



S E N A T E

S. No. 2439

(In Substitution of S. Nos. 9, 1914, and 2041, taking into
consideration H. No. 8443)

PREPARED AND SUBMITTED JOINTLY BY THE COMMITTEE ON
ECONOMIC AFFAIRS (UPON RECOMMENDATION OF ITS
SUB-COMMITTEE ON PENCAS LAW AND BLUE
ECONOMY); COMMITTEES ON ENVIRONMENT, NATURAL
RESOURCES AND CLIMATE CHANGE; AND FINANCE WITH
SENATORS LEGARDA, REVILLA, JR., VILLANUEVA, AND
HONTIVEROS AS AUTHORS THEREOF

AN ACT INSTITUTIONALIZING THE PHILIPPINE
ECOSYSTEM AND NATURAL CAPITAL
ACCOUNTING SYSTEM, MANDATING ITS USE IN
POLICY AND DECISION-MAKING, DESIGNATING
THE AGENCIES RESPONSIBLE FOR ITS
IMPLEMENTATION, PROVIDING INSTITUTIONAL
ARRANGEMENTS AMONG RESPONSIBLE
AGENCIES, AND APPROPRIATING FUNDS
THEREFOR

*Be it enacted by the Senate and House of Representatives of
the Philippines in Congress assembled:*

- 1 SECTION 1. *Short Title.* – This Act shall be known as
2 the “Philippine Ecosystem and Natural Capital Accounting
3 System (PENCAS) Act”.

1 SEC. 2. *Declaration of Policy.* – It is hereby declared
2 the policy of the State to:

3 (a) Recognize natural ecosystems as an integral part
4 of our patrimony and heritage;

5 (b) Protect and promote ecological balance and
6 resilience, and advance the right of the people to live in
7 harmony with nature;

8 (c) Adhere to internationally accepted System of
9 Environmental-Economic Accounting (SEEA) that
10 measures and monitors the dynamic interaction and
11 intersections of the environment, economy and society;

12 (d) Develop a comprehensive information system
13 and accounting framework that will take into consideration
14 the role of our natural capital, consisting of both
15 environmental and natural resources including ecosystem
16 services, and its impact on the economy;

17 (e) Compile and progressively integrate natural
18 capital accounts in macroeconomic indicators,
19 strengthening and building on Republic Act No. 10625,
20 otherwise known as the “Philippine Statistical Act of

1 2013”, which mandates the compilation of national
2 accounts, including environmental accounts, statistics, and
3 indicators;

4 (f) Provide indicators that will facilitate the
5 integration of environmental and natural resource
6 concerns in planning and policymaking at the national and
7 subnational levels, in allocating budgets, and in
8 designating statistics that will be produced regularly for an
9 identified period of analysis;

10 (g) Establish and improve interagency coordination
11 for the purpose of linking natural capital information as
12 well as efficient data management among concerned
13 agencies and their partner institutions, and establish an
14 office to guide such coordination; and

15 (h) Understand nature’s pricelessness, its heritage
16 and intrinsic value, and its interdependencies in the
17 implementation of the foregoing policies to consider that
18 nature and ecosystems have inherent rights to exist, with
19 an end view of recognizing legal rights that serve to protect
20 endangered ecosystems and applying the precautionary

1 principle, especially when economic values cannot be
2 estimated.

3 SEC. 3. *Definition of Terms.* – As used in this Act:

4 (a) *Adjusted net savings* refers to the sum of the net
5 national savings and education expenditure, and deduct
6 natural resources such as energy, minerals, forest, water,
7 soil, inland wetlands, coastal and marine areas, and
8 fisheries, depletion, and greenhouse gas emissions and
9 pollution damage;

10 (b) *Ecosystem* refers to all living things in a given
11 area, as well as their interactions with each other, and
12 with their non-living environments (weather, earth, sun,
13 soil, climate, atmosphere, water, etc.);

14 (c) *Ecosystem accounting* refers to a coherent
15 framework for integrating measures of ecosystems and
16 flows of services from them with measures of economic and
17 other human activity;

