



# PSDP

**PHILIPPINE STATISTICAL  
DEVELOPMENT PROGRAM**  
**2011-2017 Strategic Plan**



Republika ng Pilipinas  
PAMBANSANG LUPON SA UGNAYANG PANG-ESTADISTIKA  
(NATIONAL STATISTICAL COORDINATION BOARD)

# **Philippine Statistical Development Program 2011-2017**



Republika ng Pilipinas  
**PAMBANSANG LUPON SA UGNAYANG PANG-ESTADISTIKA**  
(NATIONAL STATISTICAL COORDINATION BOARD)

**The Philippine Statistical Development Program 2011-2017  
Strategic Plan**

is a publication prepared by the NATIONAL STATISTICAL COORDINATION BOARD (NSCB) in coordination with various agencies and stakeholders in the Philippine Statistical System

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## Foreword

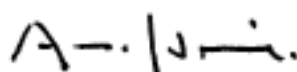
The Philippine Statistical Development Program (PSDP) is a mechanism for setting the directions, thrusts, and strategies of the Philippine Statistical System (PSS) and for defining the priority statistical development programs and activities to be undertaken in the medium term. It is formulated to effect overall development and improvement in the operations of the PSS and address critical information needs of the various stakeholders. It also addresses the data requirements of the Philippine Development Plan and other sectoral development plans, including the country's international commitments, such as the Millennium Development Goals.

Formulated every six years, the PSDP 2011-2017 is the eighth edition of the statistical development program of the PSS, which started way back in the 1970's. As the highest policymaking and coordinating body on statistical matters in the country, the National Statistical Coordination Board (NSCB) and its technical staff spearheaded the formulation of the PSDP 2011-2017 in collaboration with the various interagency and technical committees and ad hoc working groups and with guidance from the PSDP Steering Committee. It is a product of series of consultations with the various stakeholders, such as the major statistical agencies (MSAs), national government agencies (NGAs), local government units (LGUs), academe, private sector, and other data users, at the national and local levels.

This publication, the **PSDP 2011-2017 Volume 1—Strategic Plan**, contains the strategic planning framework and the major statistical development programs to be undertaken in 2013-2017, which are presented in 23 chapters covering PSS-wide concerns and various sectoral statistics. Each chapter provides the scope and coverage of the relevant sector, the key statistical developments during the previous Plan period, 2005-2010, the statistical activities that have been implemented or completed in 2011, and those activities that agencies have committed to undertake in 2012 as part of their approved plans and budget. There is also a discussion of the key issues and challenges in the sector and the major strategies and programs that are identified to address them. The PSDP 2011-2017 Volume 2 – Implementation Plan, which contains the specific statistical activities under the major programs and the indicative budgetary requirements, and a medium-term expenditure framework (MTEF) for the PSS are also being prepared to provide basis of the annual budgetary requirements of the government statistical service.

The NSCB is grateful to all the agencies, entities, and individuals who provided inputs and participated in the PSDP formulation. The NSCB also thanks the World Bank for its continuing assistance to the PSS and in particular for providing funding support in the preparation of the PSDP 2011-2017 under the *Trust Fund for Statistical Capacity Building (TFSCB) Grant for the Project on Improving the Formulation of the Philippine Statistical Development Program* (TFSCB Grant No. TF097735).

With the approval and endorsement of the **PSDP 2011-2017 Strategic Plan** by the NSCB Executive Board and the proclamation for its adoption by His Excellency Benigno Aquino III, we believe that MSAs, NGAs and LGUs will be better guided in the design and implementation of statistical development activities towards the production and dissemination of good quality statistics for policy analysis and formulation, planning and programming, decisionmaking, and monitoring and evaluation. More importantly, we hope that the entire government will provide the necessary investment and resources to effectively implement the various interventions identified to strengthen the capacity of institutions and human resources towards achieving the vision and goals of the PSS.



**ARSENIO M. BALISACAN**  
Secretary of Socioeconomic Planning  
and Chairman, NSCB

# Acknowledgments

The PSDP 2001-2017 is the eighth edition to be formulated for the PSS. Since 1976, the PSS, spearheaded by then Statistical Coordination Office of the National Economic and Development Authority and by the National Statistical Coordination Board (NSCB) starting 1987, has been conducting medium-term programming of activities to set the directions, thrusts, and priorities of the PSS towards integrating the statistical activities of the government. Over the years, the PSDP has become an important component of the national development agenda. The PSDP has been an essential and indispensable tool for evidence-based decisionmaking and policy formulation by various stakeholders.

Long before the international development community finally recognized the importance of having national statistical plans to develop the capacity of national statistical systems, the PSS has been crafting our very own PSDP. Recently, the Partnership in Statistics for Development in the 21st Century (PARIS21) and other development agencies such as the World Bank have started to advocate the design, implementation, and monitoring of National Strategies for the Development of Statistics (NSDS), the equivalent of our PSDP. We are now into our eighth version of the PSDP while most countries are just coming up with their first, or with their first update.

Compared to the previous PSDPs, the latest version has improved in terms of content and formulation process. It has benefited from more inclusive and wider consultations among government and private sector (national, regional/local, and multi-sectoral) as well as assessment and inputs from independent consultants. For this reason, we at the NSCB have a lot of institutions and individuals to acknowledge and recognize for their invaluable contribution and support.

We thank the members and secretariat of the sectoral interagency and technical committees and ad hoc working groups who participated in the series of discussions, provided inputs, and contributed in the drafting, review, and validation of the various PSDP chapters. These members represent the major statistical agencies, national government agencies, local government units, academic and research institutions, the private sector, civil society organizations, and dedicated individuals and friends of the PSS at the national and local levels. Special thanks are extended to the chairs and co-chairs of these interagency bodies and their staff for their proactive leadership in the entire preparation process.


We acknowledge and appreciate the views and suggestions of all institutions and individuals, especially the invited eminent resource persons and discussants, that actively participated and provided insights during the various PSDP consultative workshops at the national level and in Luzon, the Visayas, and Mindanao. Further, we recognize the contribution of the Regional Statistical Coordination Committees.

We truly appreciate the continued commitment and support of the World Bank for funding the project under its Trust Fund for Statistical Capacity Building Facility. We are especially thankful to Dr. Karl Kendrick T. Chua, Country Economist, Poverty Reduction and Economic Management Unit, World Bank Philippines, for his useful advice and encouragement. We also thank the consultants led by Mr. Andrew Flatt for providing expert advice in the improvement of the strategic plan and the different chapters, Mr. John Frederick de Guia for assisting in all aspects of the formulation process, from strategic planning and stakeholder consultations to drafting, review, editing, and integration of the PSDP, and Dr. Lisa Grace Bersales, Dr. Isidoro David, Dr. Honesto Nuqui for their comments, suggestions, and expert advice in specific chapters.

We are grateful to the members of the PSDP Steering Committee for spearheading the formulation of the strategic framework and for providing guidance and advice in the preparation of the various chapters. We appreciate the directions and views of the distinguished members of the Board in the finalization and approval of the PSDP, and endorsement of the same to the Office of the President for proclamation.

We especially thank Dr. Romulo A. Virola, former Secretary General of NSCB, for his selfless dedication and genuine concern for the PSS, for providing guidance, mentoring, and advice to the NSCB Technical Staff, and for leading NSCB and the PSS through odds and challenges to become well-respected statistical organizations and public service institutions for the greater good of the Filipino people.

We sincerely hope that our government will muster genuine political will to recognize the importance of statistics in good governance and in the attainment of the nation's development goals and thus provide the necessary policy and investment support for the implementation of the statistical development programs in the PSDP 2011-2017. We further hope that this PSDP will not suffer the same fate as the 2005-2010 version where the lack of resources resulted in the non-implementation or delayed implementation of critical statistical development programs.



LINA V. CASTRO

Officer-in-Charge  
Office of the Secretary General  
National Statistical Coordination Board



Republika ng Pilipinas  
**PAMBANSANG LUPON SA UGNAYANG PANG-ESTADISTIKA**  
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**NSCB Resolution No. 8**  
Series of 2012

**APPROVING AND ENDORSING TO THE OFFICE OF THE PRESIDENT  
THE PHILIPPINE STATISTICAL DEVELOPMENT PROGRAM 2011-2017**

**WHEREAS**, Executive Order No. 121 *Reorganizing and Strengthening the Philippine Statistical System and for Other Purposes* provides for the formulation and approval of the Philippine Statistical Development Program (PSDP) by the National Statistical Coordination Board (NSCB);

**WHEREAS**, the PSDP sets the strategic directions, thrusts and priorities of the Philippine Statistical System (PSS) in the medium term to provide vital information support to national, sectoral and local development plans, and international commitments;

**WHEREAS**, the PSDP provides the necessary framework for the development, generation, and dissemination of statistics and indicators needed in evidence-based policies, plans, and decisions of government and other key stakeholders and data users at the local and national levels;

**WHEREAS**, the PSDP 2011-2017 envisions "a responsive, effective and efficient PSS that provides quality statistics for evidence-based decisions towards the attainment of the development goals of the nation;"

**WHEREAS**, the PSDP 2011-2017 takes into consideration the key information requirements of the Philippine Development Plan 2011-2016 and the Millennium Development Goals as well as other essential data needs of government, business, and society;

**WHEREAS**, the PSDP 2011-2017 adheres to the Fundamental Principles of Official Statistics, the Dakar Declaration on the Development of Statistics, the Busan Action Plan on Statistics, and PARIS21's "Guide to Designing National Strategies for the Development of Statistics;"

**WHEREAS**, the PSDP 2011-2017 is comprised of: (a) the strategic plan (PSDP Volume 1) which defines the strategic framework and identifies the major statistical development programs; (b) the implementation plan (PSDP Volume 2) which outlines the specific statistical activities to be undertaken by government, the outputs, timeline and necessary multi-year budget requirements; and (c) the medium-term expenditure framework (MTEF) which sets the necessary resource requirements of the PSS and recommends rational, effective and efficient strategies for sustained investment in statistics;

**WHEREAS**, the NSCB, as the highest policymaking and coordinating body on statistical matters in the country, spearheaded the formulation of the PSDP 2011-2017 through an interagency PSDP Steering Committee, with representation from the government, the private sector, and the academe, and with funding assistance from the World Bank;

**WHEREAS**, the existing NSCB technical committees, interagency committees, task forces, and technical working groups, and regional statistical coordination committees, as well as ad hoc working groups created for the purpose, carried out the formulation of PSDP sectoral plans;

**WHEREAS**, the PSDP 2011-2017 strategic framework, which defines the vision, goals, and strategic thrusts, and the major statistical programs of the PSS were approved by the PSDP Steering Committee on 14 October 2011;

**WHEREAS**, the PSDP 2011-2017 Strategic Plan was subjected to a series of sectoral, regional, and national consultations with stakeholders and other data users from July 2011 to February 2012;

**NOW, THEREFORE, BE IT RESOLVED AS IT IS HEREBY RESOLVED**, that the Board approve the PSDP 2011-2017 Strategic Plan and endorse the same to the Office of the President for issuance of a Proclamation (Annex BR-08-20120601-01) enjoining its adoption and implementation by concerned government departments/agencies;


**BE IT RESOLVED FURTHER**, that the Board:

- 1) enjoin all agencies in the PSS to cooperate in the preparation and execution of the PSDP 2011-2017 Implementation Plan;
- 2) direct the NSCB Technical Staff to formulate the MTEF for the PSS in coordination with the Department of Budget and Management and major statistical agencies and key departments; and
- 3) task the NSCB Technical Staff to disseminate and communicate the PSDP 2011-2017 to all stakeholders in government, the private sector and academe and to periodically monitor and evaluate its implementation;

**RESOLVED FURTHER** that the MTEF and PSDP 2011-2017 Implementation Plan shall be submitted to the NSCB Executive Board for endorsement to the Office of the President for approval.

Approved this 1st day of June 2012, in Pasig City.

Attested by:

  
**ROMULO A. VIROLA** *asc*  
Secretary General *na*  
*g* *h*

## About the publication/guide to users

Executive Order 121, signed on 1 October 1987, mandates the Philippine Statistical System (PSS) to formulate a comprehensive statistical program that will address the information requirements of the country's national development plan as well as provide for activities that will promote the development of an efficient statistical system to ensure reliability, relevance, quality, and accessibility of information generated. The Philippine Statistical Development Program (PSDP) 2011-2017 outlines the statistical programs as well as the corresponding budgets required to finance the statistical activities of the PSS in the medium term. It embodies the statistical thrusts and strategies towards strengthening and improving the operations of the PSS and in developing sectoral statistics in the country.

The PSDP 2011-2017 was prepared by the various interagency sectoral and subject-matter committees and working groups under the overall guidance of the interagency PSDP Steering Committee that was created by NSCB through Resolution No. Series of 2010 and with technical and secretariat support from the NSCB technical staff.

The PSDP 2011-2017 is comprised of the strategic plan (PSDP Volume 1) which defines the strategic framework and identifies the major statistical development programs, the implementation plan (PSDP Volume 2) which outlines the specific statistical activities to be undertaken by government, the outputs, timeline and necessary multi-year budget requirements, and the medium-term expenditure framework which recommends the necessary resource requirements of the PSS.

PSDP 2011-2017 Volume 1 presents the vision, goals, and strategic thrusts and priorities of the PSS, a timeline of some key developments in the PSS from 2005 to 2011, key issues and challenges, and 23 chapters grouped into 7 clusters that loosely parallel those of the PDP, namely, Cluster 1–PSS-wide concerns, Cluster 2–Macroeconomy and finance, Cluster 3–Agriculture, industry, and services, Cluster 4–Infrastructure development, Cluster 5–Social development, Cluster 6–Environment and technology, and Cluster 7–Governance, peace, and security.

Each chapter has four sections—an introduction, scope and coverage, situational analysis, and major statistical programs. The introduction briefly describes the sector, its role in the overall development agenda, and the policy framework that needs to be measured or monitored. The scope and coverage section describes the statistical framework or the relevant areas for which data is to be developed or produced, and key statistics and indicators. The situational analysis gives an idea of the current data system—the institutions, their respective statistical responsibilities, and statistics currently being produced. It also looks back at the key or significant statistical developments in the sector during the Plan period 2005-2010 and in 2011 and discusses the issues and challenges that need to be addressed by the PSS. The section on statistical programs identifies the general strategies and programs that are meant to address the key issues and challenges in the sector presented according to the major goals or outcomes of the PSS.

The Appendix describes the formulation process and provides a listing of the planning committees, working groups, institutions, and individuals involved in the PSDP.

The PSDP 2011-2017 is available in print and on CD. It is also accessible on the internet through the NSCB website: [www.nscb.gov.ph/pss/psdp](http://www.nscb.gov.ph/pss/psdp). The print version can be copied at the National Statistical Information Center located at the G/F Midland Buendia Bldg., 403 Sen. Gil Puyat Ave., Makati City, Philippines.

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## Executive summary

The PSDP 2011-2017 represents the convergence of stakeholders in the Philippine Statistical System (PSS) towards the production and delivery of timely, relevant, and quality official statistics that is anchored on every Filipino's right to information.

Broadly, the PSDP 2011-2017 envisions the PSS to be responsive, effective, and efficient in providing quality statistics for evidence-based decisions towards the attainment of the nation's development goals. The PSDP serves as a roadmap with strategic guideposts and pegs of desired outcomes that characterize the changes and reforms needed to realize the vision. With strong political support and adequate resources, the PSDP shall facilitate and ensure the production of statistics in aid of good governance towards inclusive growth, reduced poverty, and sustainable progress in the country.

The recent past has been especially challenging for the PSS as demand for statistics continues to grow in quantity and quality while resources made available to the major statistical agencies (MSAs) and key data producers have been on steady decline. The severely depleted statistical workforce and limited budget in most of the major statistical agencies may have delayed by several years the improvement of critical statistics and the development of new ones which if were made available could have contributed to better public policies and services.

Nevertheless, as of 2011 the Philippines ranks first among 21 East Asia and Pacific countries and among eight ASEAN member states in the World Bank's Country Statistical Capacity Database with a high statistical capacity rating of 89 percent. The country has also tied for seventh to tenth places among the 144 developing countries in the same database. The ranking, which is based on combined ratings in terms of statistical methodologies adopted, adequacy and comprehensiveness of source data, and periodicity and timeliness of statistical information, is a broad indication of the high level of statistical development of the country.

This assessment is not without basis as there were some significant developments during the period 2005-2011. Compilation of poverty statistics has improved anew and expanded to produce estimates at municipality level and for the basic sectors despite the extremely meager human resources. The Philippine System of National Accounts series has been rebased from 1985 to 2000 and revised to consider new developments, updated data, and methodological changes, including the 1993/2008 SNA recommendations. It has been a long time coming for the PSNA update but not before many of the more experienced national accounts statisticians have left. Meanwhile, major statistical activities have pushed through even if a few have experienced cuts or delays in funding. The PSS has conducted censuses of population, housing, business, and industries and periodic surveys of family income and expenditure, poverty, labor force, health, education, energy, prices, business and industries, agriculture, and fishery. New surveys have been introduced such as those on family health, tourism, business and consumer expectations, and innovation. Technology has made its way in basic data collection through handheld computers and mobile phones and in dissemination through interactive websites, online databases, and geographic information systems. Coordinated and comprehensive data and microdata documentation and archiving have been initiated.

Most notable however is the improved accessibility of official statistics in recent years which may have been a direct result of the conscious decision and motivated action of the MSAs to proactively disseminate and communicate their statistical products and services to the public. Towards the end of the period 2005-2010 until 2011, the MSAs have significantly increased the quantity, variety, and expanse of statistics available and accessible on their websites inviting more data requests, pagehits, and downloads from users of all walks of life, the growing Filipino netizens included. With media appreciation of statistics on a long time high, data releases, statistical events, and government statisticians have earned more than a fair share in print and broadcast media and the internet thrusting official statistics greater and further into public attention and consciousness.

Challenges remain though and new ones are expected to emerge. There are the persistent gaps in data quality, the lack of data on old and new concerns alike, including the long and much sought-after local-level data, the need for more detailed and comprehensive data, and the clamor for quicker and easier access to statistics. Technology presents many opportunities for improving statistical operations but acquiring and applying it to business processes come with huge costs that currently available resources may simply not be able to cover. Moreover, statistical capacity gaps continue to exist within MSAs but the gap between MSAs and other data producers, especially LGUs, has significantly widened. Meanwhile, statistical policymaking and coordination needs some retooling while statistical research and development requires critical rethinking.

The overall challenge for the PSS however is sustaining its capacity to respond to steadily growing information needs of the primary stakeholders—the government, business sector, and civil society. At present, the PSS is confronted with the reality that it may be at risk of not being able to sustain current supply of statistics let alone make improvements if there are no drastic interventions to address the root cause of its problems, that is, inadequate resources. Data shows that this problem has persisted for so long, consciously or indifferently passed on from administration to administration. In an increasingly globalizing world where information has become a prime mover, government may need to break with tradition, shift its direction, and make the bold decision to invest more in statistics. In particular, it has to arrest and reverse the declining number of government statisticians and human capital for statistics. It simply must provide more funding to produce more relevant and better quality statistics as well as to strengthen coordination, capacity building, and research and development. A medium-term expenditure framework for statistics, which is envisaged to facilitate the attainment of the vision and goals of the PSS, needs to be considered and integrated into the government's expenditure planning and management.

The PSDP 2011-2017 proposes many important strategic measures to improve all aspects of data quality. It aims to produce more relevant statistics, *e.g., governance, security, climate change, environment, weather and climate, disasters, and social protection*, as well as *the poor, basic sectors, and the vulnerable*. It suggests in particular the adoption of core national development indicators as well as the development of appropriate frameworks for better relevance, coherence, and comparability of statistics. It invites greater attention to increasing the effectiveness and efficiency of business processes, *e.g., reducing cost of production and improving productivity*, and to enhancing data quality assurance mechanisms. Administrative data, which has long been hailed as an important alternative to costly survey-based statistics, are given renewed focus in terms of both policy and strategy supported by such high profile programs as the *establishment of an administrative records review and clearance system, generation of data from program registries, and development of the business register*.

Through the PSDP, the PSS shall bring statistics really closer to users. The development of an integrated PSS statistics web portal, establishment of new statistical information centers at the local levels, use of social networking, and more active media partnerships will help make access to statistics quicker and easier. Meanwhile, data and microdata documentation (metadata) will ensure long-term protection and preservation of the country's statistical legacy for future generations.

In terms of organizational development, the PSS must strive to further enhance statistical management and coordination by institutionalizing results-based management, strengthening legal and policy instruments, revitalizing coordination and monitoring mechanisms, and improving stakeholder communication and partnerships. Moreover, the PSS will have to start building a more comprehensive and integrated statistical network that includes all national government agencies as well as local government units in accordance with the essence of Executive Order 121. The creation and posting of at least one government statistician in every municipality in particular will entail massive amount of direct and attendant costs but will surely enrich the country's statistical database that can bear benefits for good governance and development beyond measure.

Furthermore, the PSS should press greater statistical capacity development through institutional building measures and an integrated approach to technical, professional, and career development of statistical human resources not only in the MSAs but across NGAs and LGUs. It should encourage more focused and diligent statistical research and development that truly contributes to data quality improvement, methodological development, and innovation.

Finally, the PSS must take concrete steps to ensure and safeguard the independence of official statistics, to instill greater transparency and accountability in statistical institutions in line with the "Tuwid na Daan" principle through the adoption of a code of ethics and practice, and to strengthen data quality assurance towards increased public trust and hence wider and rational use of official statistics in the country.

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# Acronyms and abbreviations

## National government agencies and other organizations

### A

Air Transportation Office	ATO
Armed Forces of the Philippines	AFP

### B

Bangko Sentral ng Pilipinas	BSP
Board of Investments	BOI
Bureau of Agricultural Statistics	BAS
Bureau of Customs	BOC
Bureau of Fisheries and Aquatic Resources	BFAR
Bureau of Internal Revenue	BIR
Bureau of Labor and Employment Statistics	BLES
Bureau of Research and Standards	BRS
Bureau of Soils and Water Management	BSWM
Bureau of the Treasury	BTr
Bureau of Trade Regulation and Consumer Protection	BTRCP
Bureau of Workers with Special Concerns	BWSC
Business Processing Association of the Philippines	BPAP

### C

Cement Manufacturers Association of the Philippines	CEMAP
Central Luzon State University	CLSU
Chamber of Automotive Manufacturers of the Philippines, Inc.	CAMPI
Civil Aeronautics Board	CAB
Civil Service Commission	CSC
Clark Development Corporation	CDC
Commission on Audit	COA
Commission on Higher Education	CHED
Commission on Human Rights	CHR
Commission on Information and Communications Technology	CICT
Construction Industry Association of the Philippines	CIAP
Coordinating Council of Private Educational Associations	COCOPEA

### D

Department of Agrarian Reform	DAR
Department of Agriculture	DA
Department of Budget and Management	DBM
Department of Education	DepEd
Department of Energy	DOE
Department of Environment and Natural Resources	DENR
Department of Finance	DOF
Department of Foreign Affairs	DFA
Department of Health	DOH
Department of the Interior and Local Government	DILG
Department of Justice	DOJ
Department of Labor and Employment	DOLE
Department of National Defense	DND
Department of Public Works and Highways	DPWH
Department of Science and Technology	DOST
Department of Social Welfare and Development	DSWD
Department of Tourism	DOT
Department of Trade and Industry	DTI
Department of Transportation and Communications	DOTC
Development Academy of the Philippines	DAP

### E

Employees Compensation Commission	ECC
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### F

Fiber Industry Development Authority	FIDA
Food and Nutrition Research Institute	FNRI

### G

Government of the Philippines	GOP
Government Service Insurance System	GSIS

### H

Home Development Mutual Fund	HDMF
Housing and Urban Development Coordinating Council	HUDCC

### L

Labor Coordinating Council	LCC
Land Management Bureau	LMB
Land Transportation Office	LTO

### M

Maritime Industry Authority	MARINA
Mines and Geosciences Bureau	MGB
Mindanao State University – Iligan Institute of Technology	MSU-IIT

### N

National Anti-Poverty Commission	NAPC
National Police Commission	NAPOLCO
	M
National Bureau of Investigation	NBI
National Commission on Culture and the Arts	NCCA
National Capital Region	NCR
National Disaster Risk Reduction and Management Council	NDRRMC
National Economic and Development Authority	NEDA
National Irrigation Administration	NIA
National Nutrition Council	NNC
New People's Army	NPA
National Statistical Coordination Board	NSCB
National Statistics Office	NSO

### O

Office of the Civil Defence	OCD
Overseas Workers Welfare Administration	OWWA

### P

Home Development Mutual Fund	Pag-IBIG
Philippine Association of State Colleges and Universities	PASCU
Pacific Asia Travel Association	PATA
Philippine Council for Health Research and Development	PCHRD
Philippine Commission on Women	PCW
Philippine Drug Enforcement Agency	PDEA
Philippine Development Plan	PDP
Philippine Economic Zone Authority	PEZA
Philippine Health Insurance Corporation	PHIC
Philippine National Police	PNP
Philippine National Railways	PNR
Philippine Overseas Employment Administration	POEA

Professional Regulation Commission	PRC
Philippine Statistical Association	PSA
Philippine Stock Exchange	PSE
Polytechnic University of the Philippines	PUP
Philippine Veterans Affairs Office	PVAO

## R

Retail Industry Association of the Philippines	RIAP
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## S

Subic Bay Metropolitan Authority	SBMA
Supreme Court	SC
Securities and Exchange Commission	SEC
Science Education Institute	SEI
Statistical Research and Training Center	SRTC
Social Security System	SSS

Sugar Regulatory Administration	SRA
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## T

Technical Education and Skills Development Authority	TESDA
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## U

University of the Philippines Los Baños Institute of Statistics	UPLB INSTAT
University of the Philippines National College of Public Administration and Governance	UPNCPAG
University of the Philippines School of Statistics	UPSS
United Nations	UN

## International development partners/ organizations

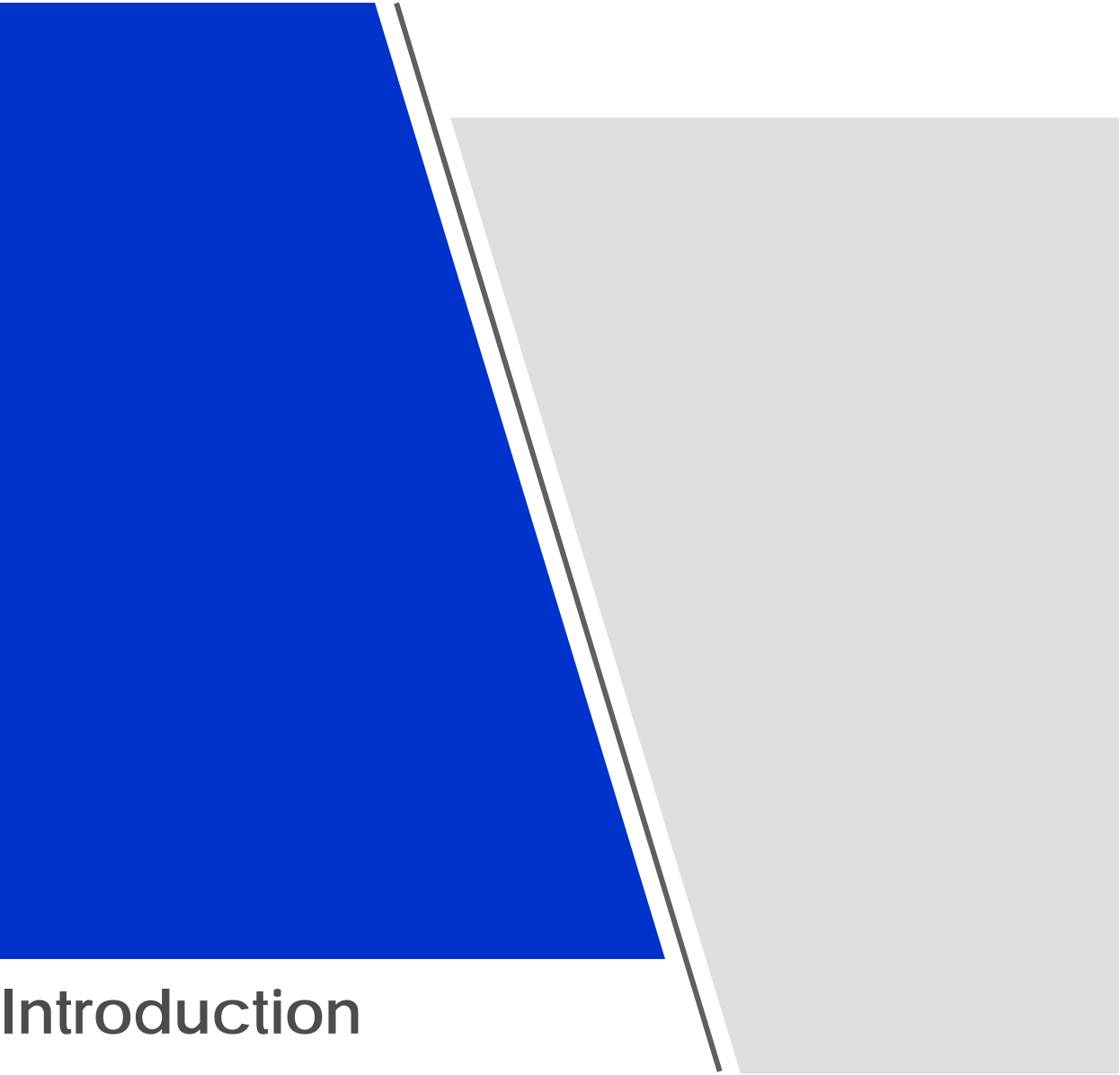
Asia Pacific Economic Cooperation	APEC
Asian Development Bank	ADB
Association of Southeast Asian Nations	ASEAN
European Union	EU
Food and Agriculture Organization	FAO
Institute of Energy Economics Japan	IEEJ
International Labor Organization	ILO
International Monetary Fund	IMF
International Telecommunication Union	ITU
Japan International Cooperation Agency	JICA
Organisation for Economic Cooperation and Development	OECD
Partnership in Statistics for Development in the 21 <sup>st</sup> Century	Paris21
United Nations	UN
United Nations Children's Fund	UNICEF
United Nations Conference on Trade and Development	UNCTAD
United Nations Development Programme	UNDP
United Nations Economic and Social Commission for Asia and the Pacific	UNESCAP
United Nations Educational, Scientific and Cultural Organization	UNESCO
United Nations Statistical Institute for Asia and the Pacific	UNSIAP
United Nations Statistics Commission	UNSC
United Nations Statistics Division	UNSD
United Nations Statistics Division	UNSD
United Nations World Tourism Organization	UNWTO
World Bank	WB

