci* 179-202.
- Namubiru-Mwaura, Evelyn, "Land Tenure and Gender : Approaches and Challenges for Strengthening Rural Women's Land Rights" (2014) 6 *Women's Voice Agency Particip Res Ser (Women's Voice, Agency, & Participation Research Series)* .
- Noori, Seyed Masoud & Soheila Louyeh, "When Environmental Obligations Collide with State Sovereignty: An International and Sharia Law Perspective" (2020) 41:1 *Consensus*.
- Norgaard, Kari & Richard York, "Gender Equality and State Environmentalism" (2005) 19:4 *Gend Soc* 506-522.
- Obydenkova, Anastassia & Rauf Salahodjaev, "Intelligence, democracy, and international environmental commitment" (2016) 147:1 *Environ Res* 82-88.
- Oktarina, Tri Nurmega & Anisa Yulianti, "The Role of Women in Sustainable Development and Environmental Protection: A Discourse of Ecofeminisme in Indonesia" (2022) 1:2 *Indones J Environ Law Sustain Dev* 107-138.
- Oktaviandra, Surya, "Closing Legal Loopholes on Indonesia Investment Law in Digital Age" (2022) 15:1 *Indones Law J* 19-36.
- , "Creating a Balance in Bilateral Investment Treaty: A Perspective from Indonesia" (2022) 4:1 *Andalas Int J Socio-Humanit* 8-15.
- , "Penataan Ulang Pengaturan Penanaman Modal Asing di Indonesia Melalui Momentum Pembangunan Ibu Kota Negara (Remodeling of Foreign Investment Regulations in Indonesia Through the National Capital Development Momentum)" (2022) 52:1 *Maj Huk Nas* 127-145.

- , “Three Arguments to Support International Binding Treaty on Business and Human Rights” (2022) 13:2 J HAM 253.
- Pathania, Sudershan Kumar, “Sustainable Development Goal: Gender Equality for Women’s Empowerment and Human Rights” (2017) 5:86 Int J Res 72–82.
- Pavoni, Riccardo & Dario Piselli, “The Sustainable Development Goals and International Environmental Law: Normative Value and Challenges for Implementation” (2016) 13:26 Veredas Direito Direito Ambient E Desenvolv Sustentável 13–60.
- Phiri, Austin T et al, “A review of gender inclusivity in agriculture and natural resources management under the changing climate in sub-Saharan Africa” (2022) 8:1 Cogent Soc Sci.
- Polzer, Tobias, Isabella M Nolte & Johann Seiwald, “Gender budgeting in public financial management: a literature review and research agenda” (2023) 89:2 Int Rev Adm Sci 450–466.
- Rai, Anuradha, “Land Rights of Women in India: How Much Has Changed After 2005” in *Sustain Sci Asia Afr* (Springer, 2023).
- Rakhmawanto, Ajib, Budiman Rusli & Sintaningrum Sintaningrum, “Merit System Selection for Pratama Senior Executive Service State Civil Apparatus in Central Java Provincial Government” (2019) 11:1 J Bina Praja 31–41.
- Ranjan, Prabhaskar & Pushkar Anand, “Determination of Indirect Expropriation and Doctrine of Police Power in International Investment Law: A Critical Appraisal” (2016) Leila Choukroune Ed *Judg State Int Trade Invest Law* 2016 127–151.
- Ravnborg, Helle Munk et al, “Land Governance, Gender Equality and Development: Past Achievements and Remaining Challenges” (2016) 28:3 J Int Dev 412–427.
- Razavi, Shahra, “The 2030 Agenda: challenges of implementation to attain gender equality and women’s rights” (2016) 24:1 Gend Dev 25–41.
- Rehn, Elisabeth & Ellen Johnson-Sirleaf, *Women, War Peace : The Independent Experts’ Assessment on the Impact of Armed Conflict on Women and Women’s Role in Peace Building* (UNIFEM, 2002).
- Rose, Gregory L, “Gaps in the Implementation of Environmental Law at the National, Regional and Global Level” in *World Congr Justice Gov Law Environ Sustain* (2011).
- Sadat, Anwar, “Knowledge Management to Improve Local Government Services: Knowledge Management” (2021) 2:3 Int J Sci Technol Amp Manag 582–591.
- Samson, Danny & Mile Terziovski, “The relationship between total quality management practices and operational performance” (1999) 17:4 J Oper Manag 393–409.