18 (d) *Ecosystem services* refer to the benefits supplied
19 by the functions of ecosystems and received by humanity
20 and all elements of living systems, which support life

1 systems on the planet. Ecosystem services consist of
2 provisioning services, regulating and maintenance
3 services, and cultural services;

4 (e) *Environmental indicators* are environment
5 statistics that have been selected for their ability to depict
6 important phenomena or dynamics. Environmental
7 indicators are used to synthesize and present complex
8 environment and other statistics in a simple, direct, clear
9 and relevant way;

10 (f) *Natural capital* refers to the stock of renewable
11 and non-renewable resources, including plants, animals,
12 air, water, soils, ores, and minerals, that provide a flow of
13 benefits to people and living things. Natural capital
14 includes, but is not limited to, ecosystem services such as
15 air and water filtration, flood protection, carbon
16 sequestration, pollination of crops, and habitats for
17 wildlife;

18 (g) *Natural Capital Accounting (NCA)* refers to an
19 accounting framework that provides a systematic way of
20 measuring and reporting on stocks and flows of natural

1 capital. NCA covers accounting for individual
2 environmental assets or natural resources, both biotic and
3 abiotic such as water, ores, minerals, energy, timber, and
4 fish, as well as accounting for ecosystem assets,
5 biodiversity, and ecosystem services;

6 (h) *System of Environmental-Economic Accounting*
7 (*SEEA*) refers to a framework that integrates both
8 economic and environmental data to provide a more
9 comprehensive and multipurpose view of the
10 interrelationships among the economy, the environment
11 and ecosystems, and the stocks and changes in stocks of
12 natural assets, as they bring benefits to humanity; and

13 (i) *Valuation* refers to determining the value or
14 worth, in both physical and economic terms, of natural
15 capital and the services it provides at national and
16 subnational levels.

17 SEC. 4. *Philippine Ecosystem and Natural Capital*
18 *Accounting System.* – The Philippine Ecosystem and
19 Natural Capital Accounting System (PENCAS) is hereby
20 institutionalized within the government bureaucracy. The

1 PENCAS shall be based on internationally accepted
2 environmental-economic accounting frameworks. The
3 PENCAS framework shall include, among others, a list of
4 the officially designated statistics on the depletion,
5 degradation, and restoration of natural capital;
6 environmental protection expenditures; pollution and
7 quality of land, air and water; environmental damages;
8 and adjusted net savings.

9 SEC. 5. *Objectives of the PENCAS.* – The PENCAS
10 shall have the following major objectives:

11 (a) Support economic, environmental, and health
12 policy development and decision-making;

13 (b) Provide a system for the collection, compilation,
14 and development of physical and natural capital accounts
15 in the government as a tool for physical and development
16 planning and programming, policy analysis, and
17 decision-making;

18 (c) Serve as a comprehensive data framework in the
19 generation of natural capital statistics and accounts

1 towards their progressive integration in macroeconomic
2 indicators;

3 (d) Provide tools and measures that contribute to the
4 protection, conservation, and restoration of ecosystems;
5 and

6 (e) Provide valuation of ecosystem services such as
7 provisioning, regulating and maintenance, and cultural
8 services.

9 SEC. 6. *Institutional Arrangement for the*
10 *Implementation of PENCAS.* – To ensure the effective
11 implementation of PENCAS, the following bodies shall be
12 tapped:

13 (a) The Philippine Statistics Authority (PSA) Board
14 shall oversee the implementation of PENCAS.

15 (b) The PSA Board shall direct the relevant
16 interagency committees created under Section 10 of Republic
17 Act No. 10625 to assist the PSA in addressing agency and
18 sectoral concerns that may arise in the development of
19 natural capital accounts, particularly on the (1) techniques
20 and methodologies in generating environment and natural

1 resources statistics; (2) areas of duplication, discrepancies,
2 and gaps; and (3) workable schemes for the improvement of
3 data systems of accounts including production, dissemination
4 and archiving of data and information.