## Others

Areas Outside National Capital Region	AONCR
Administrative Records Review and Clearance System	ARRCS
Data quality assurance framework/system	DQAF/DQAS
Geographic Information System	GIS
Geographic information system	GIS
Geospatial information management	GIM
Government-Owned and Controlled Corporations	GOCCs
Information and communications technology	ICT
Informational, educational and communication	IEC
Local government unit	LGU
Major statistical agency	MSA
Millennium Development Goals	MDGs
National government agency	NGA
Philippine Development Plan	PDP
Really Simple Syndication	RSS
Short message service	SMS
State universities and colleges	SUCs
Statistical Survey Review and Clearance System	SSRCS







Introduction

# Introduction

## The Philippine Statistical System (PSS)

The PSS is the network of government institutions that generates and provides official statistics in the country. Section 3 of Executive Order 121 dated October 1, 1987 defined the PSS as consisting *"of statistical organizations at all administrative levels, the personnel therein and the national statistical program. This includes a policy-making and coordinating body, a statistical research and training center, a single general-purpose statistical agency, all ministries, bureaus, offices, agencies and instrumentalities of the national and local government and all government-owned or controlled corporations and their subsidiaries that are engaged in statistical activities either as their primary functions or as part of their administrative or regulatory functions. The PSS shall remain decentralized with a strong coordination feature to be achieved through closer linkage between statistical programming and budgeting."*

The major statistical agencies in the PSS are the:

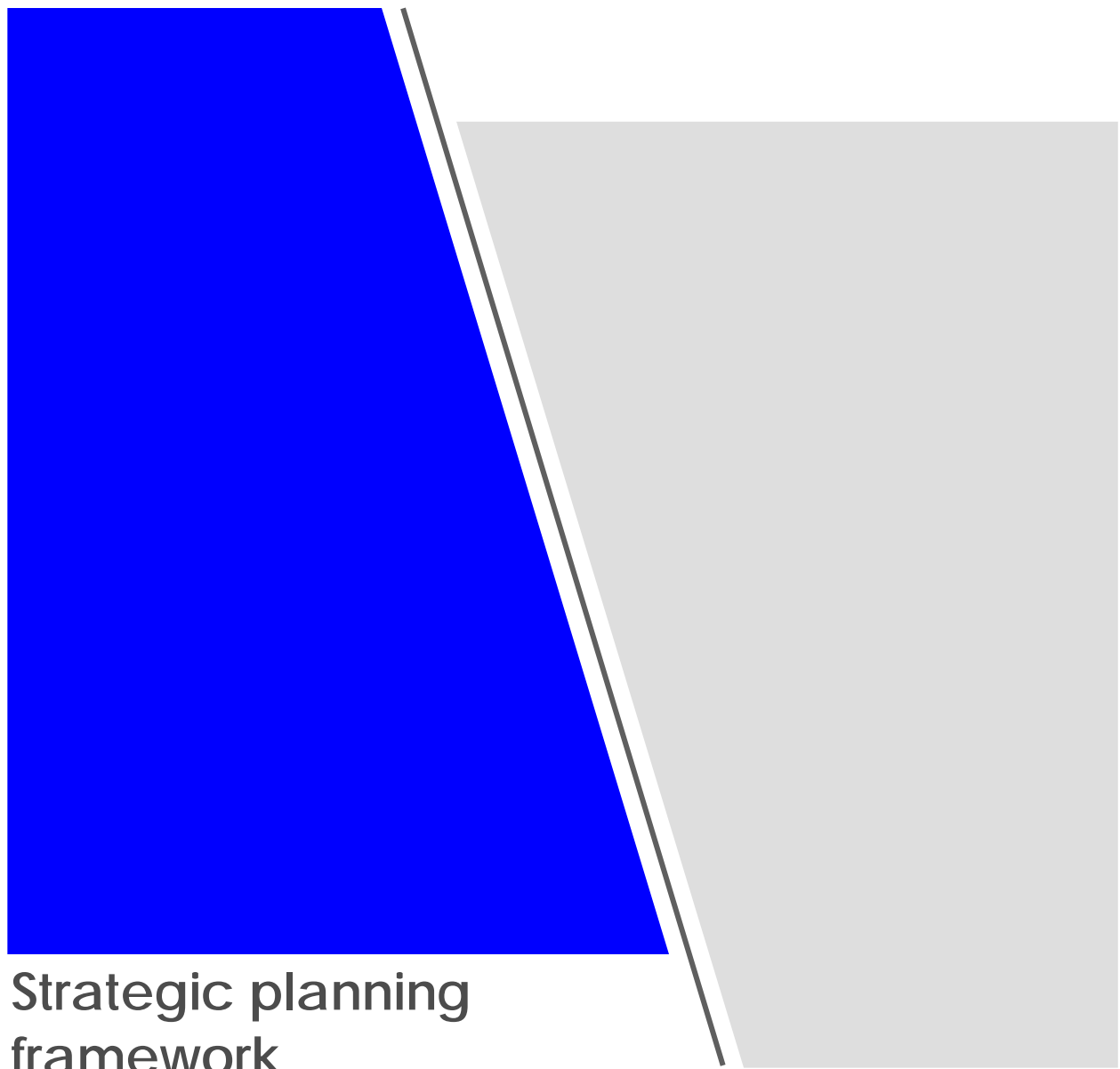
- **NSCB** – the highest policymaking and coordinating body on statistical matters. The Board is composed of the NEDA Director General or his/her designated representative as chairman, an undersecretary of the DBM as Vice-Chairman, and one representative each from the remaining departments with the rank of undersecretary, a deputy governor of the BSP, the administrator of NSO, the secretary general of NSCB, the director of SRTC, the governor or city mayor nominated by the league of governors and city mayors, and representative from the private sector to be elected by other members of the Board, as members. The NSCB has a technical staff headed by a secretary general and serves as the Board's secretariat and technical arm in the formulation, coordination, implementation, and monitoring of statistical policies, programs, standards, and mechanisms. The NSCB technical staff also develops and compiles major statistical frameworks and indicator systems and spearheads statistical information dissemination, advocacy, and capacity building and other PSS-wide programs.
- **NSO** – the major statistical agency responsible for generating general purpose statistics and undertaking such censuses and surveys as may be designated. NSO is mandated to collect, compile, and disseminate general-purpose statistics as provided for in Commonwealth Act (CA) No. 591. It also has the responsibility of carrying out and administering the provisions of the Civil Registry Law as provided for in Act No. 3753 dated February 1931. NSO is headed by an administrator who also serves as the country's civil registrar general.
- **SRTC** – the primary statistical research and training arm. Headed by an executive director, SRTC develops a comprehensive and integrated research and training program, undertakes and coordinates statistical research, and conducts non-degree statistical training of statistical personnel to sustain capacity building and improvement of statistics in the PSS.
- **BAS** – the principal government agency for the collection and dissemination of official agricultural and fishery statistics. Headed by a director, BAS is a bureau under the DA that undertakes various agricultural surveys and data monitoring on a daily, weekly, monthly, quarterly, and annual basis. BAS also coordinates all agricultural statistics and economic researches of the DA.
- **BLES** – the principal government agency for the collection and dissemination of labor and employment statistics. BLES is a bureau under the DOLE headed by a director that coordinates all statistical activities in the DOLE and collaborates with other government and private institutions and international organizations in the conduct of relevant surveys and statistical researches.
- **BSP** – the primary producer of monetary, external, and financial statistics. BSP monitors and compiles various statistical series on monetary, financial and external variables useful for the formulation and analysis of monetary, banking, credit and exchange policies.

Other major data producers in the PSS include the DOH, DepEd, DOT, and DENR although all NGAs collect some data based on their respective mandates. LGUs also generate data about their respective areas or constituents.

## The Philippine Statistical Development Program (PSDP)

The PSDP is a mechanism for setting the directions and thrusts of the PSS in the medium term for the development and production of statistics needed in the formulation, implementation, and monitoring of the PDP, including the MDGs, and in addressing the country's international commitments. The PSDP is the principal tool for integrating the statistical activities of government and promoting institutional building and cooperation among stakeholders in the PSS.

The main considerations in the formulation of the PSDP 2011-2017 are the information requirements of the PDP 2011-2016 and various sectoral plans. The PSDP 2011-2017 is also premised on providing solutions to major issues and challenges in the PSS as well as addressing emerging statistical concerns. The PSDP adopts and advocates various international principles including the UN Fundamental Principles of Official Statistics, Marrakech Action Plan in Statistics, Dakar Declaration on the Development of Statistics, Busan Action Plan in Statistics, and ASEAN Framework of Cooperation in Statistics.



Strategic planning  
framework

# Strategic planning framework

## « The vision

The PSDP envisions a responsive, effective, and efficient PSS that provides quality statistics for evidence-based decisions towards the attainment of the development goals of the nation.



By 2017, the PSS shall see a significant increase in the use of statistics in government policies, decisions, and actions at the national and local levels towards inclusive growth and reduced poverty in the country.

## « The broad goals and outcomes

Goal		Outcome
1. To deliver better quality statistics in support of evidence-based policymaking, program implementation, and monitoring	»	More timely, accessible, coherent, comparable, comprehensive, and relevant statistics
2. To increase user understanding, capacity, and trust for wider and rational use of statistics	»	Increased user understanding and rational use of statistics
3. To enhance capacity of MSAs and other data producers at the national and local levels and to strengthen cooperation of respondents and data providers for better quality statistics	»	Enhanced statistical capacities of data producers and providers
4. To strengthen statistical governance, coordination, and research and development at the national and local levels	»	Improved coherence, effectiveness, and efficiency of the statistical system
5. To increase investment and institutionalize a sustainable resource mobilization strategy for statistics	»	Increased and sustained resources for statistics



## ◀ Strategic priorities

### ▶▶ Data production

- Generation of quality statistics that address the priority information needs of government and other stakeholders, especially for monitoring the PDP 2011-2017
- Development of new statistical frameworks, standards, and methodologies and improvement of existing ones
- Development of standards and systems for administrative-based data, and production of key statistics at the provincial, city, municipal and *barangay* levels
- Improvement of the effectiveness and efficiency of censuses and surveys for better quality statistics and reduced burden on respondents
- Increasing technology utilization to facilitate data production

### ▶▶ Management and coordination

- Strengthening of legal frameworks and instruments for statistics generation and dissemination
- Implementation of more effective statistical policies and strengthening of coordination and monitoring of programs and responsibilities
- Facilitating organizational development and communication of statistical institutions for better statistical governance of the PSS
- Development and implementation of data quality assessment/assurance framework and system to ensure progressive and sustained improvement of statistics
- Advancing the professional and career development of statisticians

### ▶▶ Data dissemination and use

- Improvement of accessibility and timeliness and proactive dissemination and communication of statistics
- Development of an integrated statistics portal for dissemination of all available data and metadata resources in the PSS
- Institutionalization of data sharing, archiving and warehousing using online and interactive technology
- Strengthening of education and advocacy on the importance and rational use of statistics

### ▶▶ Local statistics development

- Adoption of an integrated data and methodological framework for the generation of local level statistics
- Implementation of appropriate statistical policies and standards for the production and dissemination of local statistics
- Strengthening the capacity of local government units to produce and use quality statistics in support of countryside development
- Strengthening institutional partnerships between the national and local governments for the generation and dissemination of local and national statistics
- Establishment of statistical mechanisms at least in every province and city for local coordination of statistics production and dissemination

## » Research and capacity building

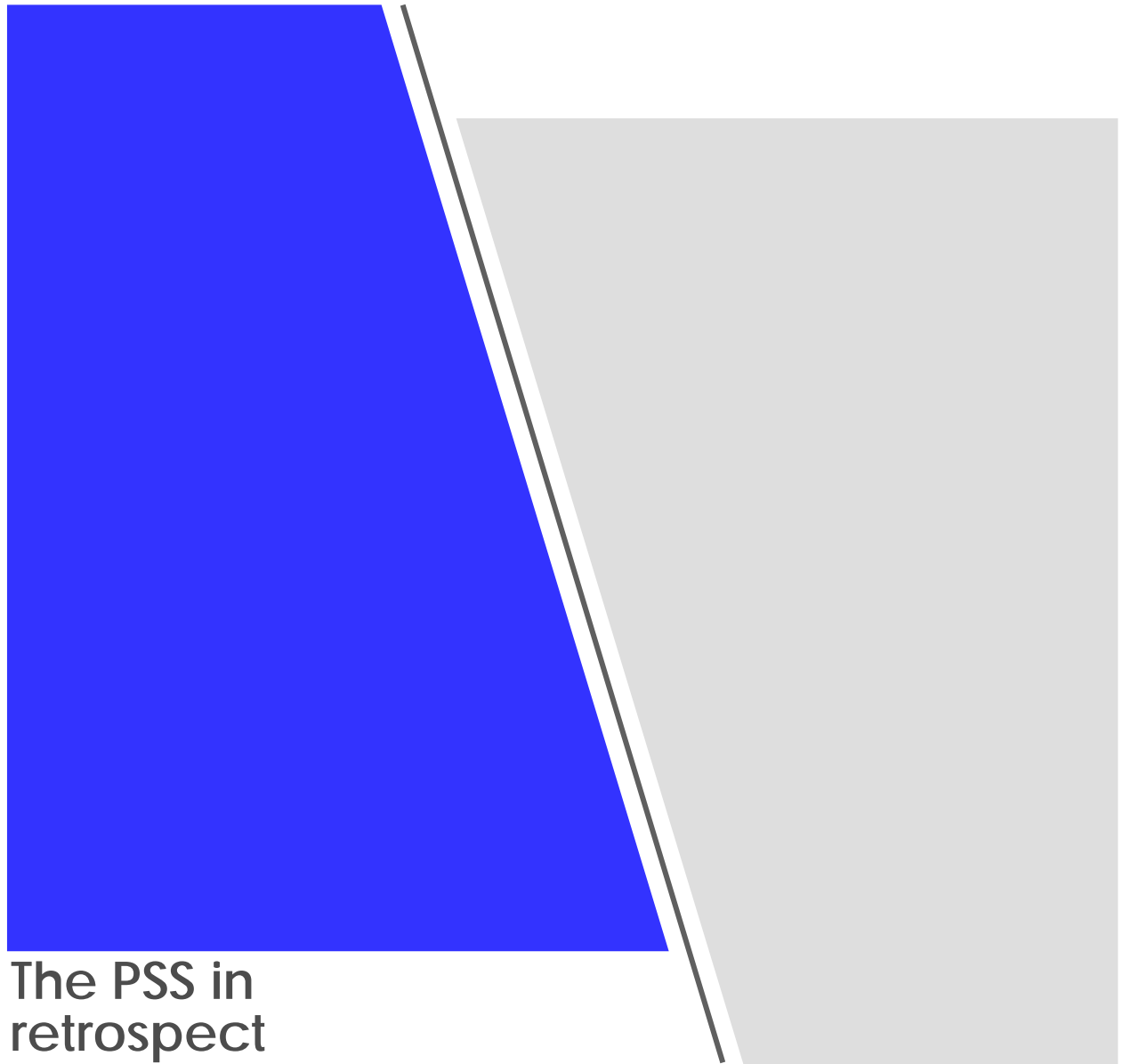
- Formulation of a viable strategic research agenda and utilization of research and development outputs towards improved methodologies and relevant statistics
- Strengthening institutional capacity for statistical research and development
- Strengthening capacity of major statistical agencies and other data producers at the national and local levels to generate and disseminate better quality statistics
- Building capacity of data users in the rational use of statistics

## » Resources in the PSS

- Increasing the statistical workforce in the major statistical agencies, other government data-producing agencies and local government units to enable PSS meet growing demand for statistics in support of evidence-based governance
- Development and adoption of a resource mobilization strategy for statistics towards increased resources and rationalized expenditure planning and implementation
- Increasing investment in information and communication technology towards improved statistical processes
- Upgrading of physical resources of major statistical agencies to improve work conditions towards increased productivity, more efficient statistical operations, and better statistical services to stakeholders
- Cost-sharing between and among national government agencies and between national and local governments for the generation of statistics
- Promotion of public-private partnership for data generation and dissemination and capacity building

## » International cooperation

- Enhancement of statistical cooperation with the international community through
  - sharing of experiences, practices and expertise
  - implementation of statistical capacity development projects
  - better coordinated and timely response to international inquiries
  - proactive and better coordinated participation in international cooperation programs and in the development of standards and methodological frameworks
  - adoption of/adherence to internationally-recognized principles, declarations & best practices
- Capacity building of major statistical agencies and other data producers at the national and local levels through participation in international meetings, conferences and workshops and provision of budget thereof
- Organization of international conferences, training and workshops on key statistical topics in support of global statistical development and promotion of the PSS



The PSS in  
retrospect

# The Philippine Statistical System in retrospect

Despite the downtrend in human resources in the major statistical agencies, the Philippines ranks first among 21 developing countries in the East Asia and Pacific (EAP) and among eight ASEAN member states and is tied for seventh to tenth places among the 144 developing countries in the WB's Statistical Capacity Database in 2011 with a high overall statistical capacity score of 89 percent. The Philippines has a perfect score of 100 in terms of adequacy and comprehensiveness of source data and 97 in terms of periodicity and timeliness of statistical information. The country fares less in statistical methodologies adopted with a score of 70. The Philippines has held the top ranking in EAP since 2008.

While such assessment does not say everything about the state of the PSS, it does represent an objective and independent perspective of the level of statistical development of the country at the close of the previous Plan period. It provides a good baseline of the general directions that the PSS must focus on to further improve statistical capacity towards better quality of statistics.

Data users may have also felt a significant increase in the reporting of statistics in the media and the use of statistical data and information in policy discussion at the beginning of the new decade. Indeed, more government statisticians have figured in media interviews or have been invited as resource persons in various forums of wide ranging topics, from the economy—business and investment, prices of commodities, and employment, to poverty and social development issues—health, education, population, children, and gender, to happiness, good governance, and disasters, and many others. With the help of media, the continuing efforts of the MSAs in proactively disseminating statistics and pushing statistics into the consciousness of society have started to gain ground.

As the PSS embraces a renewed public interest in official statistics it may be helpful to look back in retrospect at some of the milestones of the past six to seven years as well as the key issues and challenges that loom ahead for the PSS over the next Plan period.

## Key developments in 2005-2011

The PSS is one dynamic 'industry' that continuously produces data and statistics through complex business processes. These business processes entail strategic policies, well-defined standards, and established statistical and technical steps to ensure the production of quality data with the least limitations.

There are however many issues even with long-established and institutionalized processes such as censuses and surveys. There are expectedly more challenges with mostly underdeveloped or yet untapped sources of data especially administrative reporting and registration systems.

Despite these, the PSS remains one of the more developed national statistical systems in the Asia and the Pacific region and among those recognized by the international statistical community. Among the most noted features of the PSS are its good program and mix of statistical activities and well-established mechanisms for statistical coordination.

There are major problems that the PSS may have been unable to overcome but none more difficult than the inadequate resources. Even so, the PSS marches on with steadfast dedication and commitment to achieving its mission of generating statistics for evidence-based government decisions and actions.

The milestones during the period 2005-2011 are as follows:

### Censuses and surveys

► **New surveys.** Several new surveys have been introduced during the period 2005-2011. Some are one-time surveys to generate benchmark data or parameters while others are pilot surveys to test data collection design and methodology for further improvement. A few have in fact been institutionalized as periodic surveys.

#### Timeline

##### 2011

- Family Health Survey (NSO)
- Employer's Satisfaction Survey (TESDA)

##### 2010

- Survey of Innovation Activities by Establishments (NSO-DOST)
- Anti-Red Tape Act (ARTA) Report Card Survey (CSC)
- Pilot Survey of Enterprises in the Philippines (NSO)

##### 2009

- Philippine Consumer Finance Survey (BSP)
- Housing Preferences and Affordability Survey (NSO-SRTC)
- Global Adult Tobacco Survey (NSO)
- National Survey of Areas Planted to Abaca (FIDA)
- Survey of Tourism Establishments in the Philippines (NSO-DOT)

##### 2008

- Informal Sector Survey (NSO)

## 2007

- Tracer Study of Graduates of Job Directed Scholarship Programs Implemented in 2005 (TESDA)

## 2006

- LGU ICT Status Survey (CICT)
- Survey on Laboratory Testing Services (NSO-DOST)
- IT and IT-enabled Services Survey (BSP)

## 2005

- Household Survey of Domestic Visitors (NSO-DOT)

### ►► Enhanced periodic censuses and surveys.

Improvements have been made in many of the regular censuses and surveys, including the use of technology in data gathering. The NSO has started employing handheld devices in encoding responses and reporting of raw data in the 2007 Census of Population. The BAS meanwhile has recently introduced its mobile data gathering system, which facilitates field collection and reporting of basic data on prices through SMS technology.

## Timeline

### 2011

- Survey of Children (NSO-ILO)
- Updating of the Nutritional Status of Filipino Children and Other Population Groups (FNRI)
- Household Energy Consumption Survey (NSO-DOE)

[also in 2009, 2007, 2005]

- Survey on Research and Development (R & D ) Expenditures and Human Resources (NSO-DOST)

### 2010

- Census of Population and Housing (NSO)
- Household Survey on Domestic Visitors (NSO-DOT)
- Survey of Energy Consumption of Establishments (NSO-DOE)
- Survey of Information and Communication Technology (NSO)

[also in 2008, 2006]

- Occupational Wages Survey (BLES)

### 2009

- Survey of ICT for Business and Industries (NSO)
- Philippine Consumer Finance Survey (BSP)
- Global Adult Tobacco Survey (NSO)

[also in 2006]

- Family Income and Expenditure Survey (NSO)

### 2008

- Functional Literacy, Education and Mass Media Survey (NSO)
- National Demographic and Health Survey (NSO)

### 2007

- Census of Population (NSO)

### 2006

- Census of Philippine Business and Industries (NSO)
- Family Planning Survey (NSO)
- Sub-Regional Multiple Indicator Cluster Survey (NSO)
- Input-Output Survey of Philippine Business and Industry (NSO)

►► **Improved annual and sub-annual surveys.** Key improvements have been made in the production of annual and sub-annual statistics in terms of timeliness, coverage, and relevance. Also, predictability in the release of these data has been sustained keeping users informed of the availability of data.

## Timeline

### Monthly

- Farm Prices Survey (BAS)
- Producer Price Survey (BAS)
- Palay and Corn Stocks Survey (BAS)
- Visitor Sample Survey (DOT)

### Quarterly/Semestral

- Quarterly and Semestral Backyard Livestock and Poultry Survey (BAS)
- Quarterly and Semestral Commercial Livestock and Poultry Survey (BAS)
- Labor Force Survey (NSO)
- Quarterly Survey of Philippine Business and Industries (NSO)
- Labor Turnover Survey (BLES)
- Consumer Expectation Survey (BSP)
- Business Expectation Survey (BSP)

### Annual

- Survey on Overseas Filipinos (SOF)
- BLES Integrated Survey (BLES)
- Annual Poverty Indicators Survey (NSO)
- Annual Survey of Philippine Business and Industries (NSO)
- Anti-Red Tape Act (ARTA) Report Card Survey (CSC)

## ■ Updated and new frameworks, indicators, and statistics series

►► **Revised/rebased Philippine System of National Accounts (PSNA).** In 2011, the NSCB, with assistance from the WB and partner data sources, has completed the overall revision and rebasing of the PSNA. The revised and rebased national accounts series has incorporated changes based on the 1993/2008 United Nations System of National Accounts (SNA) recommendations, including the adaption of new standards and classifications, updated and new data, assumptions, and parameters, and improved estimation methodologies. The PSNA has shifted from 1985 prices to 2000 prices.

►► **Improved Input-Output (I-O) Tables.** The compilation of the 2000 I-O accounts has been completed in 2006. The latest benchmark I-O accounts for new industries such as call centers, business process outsourcing, computer-related services, and natural gas industries. The 2000 I-O covers 240 industries compared to the 229 industries in the 1994 I-O.

►► **Supply and Use Tables (SUT).** The NSCB has started compiling the SUT as part of the overall revision of the PSNA and implementation of the 1993/2008 SNA. The SUT is used mainly as a balancing tool to address among others the statistical discrepancy between the two measurement approaches—the production and expenditure accounts.

►► **Improved poverty measurement.** Significant efforts have been undertaken to improve the generation of poverty statistics in the country. With guidance from the Technical Committee on Poverty Statistics and technical assistance from the WB, the NSCB has improved yet anew the existing official poverty estimation methodology and has developed techniques to generate other dimensions of official poverty statistics. Poverty statistics have been compiled for congressional districts, provinces, cities and municipalities as well as for the basic sectors.



## Timeline

### 2011

- Revised official poverty statistics (national and provincial level) for the years 1991, 2000, 2003, 2006, and 2009 based on improved estimation methodology

### 2009 [also in 2007]

- Poverty estimates for the basic sectors (as defined in Section 3 of RA 8425 includes the women, youth, children, senior citizens, urban poor, migrant and informal sector workers, farmers, and the fisherfolks) for the years 2000, 2003, and 2006

### 2008

- Small area poverty estimates for congressional districts, cities, and municipalities for 2000 and 2003
- Poverty maps for selected provinces and cities, including *Panabo City*, the first local community with *barangay*-based poverty maps

### 2005

- Estimates of the vulnerability incidence at the provincial level
- Small area poverty estimates for cities and municipalities for 2000

►► **Statistics to monitor the MDGs.** In 2005, the NSCB initiated advocacy activities to inform stakeholders about the MDGs indicators and the need to generate and disseminate statistics to monitor progress. The NSCB, as designated repository of the MDGs indicators in the Philippines, conducted periodic data assessment and coordinated the resolution or discussion of attendant statistical issues through concerned interagency or technical statistical committees. The NSCB collected statistics from various sources and compiled and disseminated them through its website and in various forums. The NSCB also provided statistical support in the preparation of the Philippines progress reports on the MDGs.

## Timeline

### 2010

- National MDGs Indicators poster and brochure. Present the latest status of the MDGs in the country as well as the various data sources and analytical tools used in tracking progress.

### 2009

- Statistics in support of the localization of the MDGs in Regions I, IV, V, VI, VIII, IX, X, XI and XII and Cordillera Administrative Region.

### 2006

- National MDGs statistical database on the NSCB website @www.nscb.gov.ph/IMDGs.

### 2005

- MDG Watch. Periodic data updates on the MDGs indicators.

►► **Child Development Index (CDI).** The NSCB introduced the CDI in 2009 with the release of the first estimates at the regional level for the years 2000, 2003, and 2006. The CDI is constructed based on the human development index framework to help determine the state of development of Filipino children.

