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Forests are among the valuable natural resources of the Philippines due to their environmental, social, cultural and economic significance. Sadly, these fundamental assets are gradually disappearing because of continued deforestation. Delineating the country's specific forest limits by law is necessary to sustainably manage, conserve and protect the country's remaining forests from further depletion.



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## **Delineating the Philippines' Specific Forest Limits**

### I. Introduction

Land use conflicts are nothing new given the finite nature of land as a resource alongside an ever growing population and increased economic activities. Conflicting interests of various sectors and competition for land make forestlands particularly vulnerable to such conflicts. This is one of the reasons why the framers of the 1987 Constitution included a provision mandating Congress to pass a law defining the boundaries of Philippine forests.

However, despite it being included in the Legislative-Executive Development Advisory Council (LEDAC) and Common Legislative Agenda (CLA) of the Senate and the House of Representatives of the 17<sup>th</sup> Congress as well as in the priority legislation of the Philippine Development Plan (PDP) 2017-2022, a measure delineating forest limits, either on its own or through a National Land Use Act (NALUA), is yet to be passed. In fact, the NALUA bill has been languishing in the country's legislative mill for decades despite the clear importance of such measure. The absence of an enabling law which would clearly delineate the country's forest limits has resulted in confusion as to the actual boundaries of forest lands¹ and in turn, has led to incorrect land use and management. Forest lands have been subjected to boundary conflicts and encroachment such as squatting, illegal occupancy, illegal titling, and timber poaching.

This Policy Brief seeks to: (1) describe the state of the country's forests; (2) highlight the importance of enacting a forest delineation bill; (c) discuss the processes in delineating the specific forest limits; and (3) discuss legislative proposals on forest delineation.

<sup>&</sup>lt;sup>1</sup> Forest lands are lands of the public domain classified as needed for forest purposes. They include all forest reserves, forest reservations and all remaining unclassified lands of the public domain.

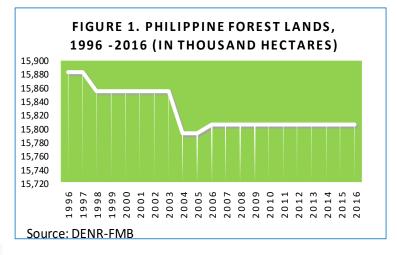
### II. State of the Country's Forests

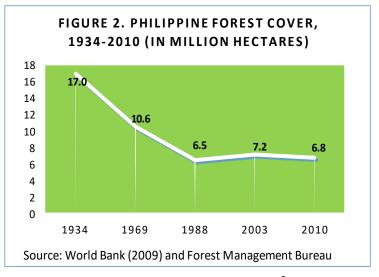
In 2016, the forestry sector contributed PhP3.62 billion (0.04%) to the gross domestic product (GDP). While this seems small, about 24 million people live in forest lands, half of which are indigenous peoples who heavily rely on agriculture and forestry for livelihood. Forests serve as significant carbon sink<sup>2</sup> and are vital for biological conservation and environmental protection. They help address the impact of climate change, particularly in mitigating greenhouse gas emissions. They also serve as alternative locations for education research, resettlement areas for people and habitat for indigenous flora and fauna. In

Rank in terms of total forest cover 0.34 M ha 28.3% Closed Forest 67.2% Open Forest 4.5% Mangrove Forest (310,593 ha) (1.934.048 ha) (4.595.191 ha) Figure 3. Forest Cover by Major Island Group Mangrove LUZON: Closed 56.4% 3,854,468 ha Open Mangrove VISAYAS: Closed 764,173 ha Open Mangrove MINDANAO: Closed 32.4% 221,191 ha Open Source: DENR-FMB

<sup>2</sup> A carbon sink is a natural or artificial reservoir that accumulates and stores some carbon-containing chemical compound for an indefinite period. The process by which carbon sinks remove carbon dioxide (CO2) from the atmosphere is known as carbon sequestration (Conserve Energy Future).

addition, forests have cultural and spiritual benefits necessary for the well-being of individuals residing in forest land communities.





However, the country's forest cover<sup>3</sup> has been steadily declining over the years. From 17 million hectares (57% of the country's land area) recorded in 1934, the country's forest cover has dwindled to 6.8 million hectares (23 percent) in The decline is mainly attributed to 2010. increasing agricultural and housing needs, commercial and illegal logging, kaingin as well as forest fires. Among the country's regions, Region 2 (Cagayan Valley) has the largest forest cover with 1.04 million hectares while NCR,

<sup>&</sup>lt;sup>3</sup> Forest cover refers to the relative (in percent) or absolute land area that is covered by forests or the forest canopy or open woodland.

unsurprisingly has the least forest cover with 2,120 hectares.