5 The Interagency Committee on Environment and
6 Natural Resources Statistics (IACENRS) shall provide
7 support in ensuring that data requirements for NCA are
8 being generated by all concerned agencies. It shall adopt,
9 implement, and update an NCA Roadmap that will (1) guide
10 short-term, medium-term, and long-term activities for
11 natural capital accounts development; and (2) prioritize areas
12 for budget support and monitoring and evaluation of NCA
13 implementation in the country.

14 (c) A Technical Working Group (TWG) on NCA shall
15 be established under the IACENRS. The TWG shall consist of
16 the PSA as lead accounts compiler, the Department of
17 Environment and Natural Resources (DENR) as main data
18 producer, the National Economic and Development Authority
19 (NEDA), and the Department of Agriculture (DA). The PSA
20 shall serve as chair and shall provide secretariat support to

1 the TWG. The TWG shall perform the following roles and
2 responsibilities:

3 (1) Provide immediate support to achieve the priority
4 activities across all components of the NCA Roadmap such as
5 ensuring the inclusion of proposals, through program
6 convergence budgeting to avoid duplication of funding for
7 similar program, activity, or project for PENCAS, by the
8 implementing agencies for budgetary or financial and
9 technical support and collaborating with development
10 partners for project preparation and implementation;

11 (2) Serve as a forum for discussion and resolution of
12 issues and concerns in the compilation, processing, and
13 dissemination of natural capital and ecosystem statistics and
14 accounts and other related indicators in terms of accuracy,
15 completeness, timeliness, and relevance;

16 (3) Review and recommend enhancements on the
17 concepts, techniques, and methodologies used in the
18 collection, processing, and reporting of natural capital and
19 ecosystem statistics and accounts to ensure conformity with
20 the prescribed statistical standards and classification system;

1 (4) Identify and recommend statistical measures,
2 strategies, and policies for the improvement of natural capital
3 and ecosystem statistics and accounts to IACENRS;

4 (5) Recommend improvements in the methodology of
5 compiling natural capital and ecosystem statistics and
6 accounts, and formulate measures to ensure that the data
7 requirements of the same are being generated and addressed
8 by all concerned agencies;

9 (6) Prioritize outputs that will address the more
10 urgent statistical requirements in the Philippine Statistical
11 Development Program, including those required to monitor
12 and measure the accomplishment of relevant chapters of the
13 Philippine Development Plan and its Results Matrices, and
14 the Philippines' obligations in multilateral environmental
15 agreements; and

16 (7) Update the PSA Board and the IACENRS on
17 developments in natural capital and ecosystem statistics and
18 accounts.

1 SEC. 7. *Specific Functions of National Government on*
2 *PENCAS.* – The following agencies shall have the following
3 specific roles and responsibilities in the implementation of
4 this Act:

5 (a) The PSA shall have the overall responsibility for
6 the institutionalization and progressive implementation of
7 PENCAS following the SEEA framework. It shall develop
8 and maintain the compilation of natural capital accounts
9 as well as the environmental and ecosystem accounts at
10 the national and, as necessary, at the sub-national levels.
11 It shall coordinate with and provide technical support to
12 interagency committees, task forces, technical working
13 groups, national government agencies, and local
14 government units (LGUs) in the generation, compilation,
15 and use of environmental accounts, statistics, and
16 indicators. In coordination with concerned agencies, it
17 shall designate the required environment and economic
18 statistics in agencies and bureaus responsible for
19 generating data.

1 The PSA shall create a service to be referred to as
2 Environment, Natural Resources and Ecosystem Account
3 Service (ENREAS), under the Sectoral Statistics Office,
4 necessary for the implementation of this Act, subject to the
5 evaluation and approval of the Department of Budget and
6 Management (DBM), and in compliance with the civil
7 service laws, rules, regulations, and guidelines.

8 (b) The DENR shall be responsible for providing
9 NCA data to PSA. The DENR shall ensure the
10 participation of its concerned offices, bureaus, and
11 attached agencies. It shall spearhead the establishment of
12 site-specific ecosystem accounts.