►► **Statistical Indicators for Philippine Development (STATDEV).** The STATDEV is a statistical indicator system for monitoring the achievement of the development goals set forth in the PDP. The STATDEV replaces the former Economic

and Social Indicators publication of the NSCB. The STATDEV indicators were first released in 2005 and were updated in 2006 for monitoring the PDP 2005-2016. Data have been updated every year thereafter.

## ►► Other new/updated statistics and indicators

## Timeline

### 2011

- 2005 and 2008 Provincial Governance Index and Voter's Index
- 2000- and 2006-based General Retail Price Index (GRPI)
- 2006-based Consumer Price Index (CPI) for all income
- 2006-based CPI for bottom 30 percent income households
- 1998-based General Wholesale Price Index
- Linked series of the 2000-based CPI

### 2010

- 2000-based Construction Materials Retail Price Index
- 2000-based Construction Materials Wholesale Price Index

### 2009

- Flash indicators to measure impact of global crisis
- Benchmark data on hunger index
- 2000-based GRPI for the National Capital Region

### 2008

- Philippine Happiness Index
- 2000-based Producer Price Index (PPI) for manufacturing
- 2000-based PPI for agriculture

### 2006

- Provincial CDI for 2000, 2003 and 2006

### 2005

- 2000-based CPI for all income
- 2000-based CPI for bottom 30 percent income households

## ■ Mechanisms for local level statistics development

►► **Community-based monitoring system (CBMS).** In 2005, the PSS officially adopted the CBMS through NSCB Resolution No. 6, Series of 2005 - Recognizing and enjoining support to the CBMS as a tool to strengthen the statistical system at the local level. First developed in 1992 as part of the Micro Impacts and Macroeconomic Adjustment Policies Project, the CBMS has evolved into a viable source of local-level statistics that is mainly focused on the MDGs indicators and related statistics. As of 2011, CBMS has been adopted by the LGU in 65 provinces (33 of which are implementing it province-wide), 764 municipalities, and 49 cities covering at least 20,382 *barangays*. Implementation is enjoined by the DILG and NAPC while the CBMS Network, a civil society organization, oversees the technical design concerns and assists in statistical capacity building.

►► **Local Governance Performance Monitoring System (LGPMs).** Initially launched at the national level and in selected cities in 2004, the LGPMs has since been rolled out to all provinces and cities since 2005. The LGPMs is a self-assessment and survey tool that generates data and information about the performance of the local governments and the state of development in the provinces, cities, municipalities, and *barangays*. It is spearheaded by the DILG in partnership with NGAs, local government leagues, CSOs, business community, international development partners, and other stakeholders. Coordination between DILG and selected

NGAs has been initiated to include important indicators in the LGPMS such as those on tourism and health.

►► **Provincial Product Accounts (PPA) in Guimaras Province.** In 2006, the NSCB, in partnership with the Provincial Government of Guimaras, developed the first PPA in the country that may serve as a model for national-local government partnership in developing local-level statistics. Estimates of the province's gross domestic product and related indicators for the years 2002-2004 were released in 2007.

►► **Barangay Agricultural Profiling Survey (BAPS).** The BAS has started collecting information on the basic structure of agriculture and fishery and ancillary information at the *barangay* level. The survey, first conducted in pilot regions and provinces, generates a *Barangay* Agricultural Profile that provides benchmark data to help inform decision-making and project implementation and monitoring at the provincial level.

►► **Statistical mechanisms at the local levels**

#### Timeline

##### 2011

- Launch of the National Statistical Information Center (NSIC) in *Aklan Province* in Region VI

##### 2009

- Launch of the NSIC in *Capiz Province* in Region VI

##### 2008

- Launch of the NSIC Region X branch in *Cagayan de Oro City*

##### 2007

- Launch of the NSIC in *Antique Province* in Region VI

##### 2005

- Establishment of the country's first municipal statistical coordination committee in the Municipality of *Maitum* in *Sarangani Province*

## ■ Standards and methodological development

►► **New and improved standards and methods for the compilation and computation of statistical indicators.** Methodological development initiatives have been undertaken to improve existing statistical concepts, frameworks, and methods as well as to develop new ones. Activities have led to new indicators and improved and updated data series.

#### Timeline

##### 2010

- Compilation of the Philippine National Health Accounts
- Compilation of provincial and municipal gender development index
- Interim estimation of national level estimates of maternal mortality ratios 1990 and 2000-2010
- 2009 Philippine Classification of Individual Consumption According to Purpose

##### 2009

- Compilation of the Philippine Tourism Satellite Accounts
- Computation of the 2006-based CPI for the bottom 30 percent income group
- Official concepts, definitions, and methodology for the computation of wholesale trade sales index and retail trade sales index

- Generation of annual labor and employment estimates
- Comprehensive documentation of the official poverty estimation methodology

##### 2008

- 2008 Philippine Standard Classification of Education
- Operational framework for counting overseas Filipinos

##### 2007

- Generation of poverty statistics for the basic sectors
- Model-based estimation of annual food and poverty thresholds
- Initial framework and methodology for the computation of hunger index

##### 2006

- Generation of the 2000 CPH-based national, regional and provincial population projections
- Refinements in the official estimation methodology for the 2003 final poverty statistics and 2000 back estimates
- Generation of the Philippine Labor Index
- Conceptual framework for the Survey of the Philippine Governance Indicators users

##### 2005

- 2004 Philippine Standard Commodity Classification
- Philippine Tourism Statistical Classification System
- Interim methodology for the revision of electronics imports statistics

## ■ Statistical management and coordination

►► **Statistical policies.** The NSCB Executive Board continues its mandate of resolving statistical issues and adopting new and improved statistical frameworks and indicators, standard concepts, definitions and classifications, and methodologies. The Board has adopted relevant international principles and declarations on statistics. The Board approved two new statistical frameworks, 19 standard concepts and definitions for statistical purposes in various sectors, six updated or new standard classification systems, and 15 new or improved methodologies, as well as a framework for the provision of statistical products and services in the PSS. The Board has likewise issued a general policy on revision of data on agricultural production, prices and related statistics produced by BAS.

►► **Statistical mechanisms.** Four new interagency committees on statistics were created to address technical issues on emerging concerns, *i.e., environment and natural resources, information and communications technology, security sector, and statistical information management and dissemination.*

►► **Review of the PSS.** Looking to better appreciation of the issues and challenges in the PSS, a comprehensive review of the PSS was carried out in 2008 by an independent panel of stakeholders. The review came up with recommendations for the improvement of the PSS.

## ■ Data dissemination and statistical advocacy

►► **Improved communication of statistics.** Efforts of the PSS led by the MSAs in improving the dissemination and communication of statistics have gained significant inroads in recent years. Data updates through press releases and dissemination forums have become more frequent, regular, and common. Many statistics and indicators have figured prominently in print and broadcast media, and the Internet,

and statisticians have been given more opportunity to communicate statistics to the public. The use of less technical language in communicating statistics, in particular, the *Statistically Speaking* feature on the NSCB website, has captured a considerable following and elicited good feedback from government, media, academe, and the general public.

►► **Increased accessibility of data, microdata, and metadata.** The MSAs and key data producers have progressively utilized the Internet to make data, microdata, and metadata more quickly available and accessible to users. The websites of the MSAs now offer a wide range of statistics that is updated frequently and more predictably as well as online tools to extract data and related information resources. Noteworthy are the *CountryStat Philippines* on the BAS website, which has been considered as an international best practice in statistics, various online databases on the NSCB website, comprehensive statistical tables on census and survey results on the NSO website, publications downloads on the BLES website, and the wealth of monetary and finance data on the BSP website.

►► **Technology in data dissemination.** The PSS has in recent years increased the use of technology in many statistical processes, including data dissemination and communication. Data visualization techniques such as motion charts, data subscription through Really Simple Syndication (RSS) feeds, mobile and push mechanisms, among others have found their way into the data dissemination strategies of the MSAs.

►► **Initiatives for better data documentation and preservation.** The PSS has started to actively address the need for better documentation and archiving of data and microdata to preserve and protect statistical resources for future generations. With some assistance from the Paris21's Accelerated Data Program, the major statistical agencies have begun to establish data archives such as the: NSO Data Archive (NSODA), BAS Electronic Archiving and Network Services (BEANS), and BLES Electronic Archived Microdata System (BEAMS).

►► **Expanded reach of the National Statistical Information Center (NSIC).** Five more NSICs have been established in the provinces of *Negros Occidental, Antique, Capiz, Aklan, and Pangasinan*, and at the regional center of Region X, *Cagayan de Oro City*, to expand the reach of statistics to stakeholders in the countryside.

►► **Enhanced statistical advocacy.** The MSAs, some key data producers, the academe, and the PSA have stepped up the campaign to promote and advocate the continuous production, research and development, and use of quality statistics in support of governance and other purposes. Nationwide and regional activities have been organized through stakeholder partnerships.

- Annual National Statistics Month celebration including an annual tree planting activity
- Annual BSP-DepEd Oratorical Contest on Statistics
- NSM Media Awards
- Tenth and Eleventh National Convention on Statistics
- Periodic regional statistics congress in *Luzon, Visayas, and Mindanao*
- Annual UPSS-UPLB INSTAT Student Faculty Conference on Statistical Science
- Annual conferences of the PSA and SRTC

## ■ International cooperation

►► **Hosting of international statistical conferences and related events.** The Philippines has co-organized with international development partners and played host to a number of important international statistical forums which attest to the recognition of the country's statistical development and PSS' organizational ability by the global statistical community.

### Timeline

#### 2011

- Second International Conference on the Millennium Development Goals Statistics (ICMDGS) (NSCB-UNSD)
- UN World Tourism Organization (UNWTO) Tourism Statistics Capacity Building Program (Workshop II) (DOT-NSCB-UNWTO)

#### 2010

- Third Global Forum on Gender Statistics (NSCB-UNSD)
- UN Interagency Expert Group Meeting on Gender Statistics (NSCB-UNSD)

#### 2009

- APEC Capacity Building Seminar Workshop on the Measurement of International Trade in Services (NSCB-APEC)

#### 2008

- Second Regional Course on Integrated Economic Accounts (SRTC-UNSIAP)
- UNWTO Technical Workshop on Tourism Statistics and Tourism Satellite Accounts (DOT-NSCB-UNWTO)
- Eighth Annual Meeting of the Washington Group on Disability Statistics (NSCB-UNSD)
- International Workshop the ASEAN Catch-up Programme on the SNA 2008 (ASEAN Secretariat-NSCB)

#### 2007

- First ICMDGS (NSCB-UNSD)

#### 2006

- Fourteenth Working Group on Foreign Direct Investment Statistics (ASEAN Secretariat-IAC on FDI Statistics-NSCB)

### ►► Technical assistance to the international community.

Just as the PSS has received generous international assistance in methodological and human resource development, it has also strived to give back through technical assistance to other national statistical systems and international organizations. The PSS has conducted study visits and training for national statistics institutions of Cambodia, China, Nepal, Bangladesh, Bhutan, Ethiopia, Lao PDR, and Uganda, among others, and country visits by the UN and other international agencies.

### ►► Adoption of international statistical principles and frameworks.

The PSS provided inputs in the formulation of important international cooperation agreements and declarations on statistics and proactively advocated for their adoption in the country and international forums.

### Timeline

#### 2011

- ASEAN Framework of Cooperation in Statistics (ASEAN)
- Busan Action Plan on Statistics (Paris21)

#### 2010

- Observation of World Statistics Day (UNSC)
- Dakar Declaration on Statistics

## Key issues and challenges

Notwithstanding the significant gains in the improvement of statistics during the previous Plan period, there are persistent issues and many new challenges that the PSS is now more than ever expected to address. Demand for improved and new statistical information with more relevant dimensions and finer spatial disaggregation and details and that becomes available more quickly and at shorter intervals has increased tremendously.

While data systems are fairly well-established for macroeconomic, monetary, and fiscal policymaking, there are many areas where the data production system is not as well developed such as social protection, climate change, disaster and environment, security, and national and local governance, or needs fine-tuning such as poverty and social development analysis. The generation of more geospatial data, including local and small area statistics, can no longer be set aside and must be prioritized.

User demand for more relevant, timely, and frequent data has magnified some deficiencies in the statistical process—from survey design, to methods and approaches, to systems and tools for data collection, processing, analysis and dissemination, as well as limitations in human and institutional capacities. Many of existing household and establishment surveys are no longer adequate to generate the level of detail and increased frequency of information that is deemed necessary for truly effective evidence-based public policy at the national and local levels. Meanwhile,

administrative data systems data have not improved much in being able to provide alternative or additional sources of data. Modifying such surveys and administrative sources will necessarily entail huge costs, which contribute further to the widening resource gaps in statistics.

Other than the data issues, the PSS faces a number of organizational challenges. The PSS needs to be able to turn the tide of the declining trend in human resources, to motivate good statisticians to remain in the system, and to build more opportunities for professional growth and career development. The PSS will need to not only continue adapting to technological changes but also to further explore potentials towards increased efficiency in statistical and business processes. There can be much wider use of statistics in government policies if there is stronger appreciation and accountability for statistics among the primary stakeholders.

Ultimately, the availability or lack of investments is crucial in sustaining the PSS towards the production of timely, relevant, and quality statistics. The PSS has been fortunate to have benefited significantly from international assistance for statistical capacity building, statistical infrastructure improvement, methodological development, and conduct of important statistical surveys. This however may not be sustainable. It is increasingly more imperative for government to increase resources for the generation of critical statistics to an optimal level and ensure continuing investment in further development of statistics.

The current state of the PSS may be described in relation to its overall vision and major goals and outcomes as follows:

Goal/outcome	Current state of affairs, issue and/or challenge
More timely, accessible, coherent, comparable, comprehensive, and relevant statistics	<ul style="list-style-type: none"> <li>Some statistics are perceived irrelevant, outdated, and tardy. In general, these statistics do not respond to some of the more important and urgent concerns of society due to unreasonably long time lag and lack of details. There are data gaps in many critical policy areas.</li> <li>The PSS needs to be more inclusive in the development, generation and dissemination of statistics.</li> <li>Statistics supply is generally outpaced by the steady rise of user needs. The major statistical data producing agencies have not truly addressed the strong demand for lower geographical disaggregation and greater frequency of statistics. The PSS has in particular been limited in supporting local development planning.</li> <li>It is important to ensure accuracy and reliability of statistics, which is particularly urgent in macroeconomic, financial and poverty monitoring frameworks.</li> <li>Statistics abound but are not proactively disseminated and are not always easily accessible to users, especially on the internet.</li> <li>Statistics in some sectors remain uncoordinated and fragmented.</li> <li>There are apprehensions of possible political influence in the collection and reporting of statistics by NGAs and LGUs. Appropriate statistical standards and guidelines are lacking.</li> <li>Measures to ensure transparency of some statistics are inadequate. Policies on data revision as well as changes in concepts and definitions, designs and methodologies have not been widely adopted or implemented.</li> <li>Concerns pertaining to burden of respondents to statistical inquiries must be addressed to further increase response rates of major censuses and surveys.</li> </ul>

Goal/outcome	Current state of affairs, issue and/or challenge
Increased user understanding and rational use of statistics	<ul style="list-style-type: none"> <li>▪ The use of statistics in government policies and decisions has fairly increased in recent years, especially at the national level, but has remained very limited at the local levels.</li> <li>▪ There are concerns about possible misuse or abuse of statistics by some stakeholders for purposes related to gaining access to government assistance and incentives.</li> <li>▪ While appreciation of statistics by media and the public has improved, more proactive dissemination, education, and advocacy are needed to reach more users.</li> </ul>
Enhanced statistical capacities of data producers and providers	<ul style="list-style-type: none"> <li>▪ Statistical capacity varies highly among data producers and users at the national and local levels. Knowledge and technical skills of current statistical personnel to properly carry out statistical processes need to be continuously strengthened.</li> <li>▪ Statisticians need more opportunities for career development and professional growth.</li> <li>▪ Research and training support for the PSS has been limited and inadequate due to organizational constraints. Better direction and more effective research and training strategies are needed to effectively contribute to the improvement of statistics.</li> <li>▪ There is need for continuing program to enhance appreciation and build capacities of respondents and data providers towards improved response rates and coverage of statistical inquiries.</li> </ul>
Improved coherence, effectiveness and efficiency of the statistical system	<ul style="list-style-type: none"> <li>▪ Statistical laws and policies governing statistical operations are deemed too general, weak, outdated, or limited in scope. There is need for a stronger state policy and appropriate legal instruments that recognize statistics as a public good, rationalize statistical processes, and institute measures for accountability of all stakeholders for the production, sharing, and use of statistics.</li> <li>▪ Institutional capability in managing statistical functions and operations varies highly among the MSAs and key sectoral data producers.</li> <li>▪ The existing program of censuses and surveys is deemed inadequate to address current emerging data demand. Censuses and surveys do not seem to ensure coherence of statistics.</li> <li>▪ Business processes, systems design, and technology adaptation in the production of statistics need rethinking, rationalization, and upgrading.</li> </ul>
Increased and sustained resources for statistics	<ul style="list-style-type: none"> <li>▪ Government resources, especially human resources, for statistics have been perennially inadequate. A number of important statistical activities have relied on technical assistance from international development agencies. There is strong perception that appreciation of statistics by policymakers at the national and local levels has remained weak hence the modest government investment in statistics.</li> <li>▪ Human resources in the PSS have been declining due to government attrition policies and less competitive salary and benefits structure for statistical personnel in government.</li> <li>▪ Few NGAs and LGUs have dedicated personnel or units responsible to undertake statistical operations. A few of major censuses and surveys have been delayed in the past due to budgetary cuts or late allocation of funds which has affected the regularity of critical data for policy.</li> <li>▪ Insufficient funding has prevented the conduct of new but quite important censuses and surveys and research and development to generate new data or develop new methodologies.</li> </ul>





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# Chapter 1

## Management and coordination of the Philippine Statistical System

### Introduction

Among the essential elements of an effective and efficient national statistical system are institutional mechanisms designed to manage and coordinate statistical operations in the government. Statistical mechanisms such as policies, strategic plans and programs, and advocacy strategies are crucial in coordinating and facilitating the generation and dissemination of timely, relevant, reliable, and coherent statistics in support of national and local development.

No less than the Fundamental Principles of Official Statistics (FPOS) adopted by the United Nations Statistical Commission in April 1994 under Principle No. 8 has declared that, "Coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system." Despite this recognition, many countries of varying statistical development have identified the lack of statistical coordination as a fundamental weakness of their national statistical systems. It is only in more recent years that the global statistical community has started to give so much importance to statistical coordination as vital and necessary for overall statistical development.

The role of management and coordination becomes more significant and crucial in a highly decentralized statistical system like the PSS. This much is the essence of the 1987 EO 121 – "Reorganizing and Strengthening the Philippine Statistical System and for Other Purposes." The EO, which resulted from a comprehensive assessment of the PSS, serves to uphold the independence of statistics and provide for a more coordinated government statistical service to assist the national development agenda.

Coordination in the PSS covers both institutional and technical matters. Institutional coordination deals with facilitating dialogue and instituting strategic collaboration between data producers and users. Technical coordination meanwhile addresses issues in the various aspects of the statistical process such as standards setting, methodological development, data collection, dissemination, and analysis, and data quality assessment and assurance.

Emerging developments in the economy and society bring about new demands for more relevant, useful, and quality data. In order for the PSS to effectively address persistent data gaps as well as growing and diversifying data needs, it must continuously strive to proactively coordinate stakeholders and effectively manage statistical and business processes. Improved

institutional and technical coordination is key to achieving the vision of a responsive, effective and efficient PSS that provides quality statistics in support of the development goals of the nation.

This chapter presents key strategic programs that will contribute to more effective and efficient management and coordination of the PSS towards overall statistical development.

### Scope and coverage

This chapter deals with many aspects of management and coordination that also provide an indication of the statistical capacity of the PSS. Managing the PSS entails a number of processes—from planning, to program implementation, to coordination, to monitoring and evaluation—to ensure the delivery of timely, relevant, and coherent statistics.

- Statistical laws and policies that provide mandate and govern the operations and activities of the PSS, *i.e., republic acts, executive orders, and/or presidential decrees, and statistical resolutions/policies issued by statistical policy making bodies*
- Statistical management and coordination mechanisms essential to maintaining an integrated and coherent framework for the development, collection, processing, dissemination, and use of statistics
  - Philippine Statistical Development Program
  - System of Designated Statistics
  - Statistical Budget Review System
  - Statistical Survey Review Clearance System (SSRCS)
  - Administrative Records Review and Clearance System (ARRCS)
  - Performance Measurement Scheme
  - Technical and interagency committees and working groups
  - Government Statistics Accessibility Program
  - Data quality assurance framework
  - Code of practice/ethics for statistics
- Statistical frameworks, methodologies, standards, and classification systems necessary to ensure the quality, consistency, and coherence of data systems within the PSS and data comparability with the international statistical community
- Organizational development and statistical advocacy strategies for institutional and human resource capacity building, professional and career

development in the PSS, as well as promotion of statistics

- Strategies for financing statistics to ensure sustainable resources for the development and generation of critical statistics
- International cooperation mechanisms for sustaining good relations with the international statistical community towards knowledge and capacity building of the PSS

Specific concerns on human resource development, research and development, statistical information management, and local statistics development are discussed in Chapter 2 – Statistical capacity development, Chapter 3 – Information management and dissemination, and Chapter 4 – Local statistics development. Sectoral statistical concerns are discussed in the rest of the chapters (Chapters 5–23).

## Situational analysis

### ◀ Key developments in 2005-2011

The PSS has made a significant mark in the global statistical community because of the generally sound leadership of the major statistical institutions, good quality of statistical human resources, various pioneering and breakthrough initiatives in the development of statistics, and much more so because of strong coordination mechanisms in place.

The PSS is also recognized for its many positive contributions to the development of statistics in various disciplines and areas of concern in the Asia and the Pacific region and in the global statistical community. Filipino government statisticians are often invited to help with methodological framework, standards development, and statistical capacity building. A number of them have served in various UN expert groups and international committees on statistics, especially in the fields of poverty and human development, gender and development, environmental accounts, population and housing, civil registration, agriculture, monetary and finance, prices, trade, tourism, governance, and the MDGs.

#### ▶ High level of overall statistical capacity of the PSS.

As of 2011, the Philippines ranks first among 21 developing countries in East Asia and Pacific (EAP) and is tied for seventh to tenth places with Egypt, Mexico, and Ukraine among the 144 developing countries in the WB's Statistical Capacity Database with a high statistical capacity rating of 89 percent. The Philippines has a perfect score of 100 in terms of adequacy and comprehensiveness of source data and 97 in terms of periodicity and timeliness of statistical information. The country fares less in statistical methodologies adopted with a score of 70. The Philippines has been at the top in the EAP since 2008.

▶ Issuance of statistical policies to address emerging concerns on statistics. During the period, the NSCB Executive Board has issued a total of 109 statistical

resolutions on improved, updated, and new frameworks, official concepts and definitions, methodologies, and statistical classification systems, and on general policies for data revision, rebasing, modifications in the system of designated statistics, dissemination, archiving, and statistical budgets, among others.

#### General policies issued by the NSCB Executive Board to guide statistical operations of the PSS in 2005-2010

- defining the basis and standard time period for the publication of revised estimates after the initial release of data
- synchronized rebasing of various price indices
- generation of data for highly urbanized cities
- measurement of the impact of global crisis in the Philippines
- modifications in the designated statistical activities of BAS, BLES, and FNRI
- data archiving and documentation of microdata based on international standards developed by the International Household Survey Network
- dissemination of statistics on the internet
- production, release and dissemination of microdata
- adoption of the community-based monitoring system (CBMS) and local governance performance management system (LGPMS) to facilitate development of local level statistics

#### Frameworks and methodologies for the improvement of statistics/indicators and compilation of new ones

- modifications in the official poverty methodology for 2003 poverty statistics, model-based estimation of annual food and poverty thresholds, and estimation of poverty in the basic sectors
- compilation of the Philippine National Health Accounts
- computation of national-level maternal mortality ratios and national, regional, and provincial population projections
- interim methodology for school-age population estimation
- annual labor force statistics and Philippine Labor Index
- computation of wholesale and retail trade sales index, interim methodology for the revision of electronics import statistics, and IT and IT-enabled services
- compilation of the Philippine Tourism Satellite Accounts
- consumer price index (CPI) for bottom 30 percent income group households
- generation of statistics on overseas Filipinos
- scope and coverage of the Philippine Information Economy in aid of the development of appropriate statistical framework

#### New/revised/rebased data series adopted

- Revised quarterly and annual national accounts series, 2000-based, 1998-2011
- Monthly CPI, 2006-based, starting 1994
- Monthly construction materials wholesale price index, 2000-based, starting 2000
- General retail price index in the National Capital Region (NCR), 2000-based, starting November 2008
- Producer price index for manufacturing and agriculture, 2000-based, starting 2001

#### Standard statistical classification systems revised following revisions in international standards

- 2004 Philippine Standard Commodity Classification
- 2008 Philippine Standard Classification of Education
- 2009 Philippine Standard Industrial Classification
- 2009 Philippine Classification of Individual Consumption According to Purpose
- Quarterly updates of the Philippine Standard Geographic Code
- Philippine Tourism Statistical Classification System, 2005

#### Official concepts and definitions for statistical purposes

- economic statistics (*trade, tourism, science and technology, information and communications technology, and environment and natural resources*)
- social statistics (*poverty, health and nutrition, education, labor and employment, population, gender and development*)

#### New surveys with clearance from the NSCB through the SSRCS

- National Demographic and Health Survey
- Household Survey of Domestic Visitors
- Global Adult Tobacco Survey
- Anti-Red Tape Act Report Card Survey
- *Pantawid Pamilyang Pilipino* Impact Evaluation Survey
- Barangay Information Management System
- Survey of Tourism Establishments in the Philippines

#### Pilot and special surveys conducted in the PSS

- 2006 LGU ICT Status Survey
- Survey on Laboratory Testing Services as rider to the 2005 Annual Survey of Philippine Business and Industry
- 2005 Tracer Study of Graduates of Job Directed Scholarship Programs
- 2005 Pilot Survey on the Diagnosis of Indigenous Peoples' Rights in Ancestral Domains in the Philippines
- Sub-Regional Multiple Cluster Survey
- Pilot Study on the Measurement of Progress of Philippine Society
- 2009 Housing Preferences and Affordability Survey
- National Survey of Areas Planted to Abaca
- Survey of Innovation Activities by Establishments, Survey on ASEAN Economic Blueprint Measures
- 2010 Survey on Energy Consumption of Establishments
- 2010 Pilot Survey of Enterprises in the Philippines
- 2011 Family Health Survey
- 2011 Employer's Satisfaction Survey

#### New interagency committees on statistics

- Environment and natural resources statistics
- Information and communications technology statistics
- Security sector statistics
- Statistical information management

▶▶ **Increased and improved access to statistics.** With the aid of both print and broadcast media and the internet, more official statistics have been published during the period reaching a much wider audience than in any time in the history of the PSS. Media coverage of data releases, analysis of statistics on specific issues, and key statistics-related events has visibly increased in recent years. The quantity and range of statistics that are now accessible online have not been thought possible with print publication, previously the primary means of data dissemination. Disseminating data on the internet has significantly cut the time lag before data reach users. All this can be attributed to the more open and proactive policy

on data dissemination that the MSAs have adopted as well as to the help of media partners and eminent data users.

Among the notable initiatives are the:

- establishment of the NSIC in the provinces of *Negros Occidental, Antique, Capiz, Aklan, and Pangasinan* to serve the needs of local-level stakeholders,
- increased use of visualization techniques in data presentation,
- provision of more data for download through websites, online databases, and other technology, *e.g., RSS feeds*, and
- statistical information dissemination through mobile services and social networking media.

The websites of the NSCB, NSO, BAS, BLES, and BSP have considerably improved with greater quantity and wider variety of statistics and online services available to users. The NSCB's eponymous *Statistically Speaking* column on its website is worth noting for its simple, non-technical, and engaging way of presenting and analyzing statistics on current or relevant issues which has received warm and positive response of the media and the general public. The NSO publishes a wide range of statistical tables from its censuses and surveys and other related undertakings. Aside from regular data releases from a host of agricultural surveys and monitoring systems, BAS also has its CountryStat Philippines website which has been recognized as an international best practice in agricultural data dissemination. BLES on the other hand regularly features data updates and analysis on labor and employment, including those that promote the decent work framework. Meanwhile, BSP continues to expand its already extensive online dissemination of statistics as new statistical activities are introduced.