To address deforestation, the government has implemented a number of environment and natural resources (ENR) policies and programs over the years such as the Moratorium on the Cutting and Harvesting of Timber in the National and Residual Forests and the National Greening Program (NGP). To some extent these interventions beneficial. have been Between 2010 and 2015, an increase of 240, 000 hectares per year of reforested area has been recorded. Nonetheless, forests continue to face sustained threats and the protection and management of forest lands in particular has become all the more necessary.

### **III. Importance of Forest Limits Delineation**

Without proper delineation, forest lands can be reclassified as alienable and disposable (A&D) lands<sup>4</sup> and may be utilized for other land development purposes that are otherwise unsustainable. According to the **Forest** Management Bureau (FMB) of the Department of Environment and Natural Resources (DENR), the delineation of the specific limits of forest lands will have a strong impact on the proper management, development, administration/supervision, and protection of the country's remaining forests and forest lands through the following:

Enhancement, development, administration, supervision and protection of forest lands. While 15 million hectares of the country's land area have already been classified as forest lands, many of these areas are not yet delineated on the ground, making it hard for forest administrators and actual field managers to promote with authority various government forest development thrusts (CPBRD, 2012).

<sup>4</sup> Alienable or disposable lands are lands of the public domain, which has been classified and declared as such and available for disposition.

Full demarcation of forests will be beneficial in allowing control of forest resources and in limiting forest degradation. It will be instrumental in the determination of priority areas that must be given attention for conversion and protection, and areas for production and utilization.

Resolution of conflict among competing uses of forest lands, agricultural lands and national parks. In the Philippines, lands are utilized for economic and commercial uses, food production, shelter, environment preservation (forest protection), and preservation of indigenous peoples, among others. More often than not, forest lands are compromised as a result of this competition, and this has led to forest encroachment and denudation.

It is not uncommon in popular tourist beach destinations in the Philippines to have shorelines, beach resort areas, residential areas and forests practically adjacent to each other. There are numerous instances where the unclear delineation of land use has led to disputes between forest dwellers and real estate developers resulting not only in economic losses for both sides but in some instances, even loss of lives. By establishing permanent boundaries for forest lands, these areas will be legally dedicated for their intended purposes and cannot be utilized for other uses, except by act of Congress. By this same measure, non-forest lands are also protected from these types of costly boundary disputes.

Security of tenure through issuances of land titles to upland dwellers or actual tillers of forest lands or agricultural lands.

An estimated 17 to 22 million people who depend on forests for their homes and livelihoods have no legal tenure rights over forest lands (Fortenbacher and Alave, 2014). While the issuance of Community-Based Forest Management Agreements (CBFMA) entitles forest communities, including indigenous

peoples to use and develop the forest land and resources for a duration of 25 years, there were some cases when the CBFMA overlapped with other tenurial instruments due to undefined forest land boundaries. This has resulted in the loss of tenurial security or displacements. With defined forest land boundaries, such overlaps and conflicts can be avoided.

Promotion of PPP in Forest Development. Public-Private Partnership (PPP) has long been advocated as an organizational solution to environmental problems that call for the joint action of the government, private sectors, and civil society. By exactly defining the scope and location of forests, uncertainty is lessened, especially on the part of private investors. The development of a forestry investment roadmap would likewise be much easier. The government, through the DENR, can more confidently enter into joint ventures, production sharing agreements or co-productions with qualified forest community organizations, local government units (LGUs), government-owned and/or-controlled corporations (GOCCs), private and other interested companies concerned in the development of forest plantations in production forest lands.

Improvement of revenue collection from forest lands. Local governments derive a substantial share from real property taxes, accounting for more than 20 percent of their total revenues. Under the proposed delineation measure, actual ground survey and verification of the specific limits of forest lands will be undertaken. This will aid the LGUs in determining the actual size of forest lands, actual land use and land ownership, thereby identifying the actual taxable areas.