13 In the Environmental Impact Assessment (EIA)
14 System, the DENR shall ensure that the natural
15 environment, ecosystem services, and natural capital are
16 framed as opportunities, benefits, or assets that may be
17 put at risk. The DENR shall ensure the wide availability of
18 frameworks, tools, methods, and skills including, but not
19 limited to, the Extractive Industries Transparency

1 Initiative (EITI), and use of available temporal and spatial
2 NCA data in the conduct of EIA.

3 To perform the foregoing functions, the DENR shall
4 be strengthened through the creation of new plantilla
5 positions, subject to existing laws, rules and regulations.

6 (c) The NEDA, including its regional offices, shall
7 ensure that NCA is included in the national and regional
8 development priorities based on the usefulness of the
9 accounts in policy analysis, development planning, and
10 investment programming. It shall provide strategic
11 guidance on improving uptake on policy use and
12 application, enhancing institutional capacity, and raising
13 awareness and transparency of NCA work.

14 (d) The DA shall assist the PSA in the generation
15 and provision of the NCA information relative to
16 agricultural areas, and fisheries and aquatic resources,
17 and closely coordinate on associated ecosystem NCA with
18 the DENR. The Bureau of Fisheries and Aquatic Resources
19 (BFAR), in line with its mandate, shall provide support in
20 the creation of data and information on fisheries valuation

1 and accounting. The National Fisheries Research and
2 Development Institute (NFRDI) shall continue to conduct
3 research and development activities and studies to support
4 the assessment, including the profiling of the status of fish
5 stocks of the country. The Bureau of Soils and Water
6 Management (BSWM) shall ensure that NCA is considered
7 to ensure soil fertility and hydrological stocks and services.
8 Further, the DA, BFAR, BSWM, and NFRDI shall create
9 national capital units through additional plantilla
10 positions, subject to existing laws, rules and regulations,
11 and approval of the DBM.

12 (e) The Department of the Interior and Local
13 Government (DILG) shall consolidate and submit NCA-
14 related data and statistics from local governments to PSA
15 and DENR. Further, the DILG shall ensure that LGUs
16 utilize and mainstream NCA into their local policies, plans,
17 and programs.

18 (f) The Department of Education (DepEd),
19 Commission on Higher Education (CHED), Technical
20 Education and Skills Development Authority (TESDA),

1 and state universities and colleges (SUCs) shall craft
2 modules in all levels and modalities of basic, technical,
3 vocational, and higher education to capacitate the citizenry
4 to avail of participatory mechanisms in relation to
5 PENCAS.

6 (g) The Professional Regulation Commission (PRC)
7 shall incorporate NCA concepts in the continuing
8 professional education programs and develop the
9 understanding of the impact of different professions on the
10 environment.

11 (h) The Department of Finance (DOF) shall
12 integrate NCA considerations into fiscal policies and
13 regulations, and develop incentive mechanisms that will
14 drive NCA investments.

15 (i) The Department of Energy (DOE) and
16 Department of Human Settlements and Urban
17 Development (DHSUD) shall integrate NCA considerations
18 into the performance of their mandate, and ensure that its
19 planning and decision-making consider natural capital.

1 SEC. 8. *Participation of Specific Bureaus Within the*
2 *Agencies.* – The following offices shall contribute to the
3 collection, generation, analysis and presentation of
4 statistics and data requirements of the PENCAS:

5 (a) All bureaus of the DENR, and the National
6 Mapping and Resource Information Authority (NAMRIA);

7 (b) National Water Regulatory Board (NWRB);

8 (c) The bureaus of the DA, especially the BFAR, the
9 BSWM, Philippine Fisheries Development Authority
10 (PFDA), Philippine Rice Research Institute (PRRI),
11 National Irrigation Administration (NIA), and the
12 Philippine Coconut Authority (PCA);

13 (d) National Renewable Energy Board (NREB);

14 (e) Research and development institutes, and
15 science and technology services, especially the Philippine
16 Atmospheric, Geophysical and Astronomical Services
17 Administration (PAGASA) and the Philippine Institute of
18 Volcanology and Seismology (PHIVOLCS) of the
19 Department of Science and Technology (DOST); and

20 (f) Other bureaus, as necessary.