- Savaresi, Annalisa & Joanne Scott, "Implementing the Paris Agreement: Lessons from the Global Human Rights Regime" (2019) 9:3 *Clim Law* 159-164.
- Setiawan, Agustina, Widuri Wulandari & Siti Munawaroh, "Kemampuan Aparatur Pemerintah Desa dalam Pengelolaan Keuangan Desa di Desa Cempakamekar Kecamatan Padalarang Kabupaten Bandung Barat" (2022) 8:1 *Moderat J Ilm Ilmu Pemerintah* 171-183.
- Singirankabo, Uwacu Alban & Maurits Willem Ertsen, "Relations between Land Tenure Security and Agricultural Productivity: Exploring the Effect of Land Registration" (2020) 9:5 *Land* 1-18.
- Siscawati, Mia et al, "Gender Equality and Women Empowerment in The National Development of Indonesia" (2020) *J Strateg Glob Stud*.
- Sjaf, Sofyan et al, "Measuring Achievement of Sustainable Development Goals in Rural Area: A Case Study of Sukamantri Village in Bogor District, West Java, Indonesia" (2021) 9:2 *Sodality J Sosiol Pedesaan*.
- Smith, Jessica M, Lauren Olosky & Jennifer Grosman Fernández, "The Climate-Gender-Conflict Nexus Amplifying Women's Contributions at the Grassroots", (2021), online: *GIWPS*.
- Sparkman, Gregg, Lauren Howe & Greg Walton, "How social norms are often a barrier to addressing climate change but can be part of the solution" (2021) 5:4 *Behav Public Policy* 528-555.
- Supraptiningsih, Umi et al, "Inequality as a cultural construction: Women's access to land rights in Madurese society" (2023) 9:1 *Cogent Soc Sci*.
- Syahirah, Sharifah, "A Gender Quota Policy Implementation and Women Empowerment in The Malaysian Public Sector" (2016) 2:1 *Aust J Sustain Bus Soc* Vol 2 No 1 March 2016 59-68.
- United Nations, *Technical Note-SDG 5 Global, Regional and Country Assessments*. (2022).
- , *The Sustainable Development Goals Report 2023 - Special Edition*, by United Nations (United Nations, 2023).
- , *Women And Elections*. United Nations, by United Nations (United Nations, 2005).
- Van Der Marel, Eva Romée, "Trading Plastic Waste in a Global Economy: Soundly Regulated by the Basel Convention?" (2022) 34:3 *J Environ Law* 477-497.
- Von Stein, Jana, *Compliance with International Law* (Oxford Research Encyclopedia of International Studies, 2010).
- Wolniak, Radosław, *Process Management Level In Local Government* (Philadelphia: CreateSpace Independent Publishing Platform, 2018).

Zetterberg, Pär, “The Downside of Gender Quotas?1 Institutional Constraints on Women in Mexican State Legislatures” (2008) 61:3 *Parliam Aff* 442–460.

Acknowledgement

This research is funded by LPPM, Universitas Andalas under Grant RDP 2023 (Contract No.T/46/UN16.19/PT.01.03/Soshum-RDP/2023)

Surya Oktaviandra is a lecturer in the Department of International Law at the Faculty of Law, Universitas Andalas. The author's writings have been published several times in online media, national and international journals. Meanwhile, several books have been published mainly in the field of economic law include: (1) *Understanding Indonesia investment law*; (2) *National treatment in GATT: materials and cases*; (3) *Most favoured nation in international trade for goods: materials and cases*; (4) *Theory and application of international environmental law*; (5) *Indonesia domestic investment: materials and cases*; (6) *Theory, law & practice of investment*; (7) *Anti-dumping in international trade on goods*; and (8) *Countervailing in International Trade on Goods*. The Author research interest has been focused in the way that international law affects state's position and function toward other subjects of international law such as multinational corporations and the affected people. The author also places significant interest when digital era creates a legal loophole in national and international legal systems, especially from the perspective of economic and human rights.

Putri Aulia Arza is a lecturer of the Bachelor of Nutrition Study Program, Faculty of Public Health, Universitas Andalas. The author is also actively researching with the concentration of community nutrition and the development of local food products into various snacks. Several research results and articles in the field of nutrition and community service have been published in scientific journals. The author also actively publishes dozens of books in the field of nutrition and public health, including *Nutrition in Pregnant and Lactating Adolescents*, *Anemia: Types, Dangers and Handling of Nutrition*, *Potential and Nutritional Content of Local Food*.