Formulation of CLUP and FLUP. All LGUs are required to formulate their respective Comprehensive Land Use Plans (CLUP) and Forest Land Use Plans (FLUP). The CLUP is a planning document that contains a set of policies, accompanied by maps and similar

illustrations that serve as a guide to determine the future use of lands and natural resources within the territorial jurisdiction of the LGUs. Integral to the CLUP formulation is the preparation of the FLUP, a plan that rationalizes the allocation and management of the scarce forest and forest land resources, and determines their most appropriate uses. Part of the FLUP preparation is the collection and preparation of relevant thematic maps, updating of data and maps after field validation, and reconnaissance surveys or community mapping activities. The delineation of forest land boundaries is hence vital in the formulation of the FLUP.

# IV. Government Efforts on Forest Limits Delineation

Efforts to delineate the specific limits of forest lands date back to 1975 with the promulgation of Presidential Decree No. 705, otherwise known as the Forestry Reform Code of the Philippines. Section 4, Article XII of the 1987 Philippine Constitution further mandates Congress to determine by law the specific limits of forest lands and national parks, marking clearly their boundaries on the ground. The permanent forest lands that will be established shall not be diminished or reduced except by an act of Congress.

The need to delineate state forest lands on the ground is further affirmed with the issuance of Executive Order No. 318 on June 9, 2004. In 2008, the DENR issued Administrative Order (AO) No. 2008-24, which provided for the comprehensive and clear guidelines in delineating the boundaries between forest lands, national parks and agricultural lands.

Table 1. Forestland Boundary Assessment and Delineation (FLBD) Project Status as of 2017

Region	Area Before (in hectares)	Area After (in hectares)	Proposed Reversion (A&D to FL) (in hectares)	Proposed Conversion (FL to A&D) (in hectares)	Difference (in hectares)	Change in FL (%)
CAR	1,513,243.30	1,489,309.38	356.7	24,290.42	23,933.72	-1.58
1	483,947.37	482,002.00	169.28	2,114.65	1,945.37	-0.40
2	1,375,067.47	1,340,695.24	0.00	34,372.23	34,372.23	-2.50
3	1,081,294.37	1,031,169.02	0.00	5,125.35	5,125.35	-0.50
NCR	19,268.00	6,888.00	0.00	12,380.00	12,380.00	-64.25
4A	409,147.44	407,193.44	1,308.94	3,262.94	1,954.00	-0.48
4B	1,771,206.12	1,737,567.48	1,177.37	34,816.01	33,638.64	-1.90
5	538,964.50	533,336.23	1,197.24	6,825.51	5,628.26	-1.04
6	681,713.35	656,617.00	6,318.73	31,415.08	25,096.35	-3.68
7	449,760.51	524,702.17	97,065.72	22,124.06	-74,941.66	16.66
8	1,198,256.75	1,013,644.80	1,669.93	186,281.89	184,611.96	-15.41
9	799,777.65	778,492.64	280.68	20,869.36	20,588.80	-2.58
10	796,777.65	789,092.10	1,173.81	8,859.36	7,685.55	-0.96
11	1,085,728.53	1,081,165.11	21.91	4,585.33	4,563.42	-0.42
12	1,053,092.86	1,039,139.33	74.85	14,028.38	13,953.52	-1.33
13	1,280,267.41	124,811,900	0.00	32,157.41	32,157.41	-2.51
ARMM	622,092.78	609,497.50	469.56	13,064.84	12,595.28	-2.02
TOTAL	15,095,916.64	14,750,630.44	111,284.73	456,572.92	348,288.19	-2.29

Source: DENR-FMB

Pursuant to the said AO, the DENR implemented its Forestland Boundary Assessment and Delineation (FLBD) project. The project sought to delineate forest lands from alienable and disposable (A&D) lands, map areas that have potential for agroforestry development, and ensure established protected area systems. Previously established land classification survey lines per province with their respective technical description and maps were used during the validation, assessment and delineation process.

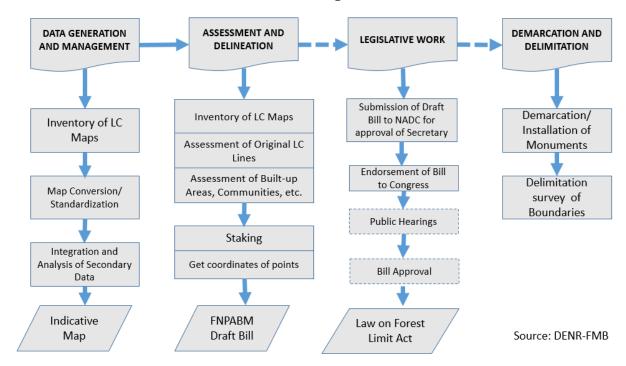
The FLBD project was completed in 2017. It covered 80 provinces nationwide including the Autonomous Region in Muslim Mindanao (ARMM) and the National Capital Region (NCR). A total of 89,091.95 kilometers of forest land boundary lines were delineated. As a result of the delineation, about 345,286 hectares

currently regarded as forest lands are proposed to be reclassified or converted to A&D lands. If approved, this will effectively reduce forest lands by 2.29 percent. NCR will see the highest shrinkage in forest land area of about 12,380 hectares or a decline of 64.25 percent. On the other hand, Region 7 will have the highest increase of forest land area of about 74,941.66 hectares or 16.66 percent.