1 SEC. 9. *Involvement of Other Stakeholders.* – The
2 TWG on NCA shall involve other relevant agencies, private
3 sector, and nongovernment organizations, including
4 indigenous peoples and local communities, in the
5 implementation of PENCAS, particularly on the generation
6 and provision of NCA data as well as the use of natural
7 capital and ecosystem accounts.

8 Subject to the implementing rules and regulations of
9 this Act and national security concerns, all stakeholders
10 shall regularly publish NCA information on their website
11 and/or such other medium deemed appropriate.

12 SEC. 10. *Applicability of Other Laws.* – For purposes
13 of implementing the provisions of this Act, penalties
14 provided in Republic Act No. 9485 or the “Anti-Red Tape
15 Act of 2007”, as amended by Republic Act No. 11032 or the
16 “Ease of Doing Business and Efficient Government Service
17 Delivery Act of 2018”, and Republic Act No. 10625 or the
18 “Philippine Statistical Act of 2013”, shall apply.

1 SEC. 11. *Participatory Mechanisms and Citizen*
2 *Remedies.* – The concerned agencies shall institute
3 consultative mechanisms, and mass collaboration
4 measures to effectively popularize PENCAS and ensure
5 wide comprehensibility and usage of the accounts.

6 Any citizen shall have the right to information on any
7 account generated under this Act, to have the standing to
8 compel the performance of any of the mandates under this
9 Act, and to seek justification from any government agency
10 that may have ignored or neglected PENCAS accounts and
11 indicators in their policy or decision-making. Major
12 PENCAS accounts, results on nature’s wealth and the
13 economic value of ecosystem services, and loss and damage
14 associated with disasters or climate change, shall be
15 released along with all releases of national economic data,
16 such as Gross National Income (GNI), Gross Domestic
17 Product (GDP), and other often-released measures of the
18 state of the country’s economic health and highlight the
19 contribution of resources and ecosystems to the economy,
20 incomes and employment.

1 SEC. 12. *Rights of Nature.* – Nothing in this Act shall
2 be construed to mean that nature has no inherent and
3 intrinsic value separate and distinct from its economic
4 value.

5 The maintenance of nature’s vital cycles, functions,
6 and processes ensures the sustainability and health of
7 natural ecosystems. This is in recognition of the fact that
8 there are limits to the ability of these natural ecosystems
9 to regenerate and that human development that alters or
10 affects them must be sustainable and must allow for their
11 renewal and restoration.

12 SEC. 13. *Appropriations.* – The amount necessary to
13 cover the initial implementation of this Act shall be
14 charged against the current year’s appropriations of the
15 departments or agencies concerned. Thereafter, the
16 amount necessary for its continued implementation shall
17 be included in the respective budgets of the departments
18 and agencies concerned in the annual General
19 Appropriations Act.

1 SEC. 14. *Implementing Rules and Regulations.* –

2 Within one (1) year from the effectivity of this Act, the PSA
3 shall constitute an interagency working group, composed of
4 the agencies and offices enumerated under Sections 6 and
5 7 of this Act, to issue the rules and regulations necessary
6 for the effective implementation of this Act.

7 The relevant agencies shall integrate internationally
8 recognized best practices and methodologies as they
9 execute and implement this Act and its rules and
10 regulations, ensuring the progressive integration of the
11 SEEA.

12 The implementing rules and regulations of this Act
13 shall include the timeframe, manner and such other details
14 regarding the collection, renewal, and review of NCA data
15 by government agencies and other stakeholders.

16 SEC. 15. *Separability Clause.* – If any provision of this
17 Act is declared unconstitutional or otherwise invalid, the
18 validity of the other provisions shall not be affected
19 thereby.

1 SEC. 16. *Repealing Clause.* – All laws, decrees, orders,
2 rules and regulations, issuances, or parts thereof
3 inconsistent with the provisions of this Act are hereby
4 repealed or modified accordingly.

5 SEC. 17. *Effectivity.* – This Act shall take effect fifteen
6 (15) days after its publication in the *Official Gazette* or in a
7 newspaper of general circulation.

Approved,