▶▶ **Increased use of technology in data collection.** The NSO and BAS have made significant steps in tapping technology to improve data collection. NSO has considerably employed handheld devices in the conduct of the 2007 Census of Population and has started exploring the use of online questionnaires for establishment-based surveys. BAS meanwhile has started using mobile technology to capture more quickly data on prices of major agricultural commodities through its Mobile Data Gathering System.

▶▶ **Initiatives to document, preserve, and protect the country's statistical legacy.** The PSS has made the collective decision of institutionalizing the documentation and preservation of statistical data for the benefit of future generations of data users. The NSCB Executive Board through NSCB Resolution No. 10, series of 2010, enjoins agencies in the PSS to archive and document microdata using international standards. It has likewise approved, through NSCB Resolution No. 5, series of 2011, the general policy on the production, release and dissemination of microdata to ensure the timeliness of release and accessibility or more comprehensive and disaggregated data to the public.

In recent years, the MSAs have published more extensive metadata and technical notes along with statistical reports, which are also meant to uphold the transparency of statistics. Meanwhile, NSO has stepped up efforts to develop its NSO Data Archive while BAS and BLES have initiated work to establish the BAS Electronic Archiving and Network Services (BEANS) and BLES Electronic Archived Microdata System (BEAMS), respectively, through the Accelerated Data Program of PARIS21.

Details of key statistical developments in various sectors are found in the relevant chapters.

## « Issues and challenges

The PSS is perennially confronted with issues and challenges brought about by the continuous increase in demand for statistics as well as the evolving sophistication and diversity of statistical requirements of stakeholders.

The issues and challenges need to be considered in the continuous improvement of management and coordination of the PSS.

### » There has been a general decline in human resources in the PSS, especially in the government statistical service.

- The downtrend in the number of statistical personnel in the MSAs since 2005 has significantly affected the productivity of statistical human resources.
- The inadequacy of statistical human resources has prevented the implementation of some important statistical policies, programs and activities thus limiting the capacity of the PSS to respond to emerging concerns.
- The severely depleted workforce is a significant effect of the government's continued rationalization policy, which has increasingly been perceived as an irrational attrition policy. It has further aggravated problems brought about by the already high turnover of government statisticians due to low salary and better professional and financial opportunities outside of the government statistical service.

### » The absence of strong, comprehensive statistics laws and the inadequacy of existing coordination mechanisms may have weakened the PSS in effecting policies and standards.

- Existing laws, policies and coordination mechanisms have proved weak and wanting for the continuous and increased production, reporting, dissemination, and use of statistical data.
- Policies and guidelines on statistics are spread out in different charters and mandates and are at best too broad and general and carry little legal weight.
- Despite the issuance of executive orders, most of which are only partly implemented, such as EO's 135, 352, 464, and 406, and established coordination mechanisms, the PSS remains inadequate in resolving long-standing and persistent issues such as the lack of local-level statistics, and addressing new challenges which now include governance, security, climate change and environmental sustainability, and disaster risk reduction management, among others.
- A comprehensive statistics law that provides for the basic principles and concrete state policies and legal frameworks is necessary for stronger and more effective governance and efficient statistical operations of the PSS at the national and local levels, and to articulate better provisions on statistical responsibilities and protection of respondents and data providers.

### » Data generation has remained fragmented and uncoordinated in some sectors.

- While the development of statistics in many sectors has made significant advances, a few sectors have remained without an integrated statistical framework or working data system to support relevant policy. As such, data are fragmented and institutional responsibilities and accountabilities are not clearly defined. As all sectors are being counted to contribute to the achievement of national development goals, it is important that data support systems in all sectors are equitably developed and well coordinated.

### » Access to data, metadata, and microdata has remained limited and, in some cases, difficult for data users.

- While improvements have been made, the dissemination of some data, metadata, and microdata, especially results of certain surveys, has remained limited and ineffective.
- Many NGAs do not regularly release their data or have very limited statistics published on their websites.
- Some data users and producers find it difficult to access data and microdata from censuses and surveys due to stringent policies or prohibitive costs of data even if the data and microdata are necessary for the computation of other statistics or indicators. A few agencies have even expressly refused to provide data without charges.

### » Users find some data and microdata still tardy and not relevant. Tardiness of data may have diminished the usefulness of statistics in policy.

- There is general perception that some data may no longer be relevant and that resources used in generating such data could be better spent to collect more useful ones.
- Some data are deemed tardy by some users mainly due to long time lag. There has not been any significant reduction in the time lag of some critical data in the previous Plan period.

### » While there are some mechanisms in place to ensure quality of data, greater focus on data quality assurance is needed.

- With the multitude of data generated in the PSS on various sectoral concerns and at different levels, data quality becomes a paramount concern to ensure user trust in statistics. The need to institute data quality assurance measures is urgent.

### » There are some areas in statistical coordination that need much improvement for increased relevance, effectiveness, and efficiency of the PSS.

- Representation in the Board and interagency committees need to be strengthened to facilitate decisionmaking processes.
- There is room for improvement in the workings of the Board and interagency committees and working groups. Improved systems and procedures can make business processes more focused and professional.
- The secretariat to the Board and various interagency committees need strengthening in terms of better meeting management and technical support. Similarly, sectoral lead agencies may have to take a more active role in agenda setting, concept development, managing discussion, and monitoring of developments in the relevant sectors.



### ► Policies and guidelines on administrative-based data have remained weak and insufficient.

- The increasing costs of censuses and surveys necessitate the use of alternative data sources such as administrative-based data systems. However, statistical policies and standards for administrative-based data generation and dissemination have remained insufficient and the few that exist have not made a significant impact in terms of increased volume and regular release of data.
- The emergence of registries created by NGAs for identifying beneficiaries of government programs has caught the PSS unprepared in terms of ensuring that the generation of data through these registries is based on established quality standards and sound methodologies. This new development has also raised possible ethical implications with the use and dissemination of respondent-level information in relation to safeguarding respondents' rights and welfare.

### ► Business processes in statistics need to be improved in terms of effectiveness and efficiency to address key quality issues.

- There is need to improve current business processes in the PSS towards greater focus on priority data needs, effective and efficient use of knowledge and technology resources and research and development, and enhanced quality of data. This will require collective and individual institutional changes in policy and culture in the management and coordination of statistical operations of government.

## Statistical programs

These statistical programs are meant to address general key issues and challenges for better management and coordination of the PSS and to provide adequate support to the PDP 2011-2016.

### *To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

#### 1. Rationalization of censuses and surveys

- Integrated review of household and establishment surveys
- Formulation and implementation of a ten-year program of censuses and surveys
- Improvement of master samples to among others, generate local-level statistics
- Increasing the use of technology in censuses and surveys

#### 2. Development of a business register to serve as basis for sampling frames of economic surveys and to generate business or corporate statistics

#### 3. Generation and improvement of local statistics

- Strengthening of national-local governments joint data collection systems in key sectors, *e.g., vital events, field health surveillance, housing and construction, business activities, environment, etc.*

- Development of mechanisms to generate data from local government administrative and monitoring systems through enhanced information systems
- Institutionalization of a community-based monitoring system in all LGUs
- Generation of local-level estimates of key statistics/indicators through small area estimation and other suitable techniques
- Development of mechanisms to utilize data generated from program registries

### *To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

#### 4. Expansion and strengthening of the Government Accessibility Program

- Development of an integrated statistics web portal as well as online and interactive sectoral databases to disseminate all available data, microdata, and metadata resources in the PSS
- Institutionalization of data archiving, including preservation, documentation, dissemination of data and microdata from censuses and surveys
- Establishment of standards and mechanisms for data sharing and exchange, *e.g., SDMX*
- Establishment of statistical information centers at the local levels

#### 5. Enhancement of data dissemination, communication, and use

- Application of appropriate technology in data dissemination, *e.g., data visualization techniques, geospatial information system/management, social networking, etc.*
- Enhancement of partnerships between the MSAs and other data producers and the media for wider dissemination of statistics

#### 6. Strengthening statistical advocacy in the PSS

- Integrated and coordinated advocacy activities on statistics
- Enhanced National Statistics Month celebration especially at the local levels
- Sustained conduct and promotion of the National Convention on Statistics and regional statistics congresses and conventions
- Increased dissemination of statistics on agency websites and online databases

#### 7. Formulation and implementation of a code of ethics/practice in statistics in the PSS consistent with the UNFPOS and pertinent national laws and policies

#### 8. Implementation of a statistical training program for data users in government, media, business, and civil society organizations and other stakeholders

### *To enhance statistical capacities of data producers and providers*

9. Establishment of competency standards for statisticians to identify core skills training needed to improve organizational and job performance, *e.g., adaptation of the UNSIAP Core Skills Framework*
10. Institutionalization of competency-based human resource capacity building program for statistical human resources at the national and local levels
11. Forging of partnerships between the PSS and the academe in undertaking methodological improvements in statistics as well as in capacity building of the statistical workforce
12. Participation in and hosting of international conferences, training, workshops, and expert group meetings for methodological development and statistical capacity building

### *To improve coherence, effectiveness, and efficiency of the statistical system*

13. Adoption of core indicators and statistics in support of national and local development as the principal statistical framework of the PSS
  - Comprehensive data assessment and stakeholder consultations
  - Identification of core indicators and development of appropriate statistical framework
  - Formulation of general policy and guidelines for the generation, dissemination, and use of data on the core indicators
14. Development, updating and implementation of statistical frameworks and indicator systems
  - Development of statistical frameworks on emerging sectoral concerns, *e.g., social protection statistics, disaster risk reduction and management*
  - Enhancement/updating of existing frameworks and indicator systems to implement international recommendations and standards and consider emerging concerns, *e.g., System of National Accounts, Balance of Payments, Government Finance Statistics, Input-Output tables, Environment and Natural Resource statistics, including climate change*
15. Enhancement of the System of Designated Statistics towards reduced time lag, more detailed and locally disaggregated data, improved accessibility of data, metadata, and microdata, and designation of new and critical statistics
16. Formulation of an integrated, comprehensive statistics act that will govern the statistical operations of the PSS at the national and local levels
17. Improvement and implementation of existing legal frameworks and instruments on statistics, *e.g., EO's 135, 352, 406, 464, etc.*
18. Formulation of strategic statistical development policy agenda with priority on
  - Policy and statistical framework for the development of local-level statistics
  - Policy and guidelines for decentralized data dissemination of key statistics
  - Policy on enhanced data sharing, pricing of statistical outputs, costs standards for statistical activities, *e.g., census, surveys, training, study visits*
  - Policy on use of administrative-based data systems as primary and/or alternative data sources
  - Policy on generation and use of data from registry systems and databases for targeting beneficiaries of government programs
  - Enhanced policy on data disclosure and confidentiality, and easing respondents' burden
19. Institutionalization of standards and guidelines on the generation and dissemination of quality administrative data
  - Implementation of the ARRCs
  - Development/improvement of administrative-based information systems on key sectoral statistics at the national and local levels
  - Development of mechanisms for increased data sharing among administrative-based data systems
  - Implementation of guidelines and standards to harmonize registry systems for targeting beneficiaries of government programs
20. Development and institutionalization of the Philippine Geoportal or an integrated geographic information system for better management and coordination of geo-referenced data
21. Development and implementation of a data quality assurance framework and system in the PSS
22. Improvement of the Performance Measurement Scheme of the PSS for better monitoring of institutional capacity and quality of the government statistical service
23. Creation of an independent Statistical Advisory Council of eminent persons to provide advice and guidance in the improvement of the PSS
24. Strengthening of sectoral statistical bodies at the national and local levels
  - Creation of new sectoral statistics bodies to address underdeveloped areas, *e.g., transport, energy, and emerging concerns, e.g., social protection, governance, peace and security, disaster, wealth accounts, total investment, etc.*
  - Creation of statistical coordination committees in the provinces, cities, and municipalities as nerve centers of statistical development at the local levels
  - Strengthening of the Regional Statistical Coordination Committee in all regions for more balanced statistical development
25. Promotion of statistics as a profession and career path towards increasing human capital for the PSS



26. Participation in international and bilateral statistical development and cooperation initiatives

*To increase and sustain resources for statistics*

27. Institutionalization of sustainable financing scheme for statistics development through a medium term expenditure framework for the PSS specifically

- Strengthening of institutional coordination between PSS, DBM, legislative bodies, and development partners to ensure funding for statistics
- Implementation of a prioritization scheme for financing statistical activities in the PSS
- Improvement of the statistical budget review process through updating of the Joint Circular No. 01-97 of the DBM
- Preparation of an investment plan for statistics for inclusion in the Public Investment Program
- Preparation of an ICT investment plan by agency towards acquisition of appropriate technology for increased automation of statistical and business processes (including data archiving and warehousing)

consistent with the information systems strategic plans of agencies

28. Review and upgrading of the salary structure for statisticians within the framework of pertinent laws and government policies

29. Creation of statistical units and positions in NGAs and LGUs with competitive salaries

- Creation or designation of at least one statistical position in every municipality, city, and province

30. Development of a strategic human resource framework to guide resource planning in the PSS in consultation with DBM and relevant oversight agencies

31. Partnership between the PSS and international development organizations as well as with LGUs for financing priority statistical development activities at the national and local levels

## Chapter 2

# Statistical capacity development

## Human resource development

### Introduction

One of the essential conditions for the PSS to achieve its goals is the availability of quality human resources to undertake statistical work and contribute to the progressive development of statistics. Although there are other important factors that affect the ability of the PSS to manage and coordinate the government statistical service, it is the sustained capability of the statistical workforce that ultimately delivers the statistics needed in governance and development.

It is therefore necessary to continually build the capacity of the statistical workforce and institutions in order to sustain effective and efficient response to the ever growing demand for statistics by decisionmakers, planners, researchers, and service providers in all sectors of society. Human resource planning, management, and development in the PSS are at the core of essential statistical capacity development measures towards ensuring the effectiveness and efficiency of the government statistical service.

The development of statistical human resources in the PSS is closely interspersed with individual growth of statisticians. The PSS thus recognizes the importance of professional and career development of statistical personnel. Through the government and with assistance of the international development community, the PSS continually invests in statistical capacity building programs to keep the statistical workforce adequately equipped to meet the technical and operational requirements of statistical work.

This section presents a general framework for statistical capacity development of the human resources in the PSS.

### Scope and coverage

This section deals in particular with the following major dimensions of statistical human resource development: human resource planning and management, human resource development, professional and career development, and statistical capacity building resources.

- Human resource planning and management
  - processes in determining current and future human resources needs and managing human resources towards achievement of goals
  - competency standards and measures, compensation and incentives system, working conditions, selection and succession policies and practices, and productivity improvement measures

- Human resource development
  - framework for helping personnel develop their knowledge, skills, and abilities towards achieving personal and organizational goals
  - statistical capacity building programs such as education and training and exposure to or internship in best practices to develop key competencies that enable individual statistical personnel to perform current and future functions
- Professional and career development
  - interventions that facilitate growth and career path improvement of individual employees
  - programs that promote the statistics profession in general towards the development of human capital for statistics
- Statistical capacity building resources
  - necessary inputs to facilitate human resource, professional, and career development in the PSS.

This section primarily addresses common and system-wide human resource concerns in the PSS. Sector- or agency-specific human resource measures are discussed in the various sectoral chapters.

### Situational analysis

#### Human resource planning and management

- As PSS is a decentralized system, each of the MSAs has its own human resource unit handling internal human resource planning and management concerns.
- In other key data producing agencies, human resource concerns of statistical personnel are addressed together with the rest of the agencies' workforce.
- There are however human resource interests that might be best approached in relation to the entire PSS, and hence need appropriate measures that apply across PSS.
- There is currently no existing mechanism for coordinating and integrating PSS-wide human resource planning and management.

#### Human resource development

- The MSAs design and implement their own human resource development program (HRDP) to continuously improve knowledge and skills of personnel in the exercise of their respective statistical functions. Typically, the HRDP provides a framework and system of scholarships for formal and non-formal training and education and in-house technical and management training and workshops focused on statistics and related topics.
- The design and implementation of an HRDP for the PSS is primarily lodged with the SRTC. The SRTC develops and conducts statistical training courses in collaboration

with the academe. The program covers training on various aspects of statistical work such as survey design, data collection and processing, database management, data analysis, presentation and dissemination. These programs are meant to enable the statistical workforce and other civil servants acquire knowledge, skills, abilities, and attitudes necessary to enable them improve their performance in producing, analyzing, and disseminating statistical information for policy use. SRTC training programs are accredited by the CSC and CHED.

- The academe also plays an important role in human resource development of the PSS. Spearheaded by the UPSS and UPLB INSTAT, these academic institutions also offer statistical training programs albeit on a less frequent basis and are geared more towards the private sector.

### Professional and career development

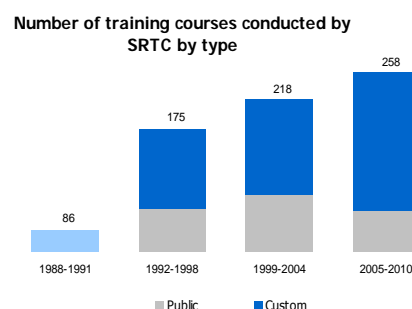
- The development of the statistics profession is crucial in sustaining the PSS. The profession takes its roots in the educational system, which over the years has ensured the continuous flow of human capital for statistics and has sustained the statistical workforce in government, academe, and the private sector.
- There are a number of colleges and universities in the country that offer undergraduate, graduate, and postgraduate degree programs in statistics. The UPSS in *Quezon City* and UPLB INSTAT in *Los Baños, Laguna* have relatively long histories of producing statisticians for the PSS. Among the other institutions that contribute to the human capital for statistics in the country are the:
  - University of the East, Polytechnic University of the Philippines, and *Rizal* Technological University in the National Capital Region
  - Central Luzon State University in *Muñoz City, Nueva Ecija*
  - UP *Visayas* in *Iloilo*, Visayas State University in *Leyte*, Eastern Visayas State University in *Tacloban City*, *Samar State University* in *Western Samar*, and *Negros State College of Agriculture* in *Negros Occidental*
  - *Mindanao State University (MSU)* in *Marawi City*, *MSU-Iligan Institute of Technology* in *Iligan City*, *University of Southeastern Philippines* in *Davao City*, and *Western Mindanao State University* in *Zamboanga City*.
- The international development community plays a significant role in human resource and professional development through scholarship and fellowship grants in various internationally recognized academic institutions.
- In addition to education and training, the PSS promotes professional development in statistics through the triennial National Statistics Convention and regional statistical congresses, hosting of and participation in international statistical conferences, training, workshops, and expert group initiatives.
- A Scientific Career System for Statistics is currently in place to kick-start the career development of government statisticians. There are however issues with the stringent requirements and other areas that need further study and improvement.
- The PSA continues to serve as a vital partner of the PSS in promoting professional and career development of statistical professionals and practitioners through conferences and other relevant programs.

### Statistical capacity building resources

- Some MSAs have their own facilities and pool of resources for training of their human resources in specific competency areas.
- Only SRTC and some academic institutions maintain such facilities and develop appropriate materials and tools to support training programs that are offered to all human resources in the PSS and other clients. SRTC has a dedicated unit for designing, developing, implementing, and coordinating training programs.
- SRTC taps trainers and resource persons from the MSAs, academe, and the private sector to administer training. It also partners with regional affiliates, which are based in the academe, in the conduct of training activities in the field, as well as with international institutions on relevant cooperation programs for capacity building.

## Key developments in 2005-2011

» **Increase in the number of statistical training programs and beneficiaries.** The SRTC has conducted more training programs of graduated complexity for more participants from 2005 to 2010 than in all previous PSDP Plan periods. The number of training programs picked up during this Plan period beginning in 2007 and 2008 and further increased from 2009 to 2011. Despite the modest size of SRTC in terms of human resources and limited funding support, the average number of training programs has risen from 32 per year for the period 2005-2008 to about 65 per year in 2009-2011. In terms of beneficiaries, the programs have upgraded the knowledge and skills of a total of 6,700 participants during the period 2005-2011.



Of the cumulative total of 325 training programs within the Plan period 2005-2011, 65 percent are demand-driven and custom-designed to address specific requirements of government and on limited occasions, the private sector. The regular training programs are classified as '*public offering*' with a yearlong calendar released at the beginning of the year.

The programs range from basic descriptive and inferential statistics to the more advanced time series and multivariate analysis, to econometric modeling. For comparability considerations, the 30 training programs on CBMS conducted for *Batangas Province* under the MDG Project of SRTC and UNDP in 2008-2009 are not included in the reported figures.

## Number of training courses and beneficiaries conducted by SRT

PSDP plan period	Training program			Beneficiaries/participants		
	Public	Custom	All	Public	Custom	All
1988-1991	4	26	86			1,981
1992-1998	61	114	175	1,054	2,744	3,798
1999-2004	82	136	218	1,370	3,103	4,473
2005-2010	58	200	258	1,027	4,512	5,539
2005	5	22	27	33	562	595
2006	8	18	26	99	379	478
2007	2	35	37	31	903	934
2008	6	33	39	106	695	801
2009	15	54	69	294	1,241	1,535
2010	22	38	60	464	732	1,196
2011	22	45	67	388	773	1,161
Cumulative total as of 2011	227	521	804	3,839	11,132	16,952

►► **Wider reach of statistical training through the regional training affiliates.** A significant number of SRTC training programs have been conducted in the regions. Despite the absence of regional offices, SRTC is able to expand the reach of its training services to stakeholders of statistics in the regions through regional training affiliates. These affiliates are established in public and private academic institutions in partnership with the Philippine Association of State Colleges and Universities (PASCU) and the Coordinating Council of Private Educational Associations (COCOPEA). After undergoing a training of trainers course, the regional training affiliates start implementing training courses under SRTC guidance which significantly helped increase the training programs conducted from 2007 onwards. Nevertheless, a larger fraction of NGAs and LGUs have yet to benefit from SRTC training programs due to budget constraints.

►► **Enhanced international cooperation in statistical capacity building.** A number of statistical training initiatives have been conducted jointly between the PSS, through the SRTC, with multilateral institutions, such as the UNDP, UNSIAP, UNESCAP, and JICA. SRTC has likewise entered into bilateral agreements with statistical institutions of other countries for the provision of technical assistance through training or study tours.

►► **Sustained human resource development in MSAs.** The MSAs continue to provide training and education opportunities for their statistical personnel through in-house statistical training sessions and local and foreign scholarships on various statistics and related fields. NSO, in particular, has conducted multi-level statistical training for its staff, *i.e., Group A, Group B, Group C, and MCO/CA*, to meet the operational requirements of its statistical work. The program has trained many of NSO's current senior officials as well as rank-and-file employees and field personnel without sufficient educational background in statistics. NSO has also entered into a memorandum of agreement with the PUP for a Master of Applied Statistics Program for its staff.

►► **Initiating statistical capacity building at the local levels.** In 2008-2010, SRTC implemented a project designed to build capacities of LGUs and technical personnel of the province of *Batangas* in the generation of their own community level socio-economic data using the CBMS approach. The project, funded by the UNDP through

NEDA, trained key staff in statistical data gathering, data processing and database building, digitizing maps, and preparation of socio-economic profiles. Through this project, the province of *Batangas* is now able to prepare comprehensive and evidence-based provincial progress reports on the MDGs.

## Issues and challenges

The current human resource situation in the PSS in relation to demand for statistics is one the most important and urgent challenges that the PSS is facing. Nonetheless, there are other relevant issues that merit appropriate and concrete action.

►► **The current human resources in the PSS are inadequate to respond to expanded and still growing user needs.**

- Recent government rationalization policy has adversely affected the level and capacity of the human resources in MSAs. Since 2005, there has been a continuous decline in the number of government statisticians in the MSAs. The reduction in statistical personnel has caused delays of some statistical indicators and suspension of some statistical data activities and outputs. It has also limited statistical capacity building, especially at the local levels, and research and development.
- The same policy has further marginalized statistics in some NGAs whose rationalization plans have either excluded or downgraded existing statistical units and positions.
- Only a few LGUs have a dedicated unit or statistical personnel for collecting and compiling statistics for local development planning. There is no concrete policy and plan for expanding human resources at the local levels to include statistical personnel
- There is quick turnover and hence loss of some trained government statisticians to the private sector and international community due to more competitive compensation packages and better opportunities for professional growth in these institutions. There is urgent need to review and upgrade the compensation and incentives system for statistical personnel.
- Meanwhile, the demand for more development indicators with greater amount of details, local-level disaggregation, and more frequent updates has increased tremendously. The situation is especially challenging in the basic social services and less statistically developed areas such as governance, climate change, disaster, and environment.

►► **Currently, there are no mechanisms for integrating and coordinating human resource planning, management, and development in the PSS.**

- There is no interagency mechanism that can provide a venue for discussion of critical human resource issues in the PSS such as attrition and succession planning and management.

►► **Despite the increase in training activities and beneficiaries, a larger segment of the PSS is unable to avail of statistical training opportunities due to resource constraints.**

- There are many statistical personnel and practitioners in NGAs and LGUs that need statistical capability building but are unable to avail of education and training due to lack of resources.

►► There is no integrated and comprehensive statistical human resource development program for the PSS.

- An integrated PSS plan for human resource development can contribute to greater focus on core competencies needed by the PSS, more rational strategies, and maximized resources for continuous development of statistical personnel at the national and local levels.
- There is need to revisit and improve designs and methods of training for more effective outcomes.

►► Data users need capacity building too.

- There is need to improve statistical literacy and capacity of data users, including NGAs, LGUs, the private sector and media, for more rational and wider use of statistics.

►► It is important to enhance appreciation of respondents and data providers on the importance of providing quality inputs to statistical inquiries in the PSS.

- Response rates of statistical inquiries could be further improved if respondents and data providers had better appreciation of their role in ensuring quality of statistics based on their responses and information. There is need for more proactive advocacy and educational campaign among respondents and data providers.

►► The current system of statistics education may need to be reviewed and enhanced to better respond to the human resource needs of the PSS.

- It is important to ensure that enrolment and number of graduates in statistics courses are robust and sufficient to build adequate human capital for the PSS.
- There has been little addition to the pool of professionally educated statisticians in the country. Previous scholarship programs to support postgraduate studies in statistics have been limited and have not created much impact for various reasons. Also, while the DOST has included and promoted statistics in its existing scholarship program, response has been low.
- More active career orientation and promotion and proactive recruitment process are needed to attract more statistics graduates into the PSS.
- Institutional coordination among stakeholders, *e.g., MSAs, academe, DepEd, and CHED*, needs to be strengthened to improve content and delivery of statistics courses as part of the basic and tertiary education programs.
- There are calls for a review of postgraduate programs and for provision of better facilities and guidance to students.

►► There are crucial issues with the existing Scientific Career System for Statistics.

- There are perceptions that the system may be too rigid and not necessarily relevant to the PSS. Further study is needed towards a more appropriate accreditation scheme.

►► Resources are severely inadequate for human resource capacity development of the government statistical workforce.

- As of 2011, SRTC has only five technical staff attending to its statistical training services which translate to a 1:13

to 1:14 ratio of training staff to training programs in a given year. Even with the existing regional training affiliates, the current staff complement is extremely insufficient to serve the increasing training needs of the PSS at the national and local levels.

- The lack of statistical human resources has affected staff productivity and service quality levels due to work overload. It has also prevented the development of new courses and training materials and retooling of staff for better performance.
- With the current SRTC staff complement for training, it is clear that many statistical personnel of NGAs LGUs will have to wait years before they can avail of statistical training services through SRTC.
- The current training facilities at the SRTC have remained limited and inadequate to accommodate growing clientele and are not at par with those of other national statistical systems. At present, there is only one computer laboratory good for only 25 training participants and two other regular training rooms with capacity of 15 participants each. It is common practice that participants are requested to bring their own computers or that SRTC rents the necessary computers. The entire SRTC offices sit on leased property and are not ideally fit for a training and research center.
- SRTC is able to acquire only limited statistical software, *i.e., Stata and Eviews*, due to resource constraints. Ideally, a statistical training center must be equipped with other systems that are widely used in statistical processes such as SAS and SPSS.
- Compensation for training resource persons and experts likewise needs to be reviewed and updated to be at par with rates offered by local and international training institutions providing highly technical and specialized capacity building services. Expert statisticians and practitioners are already becoming rare and more so those who are at the same time effective trainers. A fair and competitive scheme must be put in place commensurate to extraordinary qualifications and extensive experience required of resource persons.

►► There is need to enhance international cooperation on statistical capacity building.

- Cooperation between the PSS and the international community not only fosters better relations but also brings more opportunities for learning through sharing of international best practices and increased access to resources.

## Statistical programs

This section addresses statistical human resource development in the PSS by way of improving access to education and training, learning from experience and best practices, increasing human resource motivation, and strengthening recognition of statistics as a profession.