The remaining piece that will cap all these efforts is the enactment of forest limits law. After the passage of the said measure, the DENR and the LGUs can already establish permanent boundary monuments on the ground to demarcate forestlands, national parks and agricultural lands, in accordance with existing survey standards and practices.

#### **Box 1. The Forest Delineation Process**

Figure 4. Process Flow of the Assessment and Delineation of Boundaries Between Forest Lands, National Parks and Agricultural Lands



Under the DENR's AO No. 2008-24, forest delineation starts with data generation and management. Land Classification (LC) maps are used as reference to determine the location of the survey lines. All data gathered are integrated and deliberated by the Regional Assessment and Delineation Committee (RADC)<sup>1</sup> of the DENR, which also prepares a draft bill for submission to the National Assessment and Delineation Committee (NADC)<sup>1</sup>.

Once the NADC has reviewed and evaluated the draft proclamation, it will be endorsed to the DENR Secretary. The Secretary shall, in turn, endorse the draft bill to Congress for sponsorship and enactment. Upon the passage of the law defining the final boundary of the forest lands within a province, the same law shall be the basis for the issuance of the certifications of legal status of the land. It shall form part of the control maps and records for all public land applications filed with the DENR. The DENR and the concerned LGUs will then establish the permanent boundary monuments on the ground and delimit the boundary of the forest lands, national parks, and agricultural lands, in accordance with existing survey standards and practices.

The permanent forest lands that will be established pursuant to the law shall not be diminished or reduced except by an act of Congress. The DENR, in coordination with all agencies and branches of government, shall ensure that the forest cover and vegetation therein shall be protected, preserved and enhanced.

### V. Legislative and Policy Proposals

Previous Congresses failed to pass a forest limits law due to the opposition of some legislators who apparently do not agree with the existing classification of lands in their respective jurisdictions.

In the 17th Congress, several bills have again been filed seeking to delineate the specific limits of forest lands. In June 2018, the House of Representatives passed on third and final reading House Bill 7496 or the "Forestland Limits Act", principally authored by Rep. Maria Lourdes Acosta-Alba. In the Senate, three bills (Senate Bill Nos. 35, 741 and 861) were respectively filed by Senators Loren Legarda, Francis Escudero and Ralph Recto. All are still pending in the Senate Committee on Environment and Natural Resources.

The said bills share the collective objective of conserving, protecting and developing the forest resources of the country through the delineation of specific forest limits. They sought to designate as permanent forest lands: (1) all lands of the public domain already classified as forestland per existing land classification maps issued by the DENR; (2) all permanent forest reserves proclaimed as such by the President or declared by Congress through law; and (3) such areas within the unclassified lands.

A notable provision in the proposed measures is the creation of a National Review and Evaluation Committee (NREC) and the Land Classification Adjudication Board (LCAB). The NREC will process, evaluate, and approve all completed assessment and delineation reports. It shall be headed by the DENR Secretary as Chairperson and the NEDA Secretary as the Vice-Chairperson. Other members of the proposed committee include the secretaries of the Department of the Interior and Local Government Department of Agriculture (DA), and Department of Agrarian Reform (DAR); the chairpersons of the Housing and Urban Development Coordinating Council (HUDCC) and the National Commission on Indigenous Peoples (NCIP). The inclusion of the NCIP in the NREC is crucial and is in recognition of the rights of the Indigenous Cultural Communities/Indigenous Peoples and Tenured Migrants.

On the other hand, the LCAB will have the Secretary of the Department of Justice(DOJ) as its Chairperson. The rest of the board will be composed of the Administrator of the Land Registration Authority (LRA) and representatives from the Integrated Bar of the Philippines, from a reputable College of Forestry, and from the private sector. The LCAB will have the primary task of resolving and addressing conflicts and controversies arising from land classification as a result of the delineation of forest lands. The LCAB is meant to fast track the resolution of the said land-related cases which often take a long time to be resolved if filed in ordinary courts. In 2013 Land Governance the Assessment Framework (LGAF) study of the World Bank, for instance, it was revealed that in more than 90 percent of the land cases filed in the Supreme Court, it took more than 20 years for them to be resolved with finality.