For 2011-2017, the PSS is geared to accelerate capacity building efforts for the PSS at the national and local levels with the following statistical programs:

*To enhance statistical capacities of data producers and providers*



1. Design and implementation of a competency-based, ladder-type training program for statistical human resources at the national and local levels

- Development of a certification course covering basic statistical training, values/ethics orientation, and PSS appreciation
- Enhancement of existing regular and customized training courses
- Development of competency-based training courses, including sectoral statistics, IT solutions/applications, geographic information system/geospatial information management, strategic planning and management practices, monitoring and evaluation and communication
- Monitoring and evaluation of training outcomes and beneficiaries

2. Provision of degree and non-degree scholarship grants to statistical personnel in the PSS

- Development of a government-funded graduate scholarship program in statistics for statistical human resources (in coordination with DBM, CHED, DOST and the academe)
- Proactive search for foreign scholarship opportunities in statistics and related fields (in coordination with the Scholarship Committee, CHED, TESDA, and other institutions)

3. Conduct of internal and interagency sharing dialogue on statistical concepts, processes, methods, and practices

- Brown bag discussions
- Seminars, conferences, and workshops

4. Continuous development of training curricula, modules, and materials in partnership with individual experts and relevant institutions

- Development of competency-based curricula
- Enhancement and development of training materials and manuals
- Documentation and compilation of statistical methods and processes to serve as additional training references

5. Adoption of alternative modes of training delivery

- Enhancement of the regional training affiliates program and partnership with academic institutions to widen clientele at the local levels
- Study of distance learning and online approaches in training delivery

6. IEC campaign among respondents and data providers for increased participation in statistical inquiries and reporting systems

*To increase human capital and strengthen professional and career development in statistics*

7. Formulation of a code of ethics/practice for statistical human resources in the PSS

8. Development of an accreditation program for statisticians

9. Conduct of statistical conventions and conferences, and advocacy activities

- National Convention on Statistics
- Regional statistical congress
- Statistics quizzes and oratorical contests

10. Participation of PSS personnel in international statistical conventions and conferences and provision of necessary funds

11. Advocacy among PSS personnel for membership in national and international professional statistical organizations

12. Improvement of statistical education

- Undergraduate scholarship grants in statistics
- Youth apprenticeship for undergraduate and graduate students in statistics
- Expansion of the training-the-trainers for teachers teaching statistics at various school levels
- Improvement of curriculum and textbooks on basic statistics courses at secondary and tertiary levels
- Coordination between MSAs and DepEd and CHED for strengthening statistics in the educational curriculum

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

13. Conduct of statistical appreciation seminars for government executives, business leaders, civil society, and media

14. Conduct of training of users on interpretation and analysis of key statistical indicators

*To improve coherence, effectiveness, and efficiency of the statistical system*

15. Creation of a working group on statistical human resource development as one of the interagency mechanisms on PSS-wide concerns

16. Development of a human resource framework for the PSS

- Periodic assessment of PSS human resources
- Determination of optimal human resource complement to ensure delivery of critical statistics and address data gaps
- Strategic planning of critical statistical activities

17. Preparation of strategic statistical human resource development plans

- Periodic capacity building needs assessment
- Formulation of agency human resource development plans
- Formulation of a statistical human resource development plan for the PSS, e.g., annual training agenda, academic scholarship program, and other modes for capacity development

18. Formulation of competency standards for statistical human resources in the PSS
19. Participation in international cooperation programs on statistical capacity building including technical assistance to other national statistical systems

#### *To increase and sustain resources for statistics*

20. Creation of statistical units and positions in NGAs and LGUs
  - Expansion of the SRTC training staff for better management and coordination of statistical human resource development and delivery of training services in the PSS

21. Establishment of a statistical development fund for statistics to support implementation of human resource development plans

- Coordination between MSAs and oversight agencies for the provision of funds for additional human resources and for training and academic scholarship programs
- Augmentation of endowment fund as additional source of funding for training
- Partnership between PSS and LGUs and development partners on financing human resource capacity building in the PSS

22. Active recruitment of highly qualified, and public service-oriented, and statistics-educated/ trained human resources

- Conduct of career talks and symposia among statistics teachers and students and participation in related activities

23. Development of a pool of competent resource persons and experts

- Recruitment of additional resource persons and experts
- Continuous training of resource persons and experts on module development and training delivery
- Rationalization of compensation scheme for professional services (in coordination with DBM and concerned agencies)

24. Improvement of the physical training facilities

- Construction of building for a state-of-the-art statistical training center
- Acquisition of latest ICT resources for statistical training, including geographic information/geo-spatial information management systems



## Chapter 2

# Statistical capacity development

### Research and development

## Introduction

An essential element of an effective and efficient statistical system is a strong statistical research and development (SR&D) culture. SR&D involves the development, testing and experimentation of statistical theories, concepts, definitions, methods, and techniques. SR&D is primarily undertaken to improve aspects of or the entire process of statistical data production to deliver timely, relevant, and reliable statistical information in the most cost effective and efficient ways.

In the PSS, SR&D helps formulate statistical concepts and methods of measurement, improve frameworks and methodologies of censuses and surveys, and explore efficient ways of extracting useful data from administrative registration and reporting systems. SR&D enhances the capability of data producers to improve statistical and attendant business processes to develop better and new statistics, products, and services to meet current and future requirements of data users. Overall, SR&D contributes to the statistical capacity development of the PSS to produce quality statistics in support of governance and other productive uses.

This section presents a strategic plan towards the institutionalization of the culture and system of research and development in the PSS.

## Scope and coverage

This chapter deals with five aspects of the SR&D process in the PSS, namely, the management and coordination of SR&D, conduct of SR&D activities, dissemination and utilization of SR&D outputs and outcomes, SR&D capacity building, and SR&D resources.

- Management and coordination of SR&D
  - policies, standards, and guidelines in the planning, conduct and utilization of SR&D activities
  - mechanisms for stakeholder consultations and monitoring
- SR&D activities
  - improvement of statistical concepts, methods, techniques and processes, and development of new ones towards the delivery of more timely, accessible, coherent, comparable, comprehensive and relevant statistics
- Dissemination and utilization of SR&D

- activities to ensure that stakeholders are adequately informed of ideas and innovations through improved access to SR&D and advocacy

- SR&D capacity building
  - training and related strategies to enhance the capacity of the PSS to initiate and implement SR&D
- SR&D resources
  - necessary infrastructure and inputs such as human, financial and technology resources that enable SR&D

This section primarily addresses the common and system-wide SR&D concerns in the PSS. Subject-specific SR&D is discussed in various sectoral chapters.

## Situational analysis

There are various institutions that undertake SR&D in the PSS. The SRTC, which is mandated by E.O. 121 to spearhead statistical research and training in the country, administers a continuing statistical research program for the PSS in collaboration with the MSAs, key data producers and users, the academe, and individual experts. The MSAs also conduct SR&D on their own initiative to support their statistical work.

The academe, led by the UPSS, UPLB INSTAT, implement similar studies as part of their academic and research programs. The PSS has for years benefited from its continuing collaboration and partnership with the academic and research communities, which also provide experts and resource persons in interagency statistical bodies and SR&D activities. The PSS likewise recognizes SR&D studies carried out by students of statistical programs in selected academic institutions.

### Key developments in 2005-2011

Despite the common and perennial problem of inadequate resources, the PSS continues to strive in promoting and undertaking SR&D albeit on a limited scale.

►► **Regular updating of the research agenda for the PSS.** Every year, SRTC formulates a comprehensive and integrated research agenda for the PSS. The agenda is periodically updated in consultation with the MSAs and other data producers as well as data users to consider current and emerging needs. The research agenda focus in general to the improvement of methodologies, concepts, definitions and statistical techniques, rationalization of censuses and surveys to improve effectiveness and

efficiency of processes and quality of statistics, and development of relevant indicators to address emerging issues and concerns at the national and local levels.

►► **Conduct of R&D activities.** With meager resources available, SRTC has been able to complete on average seven researches in a year during the 2005-2011 periods although these are not much more than in previous years. More than a third of the researches are supported by proceeds from the SRTC Endowment Fund and from the SRTC's annual budget while the rest are funded by the MSAs and other data producers in the PSS. The statistical research topics pursued are selected to address issues that affect the statistical production process, dissemination and utilization of statistics, or the need for analytic study of certain development issues.

**Completed statistical research studies through SRTC**

PSDP plan period	Training program		Beneficiaries/participants			
	Inhouse	Endowment	MSAs	RGSSP	Others	All
1988-1991	-	3	9	-	-	12
1992-1998	2	22	6	-	5	35
1999-2004	2	7	4	11	1	25
2005-2010	8	6	11	3	4	32
2005	1	-	-	1	-	2
2006	1	-	2	1	-	4
2007	-	-	3	1	1	5
2008	1	2	4	-	-	7
2009	3	-	1	-	2	6
2010	2	3	1	-	1	7
2011	1	-	2	-	4	7
Cumulative total as of 2011	13	38	32	14	14	111

**Notes:**

In-house – conducted by SRTC technical staff with support from its regular fund  
 Endowment – income from SRTC Endowment Fund  
 MSA - In collaboration with MSAs  
 RGSSP – Re-engineering the Government Statistical System Project  
 Regular fund  
 Others – Other government agencies/international institutions and private offices

From 2005 to 2011, about 13 researches have been funded and undertaken jointly with and funded by other MSAs, three are coordinated by SRTC and conducted by MSAs with support from CIDA under the Re-engineering the Government Statistical System Project (RGSSP), while 17 are implemented solely by SRTC either from its own regular fund or with support from other NGAs, international institutions, and the private sector.

Some key recent SR&D conducted jointly with MSAs are the establishment of an Early Warning System for Broiler and Swine through statistical forecast models, development of alternative sampling strategies relative to the preparation of the 2012 Census of Agriculture and Fisheries, development of new foreign trade indices of the Philippines, development of a data quality assurance and assessment framework for DOLE, rethinking of the Labor Force Survey, study on chain-type measures of gross domestic product, price indices and other related indices funded by BSP, among others.

►► **Inventory of SR&D initiatives.** In order to promote utilization and institutionalization of research outputs in the

PSS, the SRTC conducts periodic inventories of completed research studies that have been institutionalized and those being institutionalized.

►► **Wider dissemination of SR&D outputs.** The triennial National Convention on Statistics (NCS) spearheaded by NSCB and the annual conference of the PSA serve as main venues for the dissemination of SR&D studies in the PSS. The last two staging of the NCS have shown a continuing increase in the number of research papers presented, reaching 104 and 112 in 2007 and 2010, respectively, and attendance, with record breaking numbers for the same years.

The annual PSA conference meanwhile has started convening outside of the National Capital Region while regional statistical congresses have been organized in *Luzon, Visayas, and Mindanao* bringing SR&D closer to stakeholders based in the regions.

The UPSS and UPLB INSTAT in partnership with SRTC jointly organize the annual National Student-Faculty Conferences for Statistical Sciences, which showcase many statistical researches dealing with both theoretical and applied statistics.

SRTC also conducts quarterly symposiums/forums for the presentation of completed research undertakings by its thesis/dissertation fellows, scholars, research project partners, and technical staff. The MSAs and academe conduct similar forums to introduce new concepts or methodologies or present data analytic findings. Abstracts of completed SR&D conducted and coordinated by SRTC are posted on its website.

►► **Thesis and dissertation fellowship program.** With the aim to advocate for SR&D and help enhance capacity of statistical human resources in the country, SRTC continues to administer an assistance program that provides financial support to students taking up masters and doctorate programs in statistics for the completion of theses and dissertations. The program is funded from the proceeds of the SRTC Endowment Fund. There have been 12 fellows, mostly from the academe, that benefited from the program during the period 2005-2011.

►► **Scholarship Program under the RGSSP Phase I.** Established in 1998, the program aims to address the future requirements of the PSS for professional statisticians. Under the joint support of the Government of the Philippines and the CIDA through the latter's Policy Training and Technical Assistance Facility, graduate scholarship grants in statistics have been awarded to 15 employees of the MSAs. The SRTC, being the agency designated to implement the program, is responsible for coordinating the planning, implementation, and monitoring of the scholarship grants and in providing the needed secretariat support. Since 2006, there have been three scholars who have successfully graduated and have returned to their respective agencies.

►► **Establishment of a statistical career system.** In 2004, the PSS moved towards promoting professional and career development of statistical personnel by establishing procedures for the SCSS. The SCSS is a system of recruitment, career progression, recognition and reward for statisticians in the public service with the main objective to develop a pool of highly qualified and productive statisticians in the country and at the same time, encourage them to undertake research. The SCSS is patterned after an existing system managed by the DOST. Despite issues regarding the rigid requirements, the SCSS provides an

option for statisticians in the PSS to pursue career advancement.

## «Issues and challenges

The following are the major issues and challenges that may continue to hinder advancement of SR&D if not appropriately addressed:

### »More concrete directions and policies are needed to ensure that SR&D contributes to statistical development in the PSS.

- There is room for improvement in the process of formulation of the research agenda for the PSS. Mechanisms for coordinating the preparation of an integrated research agenda have not been widely discussed in the past. It is not clear whether the research agenda has been truly responsive to at least the needs of the MSAs or has contributed to the attainment of the strategic thrusts of the PSS.
- The SRTC Governing Board may need to provide better guidance through more regular meetings and more concrete policy directions.

### »The PSS could use more relevant SR&D outputs that effectively translate into improved statistical processes and better quality of statistics in critical policy areas.

- There are perceptions that previous SR&D initiatives have not really addressed many of the most pressing information needs of governance such as local-level data and certain sectoral statistics. There are many important policy areas that still lack appropriate indicators or reliable data support systems.
- While there is wide recognition of the potential of administrative systems to provide useful statistics, there has been little SR&D that dealt with the improvement of key administrative-based data or the development of new ones.

### »There is little information on the utilization and institutionalization of SR&D outputs in the improvement of statistics.

- Mechanisms to effectively monitor utilization of SR&D outcomes in the improvement of statistical processes and operations are lacking. There is limited knowledge of how SR&D studies have been adopted and instituted in statistical activities of MSAs and other data producers.
- Promotion and dissemination need to be enhanced to improve access of stakeholders to these SR&D outputs and hence increase chances of utilization and institutionalization.

### »While the SRTC is mandated to spearhead SR&D in the PSS, the MSAs and key data producers have to strengthen their internal capability to initiate and undertake research in support of specific needs.

### »Resources have been perennially insufficient for the conduct of even the most basic SR&D in the PSS.

- Resource constraints continue to hinder the implementation of the research agenda for the PSS. There has been no significant increase in the budget of SRTC and other MSAs through the years. In particular,

the SRTC Endowment Fund has remained very limited to be able to support significant research activities.

- SRTC's SR&D workforce has remained modest to effectively manage and coordinate a more comprehensive SR&D agenda for the PSS. Human resources in the MSAs have not been increasing either which has further reduced opportunities for SR&D.

### »Cooperation between the PSS and the international community on SR&D must be enhanced.

- The PSS can benefit from international initiatives, expertise, best practices, and pool of resources by strengthening its working relations with pertinent international bodies in the development or improvement of concepts, frameworks, and methodologies.

## Statistical programs

For the period 2011-2017, innovative strategies and programs shall be pursued to improve SR&D as follows:

### *To improve coherence, effectiveness, and efficiency of the statistical system*

1. **Strengthening the management and coordination of SR&D activities in the PSS**
  - Conduct of regular meetings of the SRTC Governing Board
  - Creation of a working group on SR&D under the SRTC Governing Board to assist in the formulation of policies on SR&D in the PSS
  - Strengthening the linkage between the SRTC Governing Board and NSCB Executive Board
  - Strengthening of the SRTC to better lead and coordinate SR&D in the PSS
2. **Development of a framework for the management, coordination, implementation, and monitoring of SR&D in the PSS**
3. **Formulation of the SR&D agenda, program and policies on SR&D in the PSS**
  - SR&D needs assessment and stakeholder consultations
  - Development of the strategic, medium-term and annual SR&D agenda
  - Development of the SR&D Program of the PSS
  - Formulation of policies on SR&D concerns
4. **Strengthening of mechanisms for more effective and efficient review and evaluation of SR&D proposals and outputs**
  - Creation of SR&D review committees in cooperation with MSAs, eminent statisticians and academics
  - Enhancement of the SR&D review and evaluation system
  - Discussion of SR&D proposals and outputs in relevant NSCB interagency technical committees

5. Development of mechanisms for monitoring utilization of SR&D outcomes in statistical processes
  - Periodic survey and documentation of SR&D outcome utilization in the statistical activities of MSAs and key data producers *through among others the Performance Measurement Scheme, System of Designated Statistics review, and Statistical Survey Review and Clearance System, and related mechanisms*

*To enhance statistical capacities of data producers and providers*

6. Conduct of training on R&D for statistical human resources
  - Integration of R&D in competency-based, ladder-type training program for the PSS
  - Basic training on R&D concepts and process
  - Research-based training course
7. Enhancement of the SRTC thesis and dissertation fellowship program for PSS statistical personnel in partnership with the academe
8. Promotion towards increased participation of the academe in SR&D designed for application in official statistics
9. Development and implementation of an SR&D internship program for statistical personnel in the PSS
10. Participation of statistical human resources in local and international statistical conferences

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

11. Implementation and monitoring of the SR&D agenda and program
  - Design and conduct of SR&D activities *through thesis and fellowship program, grant-in-aid, statistical development projects, interagency collaboration, and partnership with eminent statisticians and statistical institutions, including data producers, academe, and research organizations*
  - Enhancement of the monitoring of SR&D activities
12. Development of mechanisms for greater SR&D utilization in official statistics
  - Adoption and utilization of SR&D outputs in official statistics
  - Development of SR&D application manuals

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

13. Conduct of SR&D dissemination and utilization forums

- Periodic conferences for presentation of SR&D fellows/experts outputs
- Project-based SR&D output presentation
- Research fellowship program presentation
- Research utilization workshops among stakeholders
- Presentation of SR&D outputs in relevant NSCB interagency technical committees for evaluation

14. Conduct of statistical conventions, conferences and congresses, including student-faculty conferences, at the national and local levels
15. Development of an SR&D portal, *e.g., online public access catalog of SR&D activities, e-library of SR&D outputs, e-directory of SR&D fellows/experts and institutions, links to statistical resources, etc.*
16. Archiving of statistical research and development outputs
17. Facilitation of peer review/ citation/publication of SR&D outputs in national and international statistical journals
18. Participation of PSS in international cooperation on SR&D initiatives/programs

*To increase and sustain resources for statistics*

19. Establishment of a statistical development fund for statistics to support SR&D in the PSS
  - Strengthening coordination between the PSS and the DBM, and other oversight agencies and international entities for provision of funds for SR&D
  - Augmentation of endowment fund as additional source of funding for SR&D
  - Partnerships between and among MSAs, LGUs, and development partners on financing SR&D
20. Development of a cadre of SR&D fellows/experts in the PSS through the SR&D program
  - Selection/accreditation of new SR&D experts
  - Partnership between and among the MSAs, academe, and relevant institutions
  - Continuous orientation of SR&D fellows/experts on the R&D process
  - Rationalization of compensation scheme for professional services (in coordination with DBM and concerned agencies)
  - Continuous orientation of SR&D fellows/ experts on the R&D process
  - Rationalization of compensation scheme for professional services (in coordination with DBM and concerned agencies)

## Chapter 3

# Statistical information management and dissemination

### Introduction

The availability of timely, relevant, and reliable statistics enables both government and the private sector to address a wide range of policy issues amidst an ever evolving social, economic, and political landscape in the country and the increasing global competitiveness. Making statistics available and accessible to those who need them has however remained a challenge in the PSS. Concerted efforts by government, as primary data producer, and the private sector and the public, as users and data providers, must be sustained to ensure the production and dissemination of quality statistics that address key information needs of the economy and society.

Effective information management and dissemination are crucial to getting statistics into the policies and decisions of government, business, and civil society to facilitate the delivery of relevant and appropriate programs and services to the citizenry. Disclosing important information about the state of the economy and the people and the impact of policies and programs promotes transparency and accountability in governance and helps in institutional building and collaboration.

Dissemination of information should cover a wide range of audience and should not discriminate among users. Certain information may however need to be more directed to its primary stakeholders to maximize its use. After all, the value of information is measured by its ability to be translated into knowledge and utilized to the fullest extent by its users.

This chapter provides a range of strategies for the effective and efficient management and dissemination of statistical information towards wider and rational use of statistics. It focuses on raising the level of user understanding, capacity, and trust to increase utilization of statistics and indicators in evidence-based governance.

### Scope and coverage

In a statistical system, data collected from respondents and data providers go through a series of processes that turn data into information before it is disseminated to and utilized by the public. The quality and usefulness of information therefore depend on how effective and efficient these processes have been conducted.

This chapter deals with the development and improvement of the statistical processes in the PSS for better information management, dissemination and communication of timely and relevant official statistics.

- Data collection
  - Statistical data is collected through censuses, surveys, and/or administrative systems such as reporting, registration, surveillance and monitoring systems administered by NGAs and LGUs either as their primary function or a by-product of their administrative or regulatory functions.
  - Basic data comes from individuals, households, business and industries, public and private institutions, and the academe as data providers or respondents to statistical activities. The quality of statistics collected by the government thus depends on these sources of data.
- Data processing
  - Data processing involves a set of systematic procedures that turns data into information. This highly sequential process typically consists of data coding, data capture, data editing or cleaning, imputation, data quality assurance, and output production or data organization. Data processing is vital to the production of quality statistics.
  - Data processing employs a wide range of techniques and relies heavily on technology. Availability and full utilization of ICT-based tools are therefore essential to efficient and reliable processing of data.
- Data dissemination and communication
  - Data dissemination refers to the release of data and metadata produced by a statistical activity through some media to its intended users. Timely dissemination of statistics to stakeholders increases user access to statistical information and contributes to swift evidence-based policies and decisions.
  - Dissemination of official statistics is guided by norms and standards to ensure that users are informed about the availability and quality of data and that vital information of data providers and respondents is protected.
  - Communicating statistics to target users facilitates better understanding and rational use of statistics. It also raises awareness of the potential and actual uses of statistics.
- Data and metadata documentation and preservation
  - Data and metadata documentation facilitates effective assessment of data quality and provides proper guidance to data users to reduce likelihood of misuse, inappropriate, or incorrect use of statistics.
  - Preserving data helps keep the statistical legacy of the country. A most common approach is data archiving which involves mechanisms and tools for the



preservation and protection of valuable and irreplaceable statistical data and metadata.

- o Data archiving requires both simple mechanisms and advanced technology to ensure that statistics is preserved for future use. Good archiving systems protect statistics from physical damage, prevent loss of data, and makes data usable even with technological obsolescence.

- Data utilization

- o Data utilization reflects the relevance and effectiveness of statistics. It signals the culmination of the statistical process and the realization of the fundamental purpose of statistics—that is to inform and empower citizens and stakeholders.

## Situational analysis

Dissemination of statistical information in the PSS has taken various forms and modes with the Internet as the fastest and most efficient channel.

While the Internet has long been utilized in the PSS, the MSAs and some NGAs continue to innovate and spend to develop online interactive statistical databases, information systems, ICT applications, and other emerging means to disseminate and communicate statistics. Recently, really simple syndication (RSS) feeds and social networking have been proven as effective ways of extending the reach of statistics. The adoption of ICT by government agencies manifests the importance of providing fast, reliable, and easy access to statistical information by data users.

### «Key developments in 2005-2011

Statistical information dissemination in the PSS has a general guiding framework in the Government Statistics Accessibility Program (GSAP). Introduced in 1997, the GSAP provides general strategies to improve accessibility of statistical products and services in the PSS. While the GSAP itself needs to be enhanced to make it more relevant to user needs and consider evolving technology, it is worth citing some initiatives of the key statistical data producing agencies in recent past.

» **Creation of the Interagency Committee on Statistical Information Management and Dissemination.** The IAC, created through NSCB Memo Order No. 1 s. 2009, is tasked to serve as a forum for discussion and resolution of concerns and issues in the areas of statistical information management and dissemination, review current policies and mechanisms and recommend possible consolidation and improvement, formulate principles, policies and guidelines on statistical information management, sharing, dissemination, and utilization to ensure accessibility and timeliness of statistical products and services, and identify and recommend continuing capacity building programs for the PSS and stakeholders of statistics in statistical information management and dissemination.

» **Adoption of policies on data and microdata production, documentation, dissemination and archiving.** Two NSCB resolutions were issued, namely, NSCB Resolution No. 10 s. 2010 – Enjoining Agencies in the Philippine Statistical System to Archive and Document Microdata Using International Standards and NSCB Resolution No. 5 s. 2011 – Approving and Adopting the General Policy on the Production, Release and Dissemination of Microdata in the Philippine Statistical System. These policies have contributed to initiatives to establish survey and census data archives, namely, the NSO Data Archive, BAS Electronic Archiving and Network Services (BEANS), and BLES Electronic Archived Microdata System (BEAMS).

» **Establishment of statistical information centers at the local levels.** New statistical information centers have been established to facilitate dissemination of statistical products and services in the provinces of *Negros Occidental* (2005), *Antique* (2007), *Capiz* (2009), and *Aklan* and *Pangasinan* (2011). The establishment and operations of the centers are supported by the NSCB and respective regional and provincial statistical coordination committees.

» **Improvement of data collection, processing, dissemination, and communication practices through increased technology utilization.** Advances in ICT have made possible more innovative ways and techniques in data collection such as handheld computers/devices, which are now being used by BAS and NSO in their statistical field operations. Meanwhile, the availability of processing software such as STATA, SPSS, and PC-Axis has paved the way for faster large-data computing that reduces processing time and speeds up the release of statistics.

In 2011, the NSCB Executive Board issued NSCB Resolution No. 16, series of 2011 – Approving and Adopting the General Policy on the Dissemination of Statistics on the Internet. Web-based statistical data dissemination is generally done through online interactive databases, GIS-based presentation and other data visualizations on government websites. Data visualization in particular has been adopted by NSCB in the presentation of key indicators such as MDGs, statistics on children, *i.e.*, *motion charts*.

### «Issues and challenges

As demand for statistical information continues to grow, the PSS needs to periodically revisit its strategies and adopt more current technology and better practices in statistical and business processes towards improved timeliness and greater accessibility of statistics. Among the key issues and challenges in enhancing statistical information management and dissemination are as follows:

» **The continued expansion of the population of people, households, and industries over time has put more strain on the statistical system for the collection of timely, reliable, and accurate data.**

- It is critical for the PSS to continuously innovate data collection approaches and tools to streamline and increase efficiency of processes.

►► Despite progress in the timeliness of some statistical indicators, statistics are still generally perceived to be tardy or outdated by the time data becomes available to users.

- Many stakeholders reiterate clamor for quicker release of results of key censuses and surveys, *e.g., population and housing, family income and expenditures, etc.*, and updates on key statistics from administrative-based data sources and indicator systems, *e.g., health and education data, key economic indicators, poverty statistics, etc.*
- Some statistical data production and dissemination systems are deemed outdated and have not kept pace with technological advances often due to resource constraints and technical capacity gaps.
- Statistical and business processes need to be enhanced to increase effectiveness and efficiency and improve timeliness and punctuality of statistics.
- Systems need to be standardized and updated periodically to ensure continuous usability of data.

►► Accessibility of statistics remains a challenge to many users, especially those at the local levels or areas away from regional government centers.

- Access to certain data and microdata is deemed limited or difficult due to, among others, pricing issues or perceived information silos in some government agencies.
- Statistical or administrative policies on decentralized data processing and dissemination need to be reviewed and strengthened.
- There is limited integrated source or facility for users to access available statistical resources in the PSS. Statistical databases are in general developed and maintained individually by producers and users alike with many common data that are often inconsistent. Few such databases are currently linked or integrated.
- Policies and mechanisms for documentation of data and metadata including sources and methods are deemed inadequate.
- Users need to be proactively informed and updated on availability and quality of data
- Demand for more online/interactive data posted in government websites.

►► More concrete policy and technical tools for data preservation and protection are needed to safeguard the country's statistical legacy.

- While there is increasing recognition of the importance of data archiving, more concrete and immediate measures and resources are needed to reduce the risk of losing valuable/vital historical statistical information resources of the PSS.

►► There is need to further improve statistical and technical skills of MSAs and key data producers in the better management and dissemination of statistical information.

- Continuous technical skills development program must be institutionalized in at least the major statistical data producing agencies to keep abreast with evolving technology, *e.g. data collection, processing, dissemination, and communication, systems design, and data documentation, archiving, and warehousing, etc.*

►► Human and financial resources in the PSS are simply not sufficient to produce, manage, and disseminate a significant lot of critical statistics needed by users.

- Human resources in the PSS is on a general decline affecting all aspects of statistical operations due to many factors, among which are low salary and lure of better professional growth outside the government statistical service.
- Human as well as financial resources need to be increased to continuously improve statistics and expand the statistical database.

►► Current ICT resources in the PSS are inadequate. There is no sustainable strategy for adopting innovation and updating systems to improve data collection, processing, archiving, and dissemination.

- Large-scale statistical activities such as censuses and surveys depend heavily on ICT and recently, other technology such as GIM/GIS, remote sensing, etc.. These require massive capital outlay/investment. Currently, there is no dependable and sustainable scheme for upgrading of such resources, both hardware and software.

►► As statistical data collection and dissemination processes are guided by many internationally recommended standards and best practices, co-operation with the international community must be sustained and enhanced.

## Statistical programs

This section identifies the major programs and strategies that are meant to enhance statistical and business processes for better information management and dissemination towards improved timeliness and accessibility of statistics.

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. Adoption/Application of technological innovation in data collection processes in censuses, surveys, and administrative based data systems
  - Implementation of web-based surveys/online questionnaires/reporting
  - Use of mobile and handheld devices and other data capture technology, etc.
  - Use of GIS-based maps in designing master sample frame for census and surveys
2. Upgrading of data processing systems for censuses, surveys, administrative-based data systems, and compilation of key indicators towards reduced time lag and improved reliability of results
  - Automation of/improvement of systems for data pre-processing, processing, validation and documentation
  - Formulation and adoption of appropriate data protocols and quality control procedures



- Improvement of the Information Systems Strategic Plan (ISSP) towards more strategic planning and acquisition of appropriate IT solutions/applications and equipment

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

3. Development of an integrated statistics web portal to facilitate consolidation, sharing and dissemination of available data and metadata in the PSS

- Design of an integrated statistics web portal and formulation of technical and data standards, protocols, and procedures
- Development of a data network to facilitate sharing among producers and users in government
- Development of online/interactive databases on websites of key statistical data producing agencies
- Adoption of standards and mechanisms for data sharing and exchange, *e.g.*, *SDMX*
- Periodic dialogue and advocacy among key statistical data producing agencies for regular/sustained dissemination of statistics on the Internet

4. Establishment of statistical information centers at the local levels for wider dissemination and utilization of statistics, especially in support of local governance and development

5. Enhancement of statistical information dissemination and communication strategies

- Increase media releases and citations of statistics in news articles
- Adoption of current/popular technology/ modes to expand reach of statistics, *e.g.* *social networking, RSS feeds, mobile edition of website*
- Increase use of appropriate data visualizations and info graphics for better communication of statistics, *e.g.* *GIM/GIS-based data presentation, dynamic charts, etc.*
- Development of user-oriented/thematic statistical outputs, *e.g.*, *thematic information materials and services for executives, legislators, cause-oriented sectors, etc.*
- Conduct of regular media briefings, press conferences, statistics appreciation seminars, and users-producers forums
- Proactive dissemination of revisions and updates along with data and metadata releases

6. Strengthening data documentation and metadata development in the PSS to facilitate understanding and rational use of statistics

- Formulation of policies and guidelines for data documentation and metadata development
- Compilation, updating and dissemination of metadata for all statistics
- Documentation of actual policy uses of statistics
- Adoption and implementation of relevant international programs such as the PARIS21's Accelerated Data Program

*To enhance statistical capacities of data producers and providers*

7. Conduct of training and other capacity building programs to enhance knowledge and skills of the PSS on statistical information management, dissemination and communication

- Training on data collection and processing
- Training on information system design and management including business processes, and quality management
- Training on data documentation and archiving
- Training on dissemination and communication techniques

8. Participation in international cooperation programs, expert group meetings, conferences, training, and workshops on international data exchange, database, data documentation and metadata development, data archiving, and warehousing

*To improve coherence, effectiveness, and efficiency of the statistical system*

9. Strengthening of the implementation of the GSAP

- Enhancement of policies, standards, and guidelines and formulation of new ones on data dissemination and statistical services, *e.g.*, *standard user service time, data download time, consistent and harmonized data revision/rebasing, rationalized pricing policy for data, microdata, and data services consistent with concept of public good, data archiving, data disclosure and confidentiality, etc.*
- Implementation and monitoring of advance release calendars for all statistics

10. Enhancement and implementation of statistical coordination mechanisms to focus on strengthening measures for improved timeliness and accessibility of data and microdata

- Review and enhancement of the SDS
- Strengthening of the SSRCS
- Implementation of the ARRCs in key sectors

11. Establishment of an integrated statistical archive/data warehouse for the PSS

12. Adoption of international tools, standards and good practices in data dissemination and documentation, metadata development, and data archiving

*To increase and sustain resources for statistics*

13. Strengthening of institutional coordination to ensure sustainable funding for improvement of statistical and business processes

- Dialogue between PSS and DBM for more strategic budget planning for technology acquisition
- Collaboration among MSAs and key data producers to maximize use of available technology resources
- Provision of budget to support development and up-grading of agency information systems

## Chapter 4

# Local statistics development

### Introduction

The high diffusion of ICT, especially broadcast and the internet, has allowed news and information about a remote village in the country's north to reach another village in the south and many other areas. This development may have contributed to the increasing reportage of human activities and natural events happening in the regions and local communities—the provinces, cities, municipalities, and *barangays* (villages).

Such growing interest in knowing more about the local communities points to the need for area-specific or local-level data and information. Indeed in recent years, demand for local-level statistics about the state of the people, economy, and environment has increased tremendously. Among the most sought after statistics are those that concern governance—the delivery of basic services, transparency of policies and processes, and accountability of public institutions and officials, especially the LGUs.

The 1991 Local Government Code has empowered the LGUs with greater administrative policy and fiscal autonomy but has also bestowed upon them greater responsibility and accountability, including the collection and reporting of statistical data. This convergence of power and obligations has placed LGUs at closer scrutiny by the public, their constituents, who increasingly want better outcomes from their policies, programs, and actions.

Making available local-level statistics is now akin to better monitoring of the social, economic, political, cultural, and environmental developments in the local communities. Local-level statistical information is expected to facilitate better understanding by government of the needs of the local communities as well as enable both the national and local governments make the right policies, decisions, and actions.

This chapter provides some key strategies for the improvement of local statistical systems towards increased statistical capacity to ensure regular supply of timely and relevant local-level statistics in support of governance and development towards inclusive growth and reduced poverty.

### Scope and coverage

The statistics referred to in this chapter are those that tell the characteristics and state of the regions, provinces, cities, municipalities, and *barangays*—the people and the physical, social, economic, political, and cultural environment at the local levels. These are regional and local-level statistical data and information that are generated through:

- national censuses and surveys conducted by the relevant MSAs and NGAs,
- nationwide registration, reporting or monitoring systems administered by NGAs through their regional/field offices and/or in collaboration with LGUs such as the civil registration system, field health service information system, basic education information system, among others, and
- local registration, reporting or monitoring systems administered by LGUs such as business licensing, tax mapping, community-based monitoring systems, the Local Governance Performance Management System (LGPMS), among others.

This chapter also includes the necessary statistical infrastructure at the regional and local levels that facilitate statistical development such as the:

- regional and local statistical coordination committees and other interagency technical bodies,
- regional and local statistical development programs,
- statistical standards and practices,
- statistical capacity building measures,
- statistical advocacy, and
- organizational development strategies.

Regional and local-level statistics produced by MSAs and NGAs are also discussed in relevant general and sectoral chapters.

### Situational analysis

#### Key developments in 2005-2011

While the MSAs and some NGAs continued to produce regional and local level statistics during the period 2005-2011, there have been several key developments that may be considered as important milestones in the development of local statistics.

►► **Generation of small area statistics on poverty.** In 2005, the NSCB developed a methodology to generate small area estimates of poverty for cities and municipalities as well as for the basic sectors at the regional level using related data and information from existing national censuses and surveys. Thus, in 2005, for the first time ever, city and municipal poverty incidences for the year 2000 were released on the NSCB website followed by the publication of the 2003 intercensal small area poverty estimates in 2008. Previously, only provincial estimates were compiled.

With aid of GIS, poverty maps were drawn for selected provinces and cities using the Minimum Basic Needs Framework. Almost all provinces in Regions I, V, VI, VIII, IX, X, XI and XII, and Cordillera Administrative Region (CAR), and a few cities and municipalities in CAR and Region XI have poverty maps.

Not long after, the first set of official poverty statistics for the basic sectors at the regional level was released. The basic sectors as defined in Section 3 of RA 8425 are the disadvantaged sectors of Philippine society, which include the women, youth, children, senior citizens, urban poor, migrant and informal sector workers, farmers and the fisherfolks.

The production of these small area statistics may be considered as a pioneering initiative in the development of local-level statistics and may pave the way for more evidence-based decisionmaking and program beneficiary targeting. In this case, small area statistics have been used in mapping poverty to help identify priority beneficiary households and communities of the government's poverty reduction programs.

►► **Compilation of good governance index (GGI) for provinces and municipalities.** Although GGI was first introduced in 2004 at the 9<sup>th</sup> NCS, the NSCB, upon enhancement of the framework and methodology, released the official GGI for all provinces and municipalities for the years 2005 and 2008 in January 2011. The GGI demonstrates how statistics can be used to provide objective, comprehensive and comparable measures of good governance to guide policymakers and stakeholders in assessing local and national government performance and in promoting more evidence-based policymaking and decision making.

►► **Estimation of Gender Development Index (GDI) at the provincial level.** The NSCB formulated a methodology to estimate GDI and released the GDI estimates at the provincial level for the years 2000, 2003, and 2008. The construction of the local level GDI framework was based on the human development index framework with the objective of highlighting gender issues and showing the level of human development with additional focus on gender to facilitate an effective monitoring mechanism on gender equality and women's advancement.

►► **Compilation of the child development index (CDI) for the regions.** The NSCB introduced the CDI in the PSS in 2009 with the release of the first CDI estimates at regional level for the years 2000, 2003 and 2006. The CDI was constructed based on the human development index framework to help determine the state of development of Filipino children.

►► **Community-based monitoring system (CBMS).** In 2005, the NSCB issued Resolution No. 6 Series of 2005 –

Recognizing and enjoining support to the CBMS as a tool to strengthening the statistical system at the local levels. First developed in 1992 as part of the Micro Impacts and Macroeconomic Adjustment Policies Project, the CBMS has evolved into a viable source of local level statistics that is mainly focused on the MDGs indicators and related statistics. As of 2011, CBMS has been adopted by 65 provinces (33 of which are implementing it province-wide), 764 municipalities, and 49 cities covering at least 20,382 *barangays*. Implementation of the CBMS by the LGUs has been enjoined by the NAPC and DILG. The CBMS Network, a civil society organization, oversees the technical design concerns and assists in statistical capacity building.

►► **Compilation of local-level MDGs indicators and gender statistics.** NSCB started compiling local-level statistics in selected regions and for selected provinces and cities to aid in the localization of the MDGs and promoting gender and development (GAD) concerns. Further, a pioneering effort to engender the MDGs at the local level was started in *Davao* Region using the Convention on Elimination of Discrimination Against Women (CEDAW) as framework.

►► **Local Governance Performance Management System (LGPMS).** Initially launched at the national level and in selected cities in 2004, the LGPMS has been rolled out to all provinces and cities since 2005. The LGPMS is described as a self-assessment and survey tool that generates data and information about the performance and state of development at the local government levels—provinces, cities and municipalities. In addition to local governance and development indicators, the latest version integrates the collection of data for the LGU Health Scorecard of the DOH and local tourism statistics of the DOT. The LGPMS is being spearheaded by the DILG in partnership with local governance stakeholders, NGAs, local government leagues, civil society organizations, business community, and international development partners.

►► **National Household Targeting System for Poverty Reduction (NHTS-PR).** In 2011, the DSWD launched the NHTS-PR to help identify priority beneficiaries of the government's social protection programs/projects towards reducing poverty. Adopting a Proxy Means Test approach, the system approximates incomes of low-income households to determine the poor and ultimately the recipients of the Conditional Cash Transfer program and other assistance. The NHTS-PR can be a potentially rich source of microdata and local level statistics.

►► **Development of the provincial product accounts in the Province of *Guimaras*.** In 2006, the NSCB forged a partnership with the Provincial Government of *Guimaras* in the development of the provincial product accounts. Estimates of the province's gross domestic product and related indicators for the years 2002-2004 were released in 2007. The joint exercise has provided a possible model for national-local government's partnership in developing local statistics. This activity benefited from the experience of the compilation of the provincial and cities for *Palawan* which was done in 1995.

►► **Barangay Agricultural Profiling Survey (BAPS).** In 2006, the Bureau of Agricultural Statistics (BAS) started collecting information on the basic structure of agriculture and fishery and ancillary information at the *barangay* level. The survey, conducted in phase in pilot regions and provinces, generates a *Barangay* Agricultural Profile that provides benchmark information and assists in information-

based decision-making and project implementation and monitoring at the provincial level.

►► **Compilation of provincial, city, and municipal profiles.** The NSCB Regional Divisions continued to prepare provincial/city/municipal profiles of selected LGUs which are posted on their respective websites. In addition, they also produced the Countryside in Figures, a publication containing municipal level data on key economic and social governance sectors, for the different provinces in their regions.

Meanwhile, the generation of some regional and local-level statistics continued through the periodic censuses and surveys, administrative registration/reporting systems, and other related statistical initiatives of MSAs and other NGAs.

►► **Generation of local-level data through censuses and surveys.**

- NSO: 2006 Census of Philippine Business and Industry, 2007 Census of Population (POPCEN) and 2010 Census of Population and Housing, 2006 and 2009 Family Income and Expenditure Survey, and 2008 National Demographic Health Survey (NDHS), among others.
- BAS: Survey of capital formation in agriculture in selected provinces, Survey of hunger incidence in the Philippines, Development of a Damage Assessment and Reporting System in agriculture, among others, and Mobile Data Gathering System to fast track gathering of prices at market outlets.

►► **Generation of local-level data through administrative-based registration, reporting, and monitoring systems.**

- NSO: Civil Registration Information System
- DOH: Field Health Service Information System and
- DepEd: Basic Education Information System.

Notable developments in the area of statistical coordination, capacity building, and advocacy include the:

►► **Establishment of new local statistical development mechanisms.** The first municipal level statistical coordination committee was created in the Municipality of *Maitum* in *Sarangani* Province in *Mindanao*. Meanwhile, new provincial branches of the National Statistical Information Center were established in the provinces of *Negros Occidental* (2005), *Antique* (2007), *Capiz* (2009), and *Aklan* and *Pangasinan* (2011) to facilitate provision of statistical products and services to local data users.

►► **Expansion of statistical training programs at the regional and local levels.** More statistical training programs have been conducted at the local levels through the SRTC and its regional training affiliates program and in partnership with academic institutions, *e.g.*, *DOT/JICA statistical capacity building for LGUs on tourism statistics*.

►► **Conduct of press conferences and briefings to disseminate and explain statistical outputs.** Press conferences and briefing were held in the regions to disseminate key indicators such as the Gross Regional Domestic Product (annually starting 2009) and 2006 Provincial Poverty Statistics (2008) by NSCB; 2003 NDHS

(2005), 2005 Family Planning Survey (2006), 2006 Census of Philippine Business and Industry (2009), 2008 and 2009 Annual Survey of Philippine Business and Industry (2010, 2011), and 2007 POPCEN (2010) by NSO, among others.

►► **Expansion/institutionalization of regional statistical conferences.** The annual Mindanao Statistics Congress has been held in *Cagayan de Oro* (2005), *Butuan City* (2006), *General Santos City* (2007), *Zamboanga City* (2008), *Camiguin* (2009), and in *Davao City* (2011). The Annual Statistical Congress in *Western Visayas* has been convened in *Iloilo City* (2005-2009 and 2011). Meanwhile, the first Statistical Congress in *Luzon* was launched in *San Fernando City, La Union* (2011).

►► **Regional celebration of the First World Statistics Day on October 20, 2010 in recognition of the many contributions of statistics to people and society.**

►► **Continuous advocacy for statistics as a profession through the organization and strengthening of local chapters of the PSA in Regions I, VI, X, and XI, and in Zamboanga City, and other areas.**

►► **Annual celebration of the National Statistics Month through the regional statistical coordination committees and NSCB Regional Divisions in collaboration with LGUs and other development partners.**

►► **Philippine Statistics Quiz by the NSO and other parallel/similar statistical contests in the regions.**

## ◀ Issues and challenges

There is much that needs to be done to improve the local statistical system and enable it to provide a steady supply of timely and reliable statistics to support local and national governance.

Weak legal and operational frameworks, little resources, and inadequate statistical capacities are the biggest challenges in developing the local statistical systems.

►► **There is currently no clear government policy and legal basis for the generation of local-level statistics and the use of the same in governance.**

- The 1991 Local Government Code does not provide explicit provisions on the role and responsibility of LGUs with regards to statistics.

►► **Statistical policies, standards, and coordination mechanisms for the production and dissemination of local-level statistics have remained weak and inadequate.**

- There is a need to improve existing systems in place to ensure relevance and quality of local-level statistics.
- There is proliferation of similar or related indicator/information systems at the local levels that has contributed to duplication and inconsistency of data.



▶▶ Local-level statistics have remained wanting and data gaps have widened.

- There is lack of/inadequate basic sectoral data, *e.g., health, education, environment, business/investment, etc.*, including those needed in the compilation of key statistical frameworks and indicators, *e.g., regional/ local economic accounts, governance index, MDGs, GAD, climate change and disaster risk management indicators, etc.*
- Major national surveys and some national censuses have been unable to provide local-level data.
- Local-level estimates of key statistical indicators are not updated periodically, *e.g., economic accounts, poverty statistics, population projections, human development index, good governance index, health accounts, etc.*

▶▶ Dissemination of available data, microdata, and metadata remains inadequate; access to local statistics is still limited and difficult for many users.

- Release of local-level statistics from censuses, surveys, indicator systems, and administrative-based data reporting systems is largely often delayed.
- Access to local-level data and microdata from existing national censuses and surveys has been perceived to be restrictive because of prohibitive costs imposed by the sources.
- Access to statistics has been mostly confined to users in regional centers and remains distant for those in most other provinces.
- Information on local-level statistics produced and released by government agencies is inadequate.

▶▶ Statistical competencies of LGUs and NGAs need to be developed/enhanced.

▶▶ Appreciation of statistics is perceived to be generally low among local stakeholders—regional and local executives and the media.

▶▶ More statistical research and development is needed to develop effective methods and approaches for the collection of local-level statistics.

▶▶ Resources for developing and generating local-level statistics have remained inadequate.

- There is huge deficiency of statistical personnel at the local levels. Only a handful of LGUs are able to fund statistical human resources and activities.
- Supply of potential statistical human resources is declining as the number of statistics students and graduates in the regions continues to drop.
- Promotion of statistics as a profession and career option is weak.

## Statistical programs

The following programs have been identified to facilitate the development of mechanisms, improve processes, and enhance capacities towards the production and dissemination of local-level statistics in support of governance and development.

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. Development and improvement of administrative-based statistical information systems to generate local-level data
  - Review and improvement of LGU-based administrative systems, *e.g., business licensing, tax mapping, etc.*
  - Strengthening of NGA-LGU joint data collection systems, *e.g., civil registration, FHSIS, tourism statistics, etc.*
  - Enhancement of data collection systems of NGAs, *e.g., BEIS, environment and natural resources, etc.*
  - Formulation of a system/mechanism for utilization of data generated from program target registries, *e.g., NHTSPR*
2. Institutionalization of a community-based monitoring system in all LGUs for the regular generation of local-level statistics
3. Institutionalization of the generation of at least provincial and city level data in national censuses and surveys
  - Redesign of the master sample for household surveys to generate at least provincial and city level data
4. Generation of local-level estimates of key statistics/indicators through small area estimation techniques, *e.g., as family income and expenditure, demographic, health, nutrition, and poverty statistics, etc.*
5. Compilation of socio-economic indicators through partnership between NGAs, LGUs and the private sector, *e.g., provincial product accounts, local health accounts, MDGs, gender, and disaster statistics, etc.*
6. Enhancement of data processing systems of censuses and surveys for increased efficiency and improved timeliness of data

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

7. Development of statistics web portals that include local-level statistics
  - Development of regional or local-level statistics web portals
8. Establishment of statistical information centers in provinces, cities, and municipalities
  - Establishment of statistical information centers at least in every municipality
  - Installation of community statistical data boards in every province, city, municipality and *barangay*

9. Capacity building of users at the regional and local levels

- Statistics appreciation seminars for regional and local executives and the private sector on use of statistics in evidence-based governance, and
- Training of LGUs and other local statistics users on data management, analysis and interpretation

10. Enhancement of advocacy on proactive dissemination of statistics and better understanding and rational use of statistics at the regional and local levels

- Advocacy among NGAs and LGUs for increased dissemination of local-level statistics through websites, online databases and GIM/GIS
- Enhancement of partnerships between MSAs, other NGAs, PIA, and the media for wider dissemination of statistics
- Regular conduct of statistical conferences/congresses, seminars, and workshops on statistical research and development in the regional/local statistical community
- Sustained observance of international and national statistics celebration at the regional and local levels, *e.g., National Statistics Month, World Statistics Day*

*To enhance statistical capacities of data producers and providers*

11. Formulation of an integrated statistical human resource development program for local statistical personnel

- Design and conduct of statistical training for regional line agencies and LGUs through the SRTC and its regional training affiliates and the academe

12. Enhancement of data sharing among data producers to facilitate policy use or the compilation of other key indicators

13. Research partnership and knowledge sharing between MSAs and academe to improve statistical methods and approaches, *e.g., on recording fish production, proper accounting of exports data, etc.*

*To improve coherence, effectiveness, and efficiency of the statistical system*

14. Development of an integrated local statistical framework and core indicators in support of local development planning and governance

- Integration/linking of existing local indicator and information systems
- Formulation of regional and local statistical development plans

15. Strengthening of statistical coordination bodies at the regional and local levels

- Strengthening of the RSCC as coordinator at the regional and local levels through, among others, creation of support technical bodies
- Creation of a statistical coordination committee at least in the provinces and cities as nerve centers of statistical development at the local levels

16. Comprehensive review and modification of legal frameworks and policies, *e.g., EO 352, EO 135, NSCB Board Resolutions, etc.*

- Formulation of implementing rules and regulations for the production and use of local-level statistics
- Lobbying for incorporation of specific provisions on statistical standards, processes and responsibilities in the LGC and related frameworks
- Improvement of existing statistical activities or designation of new ones to generate local-level statistics, reduce time lag, and improve access to data, microdata, and metadata at the regional and local levels
- Rationalization of policy on sharing of data and microdata and pricing of statistical outputs in the PSS based on the principle of public good

17. Application of a data quality assurance framework in the periodic review of local-level statistics

18. Implementation of the ARRCs on key information systems, *e.g., health, business licensing, etc.*

*To increase and sustain resources for statistics*

19. Creation of statistical units and positions to ensure regular production of critical local-level statistics

- Creation of NSCB offices in all regions with optimal staff complement to coordinate statistical development initiatives and continuously monitor quality of local statistics
- Creation/expansion of statistical units and positions in NGAs and regional/provincial line agencies, and LGUs, *i.e., at least one statistician per municipality*

20. Formulation of a sustainable financing scheme for local statistics development through

- Rationalization of salaries for statistical human resources,
- Facilitation by the regional development councils and LGUs for appropriate legislation,
- Advocacy towards mandatory budget allocation for statistics by NGAs and LGUs,
- Coordination between the NSCB and the DBM for the inclusion of statistical development and operations in the annual national budget thrusts and guidelines and in the budget of NGAs and LGUs
- Cost-sharing between MSAs, NGAs, LGUs and the private sector for the compilation of statistical frameworks/indicators at the local levels, *e.g., provincial product accounts, poverty statistics, health, education, business, etc.*

21. Advocacy for professional and career development in statistics

- Dialogue between the PSS and the educational system for integration of basic statistics in school curricula and offering of statistics courses/program in higher educational institutions, and
- Conduct of statistical appreciation seminars and training for secondary school teachers for promotion and proper teaching of statistics







cluster2

Macroeconomy and  
finance

## Chapter 5

# Macroeconomic accounts and statistics

### Introduction

The PDP 2011-2016 states that growing output and employment are the preconditions for progress in almost all social and economic aspects of development. In order to achieve progress, the PDP sets out to pursue “inclusive growth through massive infrastructure development and responsive and transparent governance”. This will require establishing a stable macroeconomic environment, instituting fiscal reforms, and ensuring low and stable inflation and reduced external vulnerability.

Good macroeconomic planning focuses on providing a policy and business environment that stimulates and facilitates economic production, consumption and investment, nurtures knowledge and technology creation and diffusion, and creates productive employment and decent work. More importantly, good economic governance ensures that gains from growth are equitably spread among the people, set aside for attaining higher societal goals, or channeled into social investments that facilitate future growth.

This chapter discusses priority strategic measures for the improvement of statistics and indicators that are necessary in documenting and measuring the country's domestic economic activities, the incomes generated and the allocation of these incomes, investments and savings of the different sectors of the economy, as well as the domestic economy's transactions with the rest of the world.

### Scope and coverage

Macroeconomic accounts and related statistics cover data and indicators that are used to measure the performance and development of the country's economy including the structure, resources, activities, and outputs of economic institutions and industries. These statistics are generated following comprehensive statistical frameworks and accounting systems supported by censuses, surveys, and administrative or financial reporting systems as follows:

- Philippine System of National Accounts (PSNA), which includes the national, subnational (*regional, provincial and city*), and satellite (*e.g., tourism, environment, non-profit institutions, health, education, etc.*) accounts;
- Input-Output Tables;
- Balance of Payments (BOP) and International Investment Position (IIP);
- Flow of Funds (FOF);
- Social Accounting Matrix (SAM); and

- Government Finance Statistics (GFS).

Macroeconomic accounts and related statistics also include:

- key short-term economic statistics and indicators, including prices and flash/high frequency/leading and lagging economic indicators;
- sentiment indicators from business and consumer expectation surveys;
- Total Factor Productivity (TFP) and related indicators;
- Food Balance Sheets (FBS); and
- Indicators on the unorganized sector and contribution of women and men to the economy.

This chapter also includes a special section on price statistics. While monetary and financial statistics are considered part of macroeconomic accounts and statistics, these are discussed separately in Chapter 6 – Monetary and financial statistics. Likewise, the basic statistics that form part of the above statistical frameworks and indicators are covered in the relevant chapters, namely, Chapter 8 – Industry, trade, and investment statistics, and Chapter 7 – Agriculture and fisheries statistics. Indicators pertaining to the unorganized sector and women's contribution are covered in Chapter 15 – Labor and employment statistics, and Chapter 19 – Statistics on children and gender and development.

### Situational analysis

The compilation of the PSNA and related accounts, including the quarterly and annual GDP, annual regional economic accounts, and periodic input-output tables and satellite accounts, informal sector, and economic contribution of women, is undertaken by the NSCB as part of its mandate. NSCB also compiles other key macroeconomic indicators such as the quarterly LEI, flash indicators, TFP, and FBS.

The compilation of the BOP, IIP, FOF, and related statistics, as well as sentiment indicators from business and consumer expectations surveys, is carried out by the BSP. The generation of the GFS is spearheaded by the DOF.

Meanwhile, the collection of basic economic data that is used in macroeconomic accounts, including price and industry statistics, is regularly undertaken by the NSO and BAS. Other relevant data are generated by other NGAs.

### Key developments in 2005-2011

There have been continuing efforts to improve macroeconomic accounts and statistics especially in the

PSNA and FOF in recent years. Among the more notable initiatives are the:

►► **2011 overall revision and rebasing of the PSNA.** In May 2011, NSCB released the revised/rebased annual and quarterly estimates of the PSNA for the period 1998-2010. The revision incorporates the results of adopting the 2008 System of National Accounts (SNA) recommendations to the extent possible, including new statistical standards and classifications, use of revised/updated/new data, assumptions and parameters, and improved estimation methodology. More notably, the base year of the PSNA series has been updated from 1985 to 2000, which has put the PSNA on the same base year as the SNA of most countries.