The proposed bills are relevant and complementary to the proposed National Land Use Act (NALUA) and Land Administration Reform Act (LARA), which were also filed in the 17th Congress. If enacted into law, they will serve as guide in the determination of the extent and appropriate use of the country's forest lands.

It must be noted though that a law is only good as its implementation. As such, oversight by the relevant Committees in the Senate and in the House of Representatives, and the active engagement of concerned environmental groups, LGUs, civil society organizations (CSOs), private sector and other stakeholders are crucial in ensuring the implementation of the law.

Intensified information and advocacy campaigns on existing and future environmental issues and regulations should likewise be conducted, especially in local communities. Educating the public on the importance of healthy ecosystems would allow local residents to act as effective" social fences" in the country's forests and be land managers without requiring many forest rangers to oversee the whole ecosystem.

### References

- An Act Providing for the Delineation of the Specific Forest Limits of the Public Domain and for Other Purposes. Senate Bill No. 741. 17<sup>th</sup> Congress. (2016).
- An Act Providing for the Delineation of the Specific Forest Limits of the Public Domain and for Other Purposes. Senate Bill No. 35. 17<sup>th</sup> Congress. (2016).
- An Act Providing for The Delineation of the Specific Forest Limits of the Public Domain. House Bill No. 143. 17th
- An Act Providing for the Delineation of the Specific Forest Limits of the Public Domain and for other Purposes. House Bill No. 03486. 17<sup>th</sup> Congress. (2016).
- An Act Providing for the Demarcation and Delineation of Forest Land Limits, Appropriating the Necessary Funds Therefor, and for other Purposes. House Bill No. 5945. 17<sup>th</sup> Congress. (2017)
- Asian NGO Coalition for Agrarian Reform and Rural Development (ANGOC). (2017). Status of tenure reform in public lands under the Comprehensive Agrarian Reform Program. Retrieved from http://ilc-nes.ph/wp-content/uploads/2017/10/5-Status-of-tenure-reform-in-public-lands-under-the-Comprehensive-Agrarian-Reform-Program.pdf
- Congressional Policy and Budget Research Department (CPBRD). (2012). Delineation of Specific Forest Limits. Retrieved from http://cpbrd.congress.gov.ph/resources/2014-02-03-09-52-57/173-17th-congress-legislative-agenda-tracker/agenda-and-briefers/804-delineation-of-specific-forest-limits
- DENR. (2000). Guidelines for the Implementation of CY 2000 Banner Program Delineation and Establishment of Permanent Forestland Boundaries. (Administrative Order No. 2000-24.)
- DENR. (2008) Revised Implementing Rules and Regulations of Republic Act No. 7586 or the National Integrated Protected Areas System Act of 1992. (Administrative Order No. 2008-24.)
- DENR. (2012, August 23). Completes Delineation of Forest Line Boundaries. (Press Release).
- DENR. (2014). Project Completion Report: Forestland Boundary Delineation Assessment Project.
- De Vera, D. E. (2007). Indigenous Peoples in the Philippines: A Country Case Study. *A paper presented at the RNIP Regional Assembly Hanoi, Vietnam August 20-26, 2007.*
- Fortenbacher, D., & Alave, K. (2014). Upland Agriculture in the Philippines. Manila Philippines: *Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH*.
- Forest Management Bureau. (2016). Philippine Forestry Statistics
- Forest Management Bureau. (2016). Philippine Forests at a Glance.
- Llanto, Gilbert and Ballesteros, Marife. (2003). Land issues in poverty reduction strategies and the development agenda: Philippines. *Philippine Institute for Development Studies Discussion Paper Series No. 2003-03.*
- National Economic and Development Authority. (2016). Philippine Development Plan (PDP) 2017-2022. Pasig City.
- Philippine Statistics Authority. (2011). *Philippine Yearbook 2011: Forestry an Environmental Management*. Retrieved from https://psa.gov.ph/sites/default/files/2011PY\_Forestry%20and %20Environmental%20Management.pdf
- Sustainable Ecosystems International Corporation, Madecor and Dessorollo International, Inc. (2002). Forest Boundary Delineation Policy Studies.
- World Bank. (2013). Land Governance Assessment Framework: Implementation Manual for Assessing Governance in the Land Sector.

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