►► **Implementation of the 2008 SNA recommendations.** In a 2008 study commissioned by the ASEAN Secretariat with support from the ASEAN-US Technical Assistance and Training Facility (USAID), the Philippines has been assessed to have reached milestone 4 out of 6 milestones in the 2008 SNA progress monitoring, the lone ASEAN Member State to have fully achieved so at that time. Among the major 2008 SNA recommendations implemented are the:

- compilation of the supply and use table which is used mainly as a balancing tool to address among others the statistical discrepancy between the two measurement approaches — production and expenditure — in the PSNA compilation,
- generation of pilot chain volume measures (CVM) estimates which are widely considered to accurately reflect the real growth of the economy over time, and
- adoption of recommended standard classifications.

►► **Improvements in the BOP compilation.** To conform to BPM6 guidelines, the BSP has adopted the revised treatment of the allocation of special drawing rights (SDRs) starting with the Q2 2010 BOP and end-of-2009 IIP. SDR allocation is now treated as a transaction, particularly as a long-term liability of the monetary authority. Prior to this, allocation of SDRs under BPM5 was considered a non-transaction item and thus, excluded from the BOP. In addition, the BSP revised the BOP statistics for 2008 and 2009 to reflect the inclusion of thrift banks' financial transactions based on the Financial Reporting Package (FRP) starting March 2008. The FRP was primarily designed to align BSP's reportorial requirements with the latest international accounting standards as well as to meet BSP's statistical requirements.

►► **Release of the FOF series based on the revised SNA.** The BSP released the FOF series based on the revised framework for the period 2000-2004 and 2005 in December 2006 and May 2007, respectively. Timeliness has been improved with succeeding releases such that the annual FOF statistics for 2006, 2007, 2008, 2009 and 2010 were published in February 2008, January 2009, 5 February 2010, 5 January 2011, and 21 December 2011, respectively.

In the 2000-2008 annual FOF, the domestic institutions were grouped into four major sectors of the domestic economy, namely, financial corporations, non-financial corporations, the general government, and households. The 2009-2010 FOF meanwhile provided further details, except for the household sector, as follows: (1) Private and public non-financial corporations; (2) Depository corporations, insurance & pension funds, and other financial corporations;

and (3) National government, local government, and social security agencies.

►► **Nationwide coverage of the Business Expectations Survey (BES).** The BES was initially conducted in 1986 as a semestral survey and enhanced in 2001 to harmonize it with tendency surveys conducted in selected Asian countries, which included the shift in reference period to quarterly. Starting in the fourth quarter of 2006, the quarterly BES has been conducted nationwide covering the 17 regions in the country with around 1,600 sample firms. The BES makes use of opinion-testing techniques to collect information from entrepreneurs about business conditions in their own companies and as well as obtain their views on the general business situation in their own industries and in on the national economy.

►► **Nationwide coverage of the Consumer Expectations Survey (CES).** The CES, initially conducted in the fourth quarter of 2004 covering the National Capital Region (NCR), has been expanded into a nationwide survey starting in the first quarter of 2007. The nationwide sample size is about 5,000 households allocated at approximately 2,500 households each for the NCR and areas outside of NCR. The CES employs opinion-testing techniques to collect information on consumer sentiments, including views on buying, financial conditions, and performance of the national economy.

►► **Compilation of the 2009 Financial SAM (FSAM).** In 2011, the BSP conducted an initial exercise to compile the Philippine FSAM for 2009. An FSAM is a matrix presentation of the SNA that provides comprehensive and consistent information on the interdependency between the financial and real sectors based on available statistical data. It links production, income, consumption, savings, and investments in both fixed and financial assets (through flows of funds) from the point of view of institutional sectors (nonfinancial, financial government, and households) and the ROW (through BOP). The work is useful as a database input to modeling work and, with information on financial transmission channels, would provide input for monetary policymaking.

## ◀ Issues and challenges

Some of the key issues and challenges identified in the compilation of macroeconomic accounts and statistics are as follows:

►► **Current statistical coordination mechanisms are insufficient in addressing long-standing and perennial problems with the basic data needed for the compilation of macroeconomic accounts and indicators.**

- There is no interagency technical body dedicated to the discussion and resolution of issues on macroeconomic frameworks and statistics unlike in other statistical areas.
- Some data source agencies have not yet adopted the advance release calendar mechanism and a data revision policy to support more timely compilation of macroeconomic accounts.
- There is low appreciation of some data source agencies on the importance of sharing critical data in the quickest time possible to ensure the production of timely, reliable, and accurate macroeconomic indicators.

►► Gaps remain in the basic data needed for the compilation and continuous improvement of macroeconomic accounts and indicators.

- Enterprise-based data are inadequate to support compilation of better quality macroeconomic accounts.
- Statistics on economic activities of the household sector remain very limited and need a lot of improvement.
- There have not been enough methodological studies undertaken to develop appropriate statistical techniques to improve quality of economic data.
- Efforts to utilize administrative-based systems as an alternative or major source of data need to be intensified.

►► Clamor for better quality, more relevant, and useful PSNA and related accounts is increasing among key users.

- A strategic plan for continuous improvement and periodic revision and rebasing of the PSNA and related frameworks is needed to maintain the relevance of macroeconomic statistics.

►► The PSS has not adequately addressed increasing demand for local-level macroeconomic statistics and indicators needed in local economic governance.

- Initiatives to compile provincial/city product accounts and economic indicators have not progressed due to insufficient local-level data and resource constraints.

►► Access to macroeconomic databases is still limited and needs to be improved to increase use of statistics in public policy and decisions. Proactive dissemination and proper communication of statistics to key users is important.

►► Serious gaps in human resource availability for the generation of basic economic data and compilation of macroeconomic accounts and indicators have not been addressed.

- In NSCB, the number of staff who compiles the PSNA has dropped by 63 percent from 2005 to 2010 putting more burden and pressure to remaining staff to deliver the national accounts on time.
- Similarly, the number of statistical personnel responsible for generating regular economic censuses and surveys in the NSO has declined.

►► Strategic human development programs are necessary for continuous knowledge building, skills improvement, and enhanced statistical capacity of compiling institutions.

►► Engagement and cooperation with the international statistical community needs to be sustained to ensure that macroeconomic accounts and statistics are at par with global quality standards.

## Statistical programs

This section puts together major statistical programs geared towards improving coordination mechanisms, methodologies, and overall quality of macroeconomic and related accounts and statistics.

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. Revision and rebasing of the PSNA and related frameworks to account for new/updated data and standards, methodological changes, and economic developments
  - Adaptation and implementation of relevant 1993/2008 recommendations including the compilation of the sequence of accounts and updated standard classifications
  - Use of new/improved basic data and implementation of methodological improvements
2. Revision of the BOP based on the BPM6 by 2013
3. Improvement in the frequency of release of the IIP statistics, *i.e., from annual to quarterly for implementation in the third quarter of 2014 starting with the first quarter 2014 data*
4. Enhancement and updating of PSNA-related frameworks and indicators
  - Compilation of the 2006 Input-Output Tables
  - Improvement and regular updating of the FBS
  - Improvement of the FOF, *i.e., generation of quarterly FOF and annual sectoral balance sheets*
  - Reconciliation of the external accounts of the PSNA and BOP
  - Institutionalization of TFP compilation in NSCB
  - Improvement/development of relevant short term key economic indicators such as the Flash Indicators of GDP, Leading Economic Indicators (LEI), and Business Cycle Clock of the Philippines
5. Improvement and generation of basic data for the compilation of macroeconomic frameworks and indicators
  - Generation of corporate sector statistics
    - Development of a business register
    - Conduct of enterprise surveys
    - Setting up of an automated system of record keeping and processing of financial statements
  - Generation of statistics on savings and investment pattern of households (necessary for improving the household sector accounts of the FOF)
  - Improvement of the informal sector survey
6. Compilation of provincial/city product accounts in partnership with LGUs

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

7. Development of a statistics web portal on macroeconomic statistics
  - Creation of e-library of statistical information
8. Compilation, updating and dissemination of metadata including methodological changes consistent with international recommendations

9. Strengthening of advocacy on the rational use of macroeconomic accounts and indicators through regular user forums

- Training of data users including the media

10. Archiving of macroeconomic accounts and statistics

*To enhance statistical capacities of data producers and providers*

11. Conduct of methodological studies to address data gaps and improve quality of macroeconomic statistics

- Study on best approach to measure the real sector, e.g., periodic updating of base year or shifting to CVM
- Improvement of sectoral accounts estimation, e.g. household final consumption expenditure, changes in inventory, breeding stock and orchard development, unorganized sector, among others
- Improvement of the Leading Economic Indicators System

12. Regular training on macroeconomic accounts and indicators for compilers and data providers

13. Participation in and hosting of international conferences, training, workshops, and expert group meetings on macroeconomic statistics

*To improve coherence, effectiveness, and efficiency of the statistical system*

14. Creation of inter-agency committee on macroeconomic statistics

- Institutionalization of continuing multilateral discussion of issues and developments in the compilation of macroeconomic and related accounts
- Strengthening of linkages and institutional arrangements between data compilers and sources, e.g., SEC and BIR, through bilateral meetings, memoranda of agreement, among others

15. Formulation and implementation of policies, standards, and programs for more efficient

generation and dissemination of macroeconomic statistics

- Adoption of data dissemination standards such as advance release calendar, revision policies, and data exchange/sharing

16. Comprehensive review and revision of designated macroeconomic statistics towards improved coverage, relevance and quality of statistics, frequency, timeliness and disaggregation, and designation of new ones

17. Implementation of the ARRCs for new and/or alternative sources of basic data for the compilation of macroeconomic accounts and statistics

18. Implementation of the data quality assurance framework for macroeconomic accounts and statistics

19. Participation in international cooperation and capacity building programs/projects, and standards and methodological development activities on macroeconomic statistics

- Development and updating of standards and methodological frameworks/manuals, technical assistance to other national statistical systems

*To increase and sustain resources for statistics*

20. Creation of statistical units or positions/hiring of additional statistical personnel in economic data producing/compiling agencies

21. Upgrading of ICT resources to support automation of collection, processing and dissemination of macroeconomic statistics and basic data

22. Technical assistance from concerned agencies for the compilation of macroeconomic accounts and statistics

## Chapter 5

# Macroeconomic accounts and statistics

### Price statistics

#### Introduction

Prices of goods and services are among the most important daily concerns among all sectors of society. Prices influence both consumer and producer decisions which in turn determine the dynamics of the economy. Prices significantly affect the way of life of the people and the economic and social well being of the country. Prices are therefore an important factor towards achieving reduced poverty and inclusive growth.

As stated in the **PDP 2011-2016**, the government remains committed to the achievement of low and stable inflation that is conducive to a balanced and sustainable growth of output and employment. The Plan emphasizes the role of monetary authorities in maintaining price stability, which has contributed to policy predictability and enabled households and businesses to make better-informed decisions.

The Plan has defined, among others, key measures to be pursued for more effective inflation management as follows:

- to improve the institutional setup and fine-tuning of procedures for inflation targeting; and
- to expand the monetary policy tool-kit which will help enhance the flexibility and efficiency of the monetary operations with a view to safeguarding both price and financial stability.

Effective inflation management is crucial to the attainment of these goals. Inflation management relies heavily on vigilant and comprehensive price monitoring, which requires price statistics and indicators that are timely, relevant, and accurate.

Price data and statistics have many other uses such as tracking price movements, project cost evaluation, determination of tariffs or fees of public and private goods and services, compilation of socio-economic indicators such as the GDP and poverty statistics, and business and industry analysis.

This section presents an overall plan for the further improvement of price statistics in support of the PDP and other policy uses.

#### Scope and coverage

The statistical framework for prices basically follows the sequential flow of the buying and selling of goods and

services between producers and users, to wit: (a) basic price; (b) producer's price; (c) wholesale price; (d) retail price; (e) consumer price; and (f) other relevant price statistics used in the analysis of wage, fiscal, monetary and trade policies.

One of the recommendations in the 2008 SNA is the valuation of the production of goods and services in the economy at basic prices. However, much has yet to be done in the operationalization of the concept to be able to provide a better alternative measure of the GDP. Aside from basic prices, other price statistics cover information on:

- producer's prices – the valuation of agricultural and manufactured goods;
- wholesale prices – the general wholesale prices of goods, including construction materials;
- retail prices – the general retail prices of goods, including construction materials;
- consumer prices – the prices of goods and services consumed by all income households, including those in the bottom 30 percent income group households.

This section also covers price-related indicators such as inflation rate, purchasing power of the peso, and purchasing power parity.

Other relevant price statistics are discussed in Chapter 6 – Monetary and financial statistics, Chapter 7 – Agriculture and fisheries statistics, Chapter 8 – Industry, trade and investment statistics, Chapter 11 – Energy statistics, Chapter 15 – Labor and employment statistics, and Chapter 18 – Social protection statistics.

#### Situational analysis

Price statistics are generated primarily by the NSO, BAS, and the DTI. Other price data are generated by the relevant NGAs such as wages (DOLE/BLES), transportation fares (LTFRB), energy/fuel prices (DOE), among others.

#### Key developments in 2005-2011

There are several major statistical development programs that have been pursued during the period 2005-2011 that contributed to the production of more timely and relevant price statistics.



►► **Generation of new/updated and rebased price indices.** Rebasing of price indices is done periodically update the reference or base year, exclude from the reference basket products and/or services that are no longer produced or traded, take into account changes in technology, and consider changing consumer tastes, etc.

Following are the rebased and revised price indices produced and released from 2005-2011:

- 2000-based Producer Price Index (PPI) for manufacturing for the period 2000-2008, released in June 2008;
- 2000-based PPI for agriculture for the period 2000-2008, released in February 2009;
- 2000-based Consumer Price Index (CPI) for the period 2000-2004, released in December 2003;
- 2006-based CPI for the period 2006-2011, released in May 2011;
- 2000-based CPI for bottom 30 percent income households for the period January 2010 - December 2010, released in May 2011;
- 1998-based General Retail Price Index (GRPI) for the period 2000-2009, released in May 2006;
- 2000-based GRPI for the period 2000-2009, released in November 2009;
- 2000-based Construction Materials Whole Price Index (CMWPI) for the period 2000-2010, released in November 2010; and
- 2000-based CMWPI for the period 2000-2009, released in May 2010.

►► **Adoption and implementation of policies for the rebasing of price indices.**

- 2000-based CMWPI, approved in 2010
- Synchronized rebasing and 2000-based GRPI for NCR only, approved in 2009
- 2000-based PPI for manufacturing and PPI for agriculture, approved in 2008

►► **Development of methodology for estimation of the 2000-based CPI for the bottom 30 percent income group households.** The methodology was developed by NSO in consultation with the Technical Committee on Price Statistics (TCPS) and was approved by NSCB through Resolution No. 5, Series of 2009. The indicator measures the composite change over time of the retail prices of goods and services purchased by low-income groups, which can be used in monitoring the welfare of poor families and provides more appropriate deflator of income and inflator of food prices and other basic commodities.

►► **Development and compilation of chained price indices.** The BSP through a research project initiated the development and compilation of chained price indices. The project aimed to develop appropriate measurement methodologies and operationalization strategies for the regular generation of chained-GDP and price indices—a more appropriate approach compared to fixed based estimates. The other implementing agencies include the NSCB, NSO, BAS and SRTC. The project generated chained price indices for GRPI, RPI, WPI, PPI, and foreign trade index (FTI) for NSO and chained PPI and RPI for agriculture or BAS.

On chained measures of GDP or the CVM, the NSCB undertook the pilot compilation of CVM for years 1998-2010, annual and quarterly. The pilot estimates of CVM were presented during the Dissemination Forum of the NSCB on the Revised and Rebased PSNA held in May 2010.

The project also completed a documentation of estimation methodologies adopted by the implementing agencies.

►► **Development of real estate price index.** In 2011, the TCPS recommended the development of the operational framework and estimation methodology for the compilation of residential real estate price index (REPI) through a study to be implemented by SRTC with financial support from the BSP. The recommendation was based on the results of a 2003 study conducted by NSCB to develop an appropriate REPI that can provide, on a regular basis, a consistent measure of real estate price developments.

►► **Conduct of dissemination and advocacy forums on prices indices.** The NSO has conducted various forums to inform users on the generation of a new data series, the CPI for bottom 30 percent income households, prior to the release of the new data in March 2009.

## ◀◀ **Issues and challenges**

In the 2005-2011 PSDP, priority programs and activities have been undertaken to address major issues and challenges confronting producers and users of price statistics. These issues and challenges are summarized as follows:

►► **While general purpose price indices are timely and regularly available, there is still need to continuously improve and update price indices to ensure relevance and wider policy use.**

- Price indices are crucial in the compilation and analysis of the national accounts and other macroeconomic indicators. The current set of available price data however is not adequate to provide appropriate deflators or inflators for the estimation of the GDP for all industries. Better and relevant price indicators are needed to increase accuracy and reliability of macro-economic estimates.
- The existing policy on rebasing and revision of price indices needs to be reviewed and improved towards optimal use of the data.

►► **Current methodologies in the valuation of goods and services have key limitations and challenges. More relevant alternative methods are needed.**

►► **Data on price indices are mostly compiled only for the national level and/or for the NCR and total of areas outside of NCR.**

- There is strong clamor for the compilation and dissemination of local-level data on key price indices such as the WPI, RPI, PPI manufacturing, etc., to support economic and spatial analysis.

►► **Duplication of price collection activities.**

- There is need to strengthen coordination and facilitate consolidation of price collection activities to avoid inconsistency of data and save on costs.
- The existing price monitoring of DTI, under Republic Act 758 or the Price Act, overlaps with price data collection activities of NSO particularly on specific manufactured/processed basic necessities, *e.g., canned fish and other marine products, processed milk, etc.* as well as prime commodities, *e.g., flour, processed and canned pork, noodles, etc.*

►► Some price data need to be more timely and accessible to stakeholders especially to users at the local levels.

- Release of price data at the regional and local levels is generally delayed. A more clear-cut, proactive dissemination policy is needed.
- There is growing demand for uniform frequency and periodicity of all relevant price indices.

## Statistical programs

The following statistical programs are intended to improve the system of collection, processing, and dissemination of price data towards more timely, relevant, and better quality price statistics in support of macroeconomic and fiscal analysis.

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. **Improvement of existing price surveys**
  - Enhancement of price surveys in terms of updated references of goods and services, more relevant geographic coverage and disaggregation, reduced time lag, etc.
  - Development/utilization of new modes of price data collection and processing *such as the use of mobile phones, handheld devices, Internet, etc.*
  - Compilation of the CPI for the bottom 30 percent income group households to support poverty analysis
2. **Periodic rebasing and revision of price indices**
  - Rebasings to 2006 of the core inflation, PPI for agriculture and manufacturing, GWPI, and GRPI
  - Rebasings to 2012 of the CPI for all income and bottom 30 percent income group households

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

3. **Development and improvement of a price statistics web portal consolidating all available data and information resources on prices**
4. **Strengthening of statistical advocacy and dissemination of price statistics**
  - Increasing the use of broadcast and internet media to disseminate price statistics to stakeholders at the national and local levels
  - Conduct of national and field advocacy forums and activities to disseminate price statistics and to educate stakeholders on rational use of price data
  - Review and adoption of more relevant advanced release calendar for price statistics
5. **Training of LGU personnel on the rational use of price statistics in macroeconomic analysis and development planning at the local levels**

*To enhance statistical capacities of data producers and providers*

6. **Conduct of methodological studies to address data gaps and improve the quality of price statistics**
  - Study on chained price indices
  - Development of real estate price indices
  - International comparison of prices
  - Study on use of hedonic pricing and forecasting of prices
  - Study on the generation of local-level PPP
  - Study on the generation of basic prices
7. **Conduct of training and workshops for institutions involved in the collection, analysis, and dissemination of price statistics**
8. **Participation in and hosting of international conferences, training, workshops, and expert group meetings on price statistics**

*To improve coherence, effectiveness, and efficiency of the statistical system*

9. **Formulation and institutionalization of an integrated policy on the generation and dissemination of price statistics**
  - Updating of the policy on revision and rebasing of data
  - Adaptation of international recommendations in national statistical standards and compilation systems
10. **Conduct of stakeholder consultations in the revision and rebasing of price indices and development of new price indicators**
11. **Comprehensive review and improvement of designated statistical activities on prices towards reduced time lag, improved data accessibility, and generation of local-level data**
12. **Implementation of the data quality assurance framework for price statistics**
13. **Participation in international cooperation and capacity building programs/projects, and standards and methodological development activities on price statistics**
  - Participation in the International Comparison Program
  - Development and updating of standards and methodological frameworks related to price statistics
  - Preparation of compilation manuals on price statistics
  - Provision of technical assistance to other national statistical systems

*To increase and sustain resources for statistics*

14. **Implementation of a sustainable resource mobilization program for the conduct of methodological studies and statistical activities on price statistics and indicators**
  - Creation of statistical units and positions in concerned agencies and LGUs
  - Integration of statistical activities in the concerned agencies' and LGU budgets

## Chapter 6

# Monetary and financial statistics

### Introduction

Money and finance are fundamental to the country's economic life and overall well-being. Money affects many of the day-to-day and long-term decisions of society and individuals while financial institutions influence the growth and development of the country.

The workings of the capital market and financial institutions in particular can have significant implications for business and consumer confidence, financial stability, and the functioning of the economy. Sound fiscal and monetary policies that foster macroeconomic stability are therefore crucial towards sustained economic growth.

The **PDP 2011-2016** targets a broad range of financial sector reforms to be pursued to further deepen the financial system and enable it to contribute to sustainable and inclusive growth.

The PDP envisions the financial sector as "a regionally responsive, development oriented and inclusive financial system which provides for the evolving needs of its diverse public" that is guided by the following precepts: (a) bottom-up development, (b) top-down infrastructure support, (c) prices that fully reflect relevant information, and (d) enabling environment for the effective management of risks. Prudent and responsible monetary policy helps ensure that financial markets are stable and credit conditions are appropriate to support the continuous expansion of economy.

The PDP plans to implement the following specific reform strategies:

- promote a regionally responsive and inclusive financial system through institutionalized savings generation and resource mobilization;
- develop an enabling environment for long-term investments;
- strengthen the governance framework of the financial system in line with best practices and standards; and
- establish a strong legal framework for financial sector development.

Statistics are fundamental to understanding the way the country's financial system and institutions work and analyzing the implications of fiscal and monetary measures on financial stability and economic performance. Timely and accurate statistics are especially important in informing about potential or im-

pending financial crisis and thus help policymakers draw up solutions or design safety nets to protect the economy.

This chapter aims to establish a well-coordinated system for the generation and dissemination of timely, accurate and relevant monetary and financial statistics and indicators.

### Scope and coverage

This chapter covers data and statistics on the monetary, financial, fiscal, and banking sectors.

Monetary statistics cover stock and flow data on the assets and liabilities of the financial corporations sector, which in turn is comprised of the central bank and other depository corporations, and other financial corporations (including insurance corporations and pension funds, other financial intermediaries and auxiliaries). Financial statistics on the other hand encompasses all financial stocks and flows of all sectors in the economy, both financial and non-financial, and between these sectors and the rest of the world.

This chapter includes data on the government cash operations and public service finance position.

Specifically, this chapter covers data and statistics that measure:

- Monetary
  - Monetary aggregates
  - Assets and liabilities (including foreign official reserves)
  - Activities auxiliary to financial intermediation (stock and bond market information)
  - Flow of funds
  - Financial SAM (FSAM)
- Public or Government finance, covering revenues and expenditures of
  - National (general) government;
  - LGUs; and
  - Government-owned and controlled corporations (GOCCs)
  - Consolidated public finance position
  - National debt service
- Banking transactions
  - Assets
  - Loans
  - Deposits

FOF and FSAM, while considered as part of monetary and financial statistics, are discussed separately in Chapter 5 - Macroeconomic accounts and statistics.

## Situational analysis

The compilation of monetary, financial and banking statistics is primarily lodged with the BSP. Collection of data is done on a daily, weekly, monthly, and annual basis through administrative and regulatory processes and surveys on selected components.

Fiscal or public finance statistics are produced by the DOF and its bureaus and attached agencies such as the BTr, BIR, BOC, BLGF, and IC, the DBM, and COA.

### Key developments in 2005-2011

The major statistical activities for the production of monetary, financial, fiscal and banking statistics implemented in the previous plan period are as follows:

▶▶ **Monthly Monetary Authorities Survey (MAS).** The BSP regularly compiles the MAS to consolidate the balance sheets of the monetary authorities (consisting of the BSP and national government) in so far as the latter's monetary functions arising from its holdings of cash and transactions with the IMF are concerned. Accounts are classified into foreign and domestic positions distinguished on the basis of residence and segregated into three major categories, namely, net foreign assets, net domestic assets, and reserved money.

▶▶ **Depository Corporations Survey (DCS).** The DCS is a consolidation of the balance sheets of all the deposit-taking financial institutions, namely, the BSP (monetary authority) and other depository corporations (ODCs) consisting of commercial banks, thrift banks (TBs), rural banks, non-stock savings and loan associations (NSSLAs) and non-banks with quasi-banking functions (NBQBs). In the process of consolidation, interbank loans, deposit transactions and other intra-system accounts between the BSP and ODCs are eliminated, whenever possible.

▶▶ **Consumer Finance Survey (CFS).** In 2009, the BSP conducted the inaugural CFS in the Philippines. The survey generated household-level data on financial and non-financial assets as well as sources of credit and level of indebtedness, income, spending, and insurance coverage of households. The CFS also provided data on payments and settlements system. The rationale behind the conduct of the CFS was the BSP's recognition of the growing importance of generating micro data on consumer finances in view of its wide-ranging implications on banking and monetary policies as well as on payments and settlements system. The results of the first survey were released in early 2012. The CFS is envisioned to be conducted every four years.

### Issues and challenges

The key challenges in monetary and financial statistics are as follows:

▶▶ **Existing statistical coordination mechanisms are not sufficient in addressing issues in the compilation of monetary and financial statistics and indicators.**

- Unlike in most statistical sectors, there is no established interagency mechanism to resolve statistical issues and

coordinate activities for the development/improvement of monetary, financial, fiscal and banking statistics.

- Some data sources have not yet adopted the advance release calendar/revision policy of outputs needed in the compilation of financial and fiscal statistics.
- There is perceived lack of appreciation among some data sources of their institutional responsibility to share critical data necessary for more reliable and accurate fiscal and financial indicators.

▶▶ **There is need to ensure overall quality of monetary and financial statistics.**

- There have been inconsistencies of some fiscal data within and among concerned agencies due to differences in time of recording (cash vs. accrual method of accounting)
- There are varying terminologies and classification of budgetary accounts utilized by the BIR, BTr and DBM.

▶▶ **The existing government finance statistics has yet to conform to the latest international standards and recommendations.**

- The internationally recommended 2001 GFS manual has not yet been adopted in the compilation of government financial statistics, as it requires a shift to a new accounting system that is difficult to implement. This has affected the consistency of government financial statistics with related macroeconomic and financial frameworks and comparability with international statistics.
- There is a need to revise existing government financial statistics based on the 2001 GFS manual.
- There is a need to enhance knowledge and capacity of compilers in the implementation of international recommendations through training and workshops.

▶▶ **There is a need for more comprehensive corporate statistics of non-financial institutions for the compilation of monetary and financial statistics/indicators.**

- Currently, there is limited data on private financial and non-financial corporations in the PSS.

▶▶ **Dissemination to and sharing of statistics between stakeholders need to be improved to maximize the use and value of statistics.**

- The PSS lacks an integrated database and source of statistics on monetary, financial, fiscal and banking statistics.

▶▶ **Statistical capacity of institutions compiling monetary, financial, fiscal and banking statistics needs strengthening.**

- Training of staff compiling monetary, financial, fiscal and banking statistics should be sustained.

▶▶ **Resources for the development and improvement of financial, and fiscal statistics have remained insufficient.**

- There is lack of statistical personnel in data producing/compiling agencies
- ICT resources need to be upgraded to support automation of collection, processing and dissemination of monetary and financial statistics, including basic data.



## Statistical programs

The following are general statistical programs that are intended to produce and disseminate more timely, relevant, and better quality monetary, financial, and banking statistics:

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. Development of new data compilation systems/databases and enhancement of existing ones
  - Compilation of general government debt statistics that is aligned with the IMF-WB's recently issued Public Sector Debt Statistics Guide for international comparability and for better indicators for the credit rating agencies
  - Establishment of the International Monetary Database
  - Development of database from the Philippine Payments Settlement Systems (PhilPass) to enhance BSP's capability to monitor and identify clearing and settlement risks of the financial system
  - Study on the development of e-money database system
  - Development of the Debt Management and Financial Analysis System (DMFAS) to increase BSP's efficiency in recording, monitoring, and generating external debt data while improving compliance with international reporting standards
  - Development of a Government Integrated Financial Management Information System (IFMIS) which automates the three oversight agencies—COA, DBM, and DOF to enable real-time, online accounting, monitoring and control of obligations and disbursements and their direct links to cash management for more effective financial control and accountability
  - Development of the Government Management Information System for GOCCs and government financial institutions
  - Development of automated system for budget forward estimates
  - Adoption of technological innovations in data collection and processing such as state-of-the-art computer hardware and software including computer-assisted personal interviewing and optical character recognition technologies for the timely release and to ensure greater accuracy of findings from the CFS
  - Generation of time series data on consumer finances for monitoring and analysis of savings and investment behavior of households across regions and over time
2. Improvement and generation of basic data for the compilation of monetary and financial statistics indicators
  - Generation of data on insurance of migrant workers, microfinance, micro-insurance, pawnshop operations, cooperatives, etc.
  - Generation of financial institution statistics such as corporate data from the SEC
  - Improvement of data coverage of the CFS as source of data on financial inclusion of the household sector

3. Improvement of existing statistical frameworks considering the latest developments and concerns on monetary and financial statistics

- Revision of the existing government financial statistics based on the 2001 GFS Manual
- Adoption of the Standardized Report Forms (SRF) in the generation of monetary statistics for reporting to IMF

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

4. Development and improvement of a web portal for monetary, financial, fiscal, and banking statistics
  - Linking of agency information systems
  - Creation of e-library of statistical information
5. Archiving of monetary, financial, and banking data
6. Compilation, updating and dissemination of metadata including methodological changes consistent with international recommendations

*To enhance statistical capacities of data producers and providers*

7. Conduct of regular training of data compilers and appreciation forums for data providers of monetary and financial statistics
8. Participation in and hosting of international conferences, training, workshops, and expert group meetings on monetary and financial statistics

*To improve coherence, effectiveness, and efficiency of the statistical system*

9. Creation of an interagency/technical committee on monetary and financial statistics to lead the coordination of relevant statistical concerns
10. Formulation and implementation of policies, standards, and programs on the generation and dissemination of monetary and financial statistics and indicators
  - Adoption of the latest internationally recommended manual such as the 2001 GFS Manual, etc.
  - Development and improvement of mechanisms and policy on data sharing based on the principles of public good
  - Adoption of advance release calendar
  - Implementation of appropriate data revision policy
11. Comprehensive review and enhancement of designated monetary and financial statistics towards reduced time lag, improved accessibility, generation of local-level data, and designation of new statistics
12. Implementation of the ARRCs for new and alternative sources of basic monetary and financial data

13. Implementation of data quality assurance framework for monetary, financial, fiscal, and banking statistics
14. Participation in international cooperation and capacity building programs and projects, and standards and methodological development activities on monetary and financial statistics
  - Development and updating of standards and methodological frameworks/manuals, technical assistance to other national statistical systems, etc.
  - Membership in international committees/working/experts groups/task forces and provision of inputs in updating development frameworks

*To increase and sustain resources for statistics*

15. Creation of statistical units or positions/hiring of additional statistical personnel in data producing or compiling agencies
16. Upgrading of ICT resources to support automation of collection, processing and dissemination of monetary and financial statistics, including basic data





cluster3

Agriculture, industry,  
and  
services

## Chapter 7

# Agriculture and fisheries statistics

### Introduction

The agriculture and fisheries sector puts food on the table of every Filipino in the country. The sector supplies vital raw materials for the production of other commodities and supports tourism and other services sector. It provides livelihood and income to a good segment of society and thus contributes to economic and human development.

As demand from increasing population and expanding industries grows amidst concerns of resource depletion and impact of climate change, the sector needs to harness its full potentials to achieve higher efficiency and improve productivity to help in poverty reduction.

The **PDP 2011-2016** foresees a competitive and sustainable agriculture and fisheries sector that is vital in achieving the country's vision of inclusive growth and poverty reduction. To realize this, the following are goals that must be met:

- improved food security and increased rural incomes,
- increased sector resilience to climate change risks, and
- enhanced policy environment and governance.

Monitoring the progress and outcomes of policies and program interventions through a well-designed framework of statistical measures and information is crucial to ensure that stakeholder interventions lead to the attainment of these goals.

### Scope and coverage

This chapter covers statistical indicators and data that describe the characteristics, activities and outputs of the economic units in the agriculture and fishery sector—*farmers and fisherfolks, establishments/enterprises, and market outlets*. It also includes statistical information on the government's agrarian reform justice delivery and services and their beneficiaries.

Statistics on agriculture and fishery and agrarian reform include data and indicators generated from censuses, surveys, and monitoring and administrative systems such as:

- agricultural structure and resources, *e.g., land use, irrigation system, demographic of farmers/fisherfolks/operators, etc.*;

- agricultural and fishery production, *e.g., agricultural crops, livestock and poultry, fishery, agricultural services, cost and returns of production and stock/inventories*;
- agricultural marketing, *e.g. prices and margins, domestic and foreign trade, supply and value chain, infrastructure and facilities*;
- farmers'/fisherfolks' welfare/household economics, *e.g. income, wage rate, consumption, capital formation, access to credit, insurance and guarantees*; and
- land tenure improvement, agrarian justice delivery, and support services delivery.

Statistics on agriculture, fishery and agrarian reform related to the national accounts are covered in Chapter 5 – Macroeconomic accounts and statistics.

### Situational analysis

The agricultural statistical system in the Philippines may be considered as above par among many developing countries. There is a dynamic program of surveys and other related statistical activities with adequate frequency of data updating and releases—daily, weekly, and monthly prices of agricultural and fishery commodities, quarterly agricultural and fishery production that feed into the national accounts estimation and food situation monitoring, and a host of annual statistical reports. Most agricultural and fishery statistics have provincial disaggregation.

The BAS has been leading the way in the production of timely and relevant agricultural statistics through surveys, monitoring systems, and special studies conducted all year round. NSO is designated to conduct the census of agriculture and fisheries (although no such census was done during the previous plan period) while NSCB compiles the contribution of the sector in the PSNA. There are other bureaus and attached agencies of the DA or related institutions that generate relevant data such as the BFAR, SRA, NIA, etc..

### Key developments in 2005-2011

Following are among the more significant statistical interventions in the previous plan period:

- ▶ **CountrySTAT Philippines website.** Launched in 2006, CountrySTAT is a web-based system that integrates national food and agricultural statistical information to

ensure harmonized national data and metadata collection for analysis and policy. The Philippines' CountrySTAT is recognized as one of the international best practices in statistics.

►► **Establishment of the BAS Geographic Information System (GIS) Laboratory.** Established in 2011, the laboratory facilitates the collection and management of geo-referenced data and information and the development of GIS-based maps to present and disseminate agricultural data.

►► **Conduct of new/benchmark surveys.**

- **Barangay Agricultural Profiling Survey (BAPS).** From 2006-2010, the survey collected information on the basic structure of agriculture and fishery at the *barangay* level in CAR, Regions I (Ilocos Norte and Ilocos Sur), II, III, IVB (Mindoro Occidental and Mindoro Oriental), V, IX (Zamboanga Sur and Zamboanga Sibugay), and XII, and Caraga.
- **Survey on capital formation in agriculture.** The survey, developed in 2008, generated information on the level and structure of capital formation by agricultural households in the provinces of Isabela, Leyte and Bukidnon, and in Region I.
- **Survey of Food Demand (SFD) for Agricultural Commodities Survey.** The survey conducted in 2008 and 2009 covering 13,617 households nationwide provided new benchmark information on consumption of agricultural commodities.
- **Survey of Hunger Incidence in the Philippines.** The survey gathered indicators in support of the government's food security programs (2006).

►► **Development of new/improved approaches in data collection/compilation.**

- **Mobile Data Gathering System (MDGS) for Prices.** Introduced in 2010, the MDGS uses mobile technology for more efficient internet-based data capture and close to real-time information delivery through interface with the Agriculture and Fisheries Marketing Information System (AFMIS).
- **Damage Assessment and Reporting System.** Standardized the concepts and valuations in estimating losses in agricultural production and infrastructure due to calamity (2007).

►► **BAS Electronic Archiving and Network Services (BEANS).** Developed under the ADP of the OECD/PARIS21 and the World Bank, this web-based survey cataloging and repository system serves as a portal mainly for researchers to access relevant census or survey data and metadata.

## ◀◀ Issues and challenges

The key issues and challenges in agriculture, fishery, and agrarian reform statistics are as follows:

►► **Significant reforms are needed to improve the quality of statistics and increase the usefulness of the CAF.** Resources for previous CAFs (1991 and 2002) were insufficient for complete enumeration of the target population. The CAFs were instead conducted as large sample surveys, which according to a recent study resulted in low quality and usefulness of data. Further, the CAF did

not adequately highlight aquaculture and fisheries as emerging important economic activities.

►► **Data gaps and quality issues, i.e., coverage, timeliness, reliability, consistency and independence, need to be addressed.**

- There are relatively less data on other agricultural and fishery concerns such as costs of production of major agricultural and aquaculture commodities, capital formation, among others, because resources have been concentrated heavily on production surveys.
- Local-level statistics and indicators needed for local governance in the agriculture, fishery and agrarian reform sector have been limited. There are data gaps on functions/ services that have been devolved to the local governments.
- Agrarian reform statistics are collected only during censuses; it does not include information on new developments in the sector due to outdated classification.
- Sampling frames of agricultural surveys are deemed outdated and need updating to improve quality of data.
- There is perception that the current practice of validation and revision of survey results involving provincial/municipal agricultural officers and BAS' regional and provincial agricultural statistics offices may have affected the reliability and independence of statistics.
- Some statistics collected through different modes, i.e., census, survey, and administrative reporting/monitoring, have been found to be inconsistent due to differences of definition and time reference of collection/reporting of data, e.g., irrigation.

►► **Little information is available on sampling and measurement errors of aquaculture and fisheries estimates from censuses and surveys.**

- Some surveys are not integrated in terms of design and implementation, which has prevented the computation of sampling errors. Publication of such error measurements is a good practice in dissemination to promote transparency of statistics and to guide users on the proper use of statistics.

►► **Continuous strengthening of human resources and institutions is urgently needed to sustain efficient production of timely and reliable agriculture, fishery and agrarian reform statistics.**

- There is a need to increase knowledge and technical statistical skills of human resources in the agricultural statistical system, especially on census and survey design and implementation.

►► **Resources, especially human resources, for generating agriculture and fishery statistics have been inadequate.**

## Statistical programs

For the plan period 2011-2017, the agriculture statistical system shall step up its efforts to resolve critical data gaps, improve data quality, strengthen statistical capacity, and explore ways to address

emerging data needs in support of the nation's goals. The key strategies in achieving these are as follows:

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. Improvement of the CAF sampling frame, data coverage and conduct of full enumeration
  - Splitting of the CAF into core, community, and supplementary census modules to improve effectiveness and efficiency of statistical processes and quality of data
  - Administration of large-sample supplementary census modules
2. Enhancement of agricultural and fishery surveys and other related statistical activities in terms of coverage, methodology, processing, and timeliness of data generated
  - Improvement/updates and integration of sampling frames, design, instruments, and implementation of related surveys
  - Use of ICT and GIS tools to increase automation of data collection and processing
  - Generation of timely and reliable local-level data
3. Updating parameters for the compilation of agricultural accounts statistics and indicators
  - Updating of parameters for the PSNA, agricultural supply utilization accounts, capital formation in agriculture, etc.
4. Increased use of administrative-based systems as alternative sources of data on agriculture, fishery, and agrarian reform
5. Development of an early warning system such as survey-based forecasting to monitor supply and demand of agricultural and fishery commodities
6. Development of data systems on emerging concerns include indicators on climate change, biotechnology, organic agriculture farming, and other emerging agricultural industries
  - Assessment of data requirements for emerging agricultural industries
  - Supply and demand on new animal stock such as gamefowls
  - Generation of statistics on climate change, biotechnology and organic farming
7. Generation of relevant statistics and indicators from the registry of farmers and fisherfolks and the agrarian reform program implementation and monitoring system

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

8. Conduct of methodological studies to address data gaps and improve the quality of agriculture and fishery statistics
  - Study of demand and supply of key agricultural commodities, fishing effort, etc.
  - Development/improvement of agricultural survey designs, e.g., *supplementary modules of the CAF*

9. Strengthening of advocacy on understanding and rational use agriculture and fishery statistics and indicators
  - Conduct of dissemination and users forums, briefing, appreciation seminars, etc.
  - Preparation of statistical guide for farmers on using production and marketing information through PMAS

10. Improvement of data dissemination
  - Application of GIM/GIS and global positioning system/remote sensing in the dissemination of agricultural and fishery data
  - Enhancement of agency websites and databases
  - Establishment of an e-library of agriculture and fishery statistical information resources

11. Full implementation of the BEANS to integrate survey documentation, historical data, microdata file and data enclave

*To enhance statistical capacities of data producers and providers*

12. Regular training on agriculture and fishery frameworks and indicators for data collectors, data providers and compilers
13. Participation in and hosting of international conferences, training, workshops, and expert group meetings on agriculture and fishery statistics

*To improve coherence, effectiveness, and efficiency of the statistical system*

14. Strengthening of linkages and collaborative agreements between the MSAs and sources of administrative-based data
  - Creation of a survey design group for agricultural surveys
15. Implementation of the ARRCs towards new and alternative sources of basic data on agriculture, fishery, and agrarian reform statistics
16. Comprehensive review and improvement of designated agriculture, fishery, agrarian reform statistical activities towards reduced time lag and generation of local-level data, and designation of new activities
17. Participation in international cooperation and standards and methodological development initiatives on agriculture and fishery statistics
  - Development and updating of international standards and methodological frameworks/ manuals

- Technical assistance to other national statistical systems

18. Adaptation of relevant international principles, frameworks, and standards in the production of agriculture and fishery statistics such as FAO standards and classifications

*To increase and sustain resources for statistics*

19. Creation of statistical units or positions/ hiring of additional statistical personnel in data producing/ compiling agencies

20. Upgrading of ICT resources to increase efficiency of statistical processes in the production of agriculture and fishery statistics

- Automation of data collection, processing and dissemination

21. Strengthening of institutional coordination within the PSS and between PSS and the DBM, legislative bodies, and development partners to ensure funding of the continuous improvement and production of critical statistics on agriculture, fishery, and agrarian reform statistics

## Chapter 8

# Industry, trade, and investment statistics

### Introduction

Industry, trade, and investments are primary growth drivers of the economy.

Industries harness the country's human capital, natural and economic resources, and technology to keep business running and ensure the continuous supply and diversity of products and services.

Meanwhile, trade not only moves goods and services, it plays a vital role in keeping the economy on the move. With every product that the economy produces and with every service it provides, different opportunities are created. Trade generates employment, empowers workers, redefines product and service quality, improves quality of life, and provides various avenues for growth for the entire economy.

Similarly, investments contribute to job creation, business development, and expansion of economic activities in the country. Investments induce economic production and raise standards and welfare in the economy. Foreign direct investments (FDI) in particular bring technological innovation, labor skills and management best practices that help improve ways of doing business. Domestic investments on the other hand indicate both the capacity and confidence of Filipino investors in inducing business and sustaining the economy.

Investments are sometimes perceived negatively by some sectors because of reported business malpractices and exploitation of natural and economic resources. Ultimately though, investments are regarded as important elements that can hasten economic growth and development.

The **PDP 2011-2016** envisions a globally competitive and innovative Philippine industry sector, along with services, that contributes significantly to economic growth and employment generation. As the country continues to gain momentum towards greater industrialization, the PDP focuses on the following medium-term goals:

- improved business environment through improved governance, strengthening economic zones, strengthening national brand and identity/awareness;
- increased productivity and efficiency through government interventions on key priority areas and by providing firm level of support to micro, small and medium enterprises (MSMEs), increasing market access, expanding industry cluster

development, and intensifying the culture of competitiveness; and

- enhanced consumer welfare by promoting competition and enforcing trade regulations.

Together, these three areas—industry, trade and investment, necessitate solid statistical support in order to produce relevant and appropriate programs that could spell greater growth and development of the country.

This chapter presents an integrated plan for the improvement of industry, trade and investment statistics for better-informed policy and governance reforms and effective impact monitoring.

### Scope and coverage

#### Industry

Statistics on industry cover data and indicators that describe and measure the characteristics, activities and outputs of the economic units in the industry sector which are the establishments/enterprises, government corporations, households (as unincorporated enterprises), and non-profit institutions.

Broadly, industry statistics deals with data on the country's businesses and industries, which are created and managed, by corporations and households, including micro, small, and medium enterprises (MSMEs). The PSIC provides the main reference of the range of economic activities in the industry sector for which data are collected and analyzed.

Industry statistics typically include data on:

- Establishments/enterprises, including corporations and MSMEs
  - Employment
  - Hours worked
  - Revenue /Sales
  - Compensation
  - Costs
  - Value-added
  - Capital expenditures
  - Fixed Assets
  - Inventories
  - Subsidies received
- Households
  - Income and expenses
- Government Corporations



- Income and expenses
- Cash flows
- Balance sheets
- Informal sector
  - Employment and income
  - Social protection
  - Contribution to the economy

Statistics on certain economic activities are discussed more thoroughly in relevant chapters such as in Chapter 7 – Agriculture and fisheries statistics; Chapter 9 – Tourism statistics; Chapter 10 – Transport Statistics; Chapter 11 – Energy statistics; Chapter 12 – Information society statistics, among others.

## Trade

Trade statistics cover data on international and domestic trade of goods and services, and trade-related activities.

- International trade
  - International merchandise (goods) trade
  - International trade in services, including foreign affiliates in trade in services
- Domestic trade
  - Distributive trade
    - Wholesale trade
    - Retail trade
    - Commodity flow
  - Domestic trade in services
- Trade-related
  - Import tariffs
  - Import/export prices
  - Exporters and importers profile

Some statistics on international trade in services (SITS) are also discussed in Chapter 5 – Macroeconomic accounts and statistics; Chapter 6 – Monetary and financial statistics; and Chapter 9 – Tourism statistics.

## Investment

Investment statistics cover data on both foreign and domestic investments. Foreign investment statistics include statistics on non-residents' direct investments and portfolio investments in the Philippines while statistics on domestic investments include all those relating to investments of Filipinos in the domestic economy.

Investments can either be inward or outward depending upon the direction of flow. Statistics on inward investments cover all investments entering the Philippines from other countries or economies while statistics on outward investments refer to investments of residents in the Philippines in other countries or economies.

Investment statistics measure the following:

- Foreign investments
  - Direct investments
    - Inward and outward investments as reported in the country's balance of payments
    - Approved and realized inward investments registered/subscribed under the government's investment promotion programs
    - Registered investments
  - Portfolio investments
    - Inward and outward investments made through the stock market system
- Domestic (Filipino) investments
  - Direct investments
    - Approved and realized inward investments registered/subscribed under the government's investment promotion programs
    - Registered investments
  - Portfolio investments (residents' purchase of Philippine-listed stocks, debt papers and money market instruments from the PSE and BTr)

Although capital formation (public or private) is itself a form of investment, the relevant statistics are covered in Chapter 5 - Macroeconomic accounts and statistics.

## Situational analysis

### Industry

Industry statistics are generated through censuses and surveys, and administrative data systems. Basic data on industry provide the core basis in the compilation of critical macroeconomic indicators such as the PSNA, and support the analysis of industry development—profile/structure, movement, and growth, which are essential in monitoring economic progress and development.

Sources of industry data include the NSO which conducts quinquennial censuses and annual, quarterly, and monthly surveys of business and industries; program and regulatory agencies which collect administrative data such as the DOE for energy and petroleum production, MGB for metallic and non-metallic production; BIR, SEC, and COA for income and expenses, and balance sheet of enterprises/establishments and GOCCs; and industry associations such as the Business Processing Association of the Philippines (BPAP), Retail Industry Association of the Philippines (RIAP), Cement Manufacturers Association of the Philippines (CEMAP), Construction Industry Association of the Philippines (CIAP), Chamber of Automotive Manufacturer of the Philippines, Inc. (CAMPI).

### Trade

International merchandise trade statistics (IMTS) (also called foreign trade statistics) and distributive trade are

compiled on a regular basis by the NSO. Foreign trade statistics are generated from customs declaration forms while data on distributive trade is collected mainly through quarterly and annual surveys and periodic censuses as well as regional (domestic) commodity flow.

Statistics on international trade in services (SITS) are compiled by the BSP as input to the BOP and the PSNA compilation.

Other trade-related data are collected through administrative systems of pertinent government agencies such as the TC and DTI.

## Investment

Investment statistics are produced through a mix of statistical surveys and administrative registration and monitoring systems.

Data on foreign direct and portfolio investment are generated through statistical surveys and information collected from banks, the PSE and BTr, as part of the BOP statistics and IIP compiled by the BSP.

Data on approved foreign and Filipino investments are generated by the BOI, CDC, PEZA, and SBMA, and other investment promotion agencies. Data on registered FDI enterprises (corporations and joint ventures) are produced from the registers of SEC and the BTRCP of DTI.

Interagency mechanisms such as the Interagency Committee on FDIS (IACFDIS) have long been in place for the coordination of statistical activities, resolution of statistical issues, and integrated reporting of foreign direct investment statistics. The NSCB consolidates all available FDI data and publishes the quarterly national statistical report on FDI.

## Key developments in 2005-2011

There have been continuing efforts to improve industry, trade and investment statistics. Among the more notable initiatives during the previous plan period and recently are the following:

### Industry

►► **2010 Pilot Survey of Enterprises.** The pilot survey, which was conducted in 2011 aims to generate estimates of total value added, non-financial assets, revenue and gross capital formation for the institutional sector accounts of the PSNA aggregated among enterprises.

►► **Release of the 2000-based data series from the Monthly Integrated Survey of Selected Industries (MISSI) and Producer Price Survey (PPS).** The MISSI and PPS, which provide indicators for the manufacturing industry, were rebased from 1994 to 2000 in accordance with NSCB Resolution No. 6, series of 1991 mandating the rebasing of the price indices every five years and NSCB

Resolution No. 13, series of 2003, which approved the adoption of the 2000-based CPI.

►► **2008 Informal Sector Survey.** In 2009, the NSO, in collaboration with the UNESCAP, conducted the first nationwide survey of the informal sector in the country with 2008 as reference year. The Philippines was one of the pilot countries to test a 2-step survey for the evaluation of employment of informal sector enterprises.

## Trade

►► **Creation of the Task Force on the Generation of Wholesale and Retail Trade Indices.** In 2006, the Interagency Committee on Trade Statistics (IACTrS) created the Task Force on Wholesale and Retail Trade Indices (TF-WRTI) to formulate official definitions of wholesale and retail trade as well as develop a methodology to generate estimates of trade indices for proper monitoring of domestic trade activities. The Task Force has come up with the operational definition of wholesale and retail trade including the methodology for computing wholesale and retail trade sales indices.

►► **Adoption of official concepts and definition for statistical purposes and methodology for the generation of wholesale and retail trade sales indices.** The NSCB Executive Board approved Resolution No. 7, series of 2009—Approving and Adopting the Official Concepts and Definitions for Statistical Purposes of Wholesale and Retail Trade and the Methodology in Computing Wholesale and Retail Trade Sales Index. The Resolution, issued upon the recommendation of the IACTrS, provides an estimation methodology for wholesale trade sales index and retail trade sales index using the Laspeyres method. This is in response to the recommendation of the Experts' Group on Distributive Trade Statistics during a meeting organized by the UNSD in August 2005 for the development of trade indices for proper monitoring of domestic trade activities.

►► **Adoption of the 2004 PSCC in FTS.** The FTS started using the 2004 PSCC in July 2006 in compliance with NSCB Resolution No. 03, series of 2005—Approving and directing the adoption of the 2004 PSCC by all concerned government agencies and instrumentalities. The new data series conforms with the Harmonized System and ASEAN Harmonized Tariff Nomenclature.

►► **Rebasing of price indices.** In 2009, the NSO shifted the base year for computing the GRPI from 1978 to 2000. The GRPI is an indicator to monitor the economic situation of the retail trade sector. The rebasing included the updating of the market basket to represent goods being purchased by consumers in the most recent years.

►► **Development and adoption of an interim methodology for the revision of electronics import statistics.** In 2005, the NSCB Executive Board approved Resolution No. 8, Series of 2005 calling for the adoption of the interim methodology for use in the revision of electronics imports statistics, until such time that an improved and more viable valuation methodology has been developed. The interim methodology was proposed by the IACTrS in order to estimate the true measure of imports of consigned electronics based on the information compiled from the Export Declaration and the Automated Exports Declaration System collected by the NSO from the BOC.

This concern stemmed from the issue on the need to revise trade statistics, particularly, imports, based on an earlier finding that there was an understatement of import data.

►► **Development of framework and methodology for generating statistics on IT-enabled services.** In 2005, the IACTrS through Technical Working Group on Trade in Services (TWG-TiS) initiated the development of statistics on IT-enabled services in response to the growing demand for statistics that will measure the impact of IT-enabled services to the economy. The interagency collaboration produced the conceptual framework, classification of IT-enabled services activities, list of relevant data/indicators to be generated/ compiled and the corresponding metadata, customized administrative/monitoring forms, tabulation plans, and summary statistical tables.

►► **Conduct of benchmark and annual surveys of IT-BPO Services (previously called IT and IT-Enabled Services).** The Survey of IT-BPO Services started as an initiative of the IACTrS to provide reliable statistics on the contribution of the IT- and IT-enabled services industry to the economy. The BSP spearheaded the survey in close coordination with members of the IACTrS and industry associations. The survey is designed to collect information on revenue, exports, equity investment, employment and compensation from companies that provide IT-BPO services. The data are expected to be useful in labor and industry analysis to assist policy for the further development of the industry towards optimizing economic and welfare benefits. The benchmark survey conducted in 2006 covered data for the period January 2004 to December 2005. Meanwhile, annual surveys were administered in the following years, from 2006-2010.

►► **Participation in the harmonization of IMTS and SITS in ASEAN.** The Philippines through BSP and NSCB participated in regional cooperation initiatives to enhance capacity towards a common data framework and shared database on IMTS and SITS for ASEAN purposes. Starting 2005, the Philippines has participated in various regional initiatives such as meetings, technical workshops, training, data assessment, metadata development, preparation of data protocols, and strategic planning. The Philippines through NSO, and through BSP and NSCB, sits as member of the ASEAN Task Force on IMTS, and ASEAN Task Force on SITS, respectively.

►► **Development of the conceptual and statistical frameworks and methodology for measuring health and wellness tourism.** In 2008, NSCB, with guidance of the IACTrS and assistance from the European Union (EU) - Trade-Related Technical Assistance (TRTA), formulated the definition, defined the scope and coverage, and developed a methodology for measuring health and wellness tourism. The initiative aimed to quantify the contribution of health and wellness tourism services to the economy as input in trade negotiations and as data support in the formulation of national positions.

►► **Initiatives undertaken on the generation of a new Foreign Trade Index (FTI).** Discussions on the new/revised FTI covering the period 2006-2010 is underway. The new FTI will have 2006 as its base year and is being revised using the chained type method. In order to generate more improved indices on export and import value, quantity and price, the IACTrS recommended the following activities to be undertaken: data cleaning for quantity and price (prior to the generation of the indices)

and further studies on other techniques regarding seasonality and missing data.

## Investment

►► **Conduct of the Survey on FDI and related data.**

Launched in 2004, the FDI Survey is a regular quarterly activity conducted by BSP. The comprehensive survey covers FDI enterprises in the Philippines comprising a broad range of industry and services sectors. It gathers data on actual FDI positions and transactions as well as other related transactions of the FDI enterprises such as investment income and international trade-in services, including those with foreign affiliates. Responses to the survey are translated to BOP and IIP tables.

►► **Hosting of the 14<sup>th</sup> Meeting of the ASEAN Working Group on FDI statistics.** In 2006, the Philippines through NSCB and in collaboration with the IACFDIS, hosted the 14th Meeting of the WGFDIS and served as Chair during various WGFDIS meetings.

►► **Participation/contribution in the development of ASEAN FDI statistics.** The Philippines through NSCB, BSP, and the IACFDIS continued its collaboration with ASEAN through the ASEAN Working Group on FDI Statistics (WGFDIS) and European Union-ASEAN Statistical Capacity Building Programme (EASCAB). The Philippines regularly shared FDI data, attended regional meetings and workshops, and participated in technical data assessment and capacity development initiatives.

►► **Improvement of FDI data dissemination.**

Improvements have been incorporated in the Quarterly FDI Report to update and expand the data as follows: adoption of the 2009 PSIC starting Q1 2011, inclusion of historical data and data collected by other investment promotion agencies.

►► **Capacity building on FDI statistics.** Training, workshops, and appreciation forums were undertaken through the IACFDIS and its member agencies, such as the 2009 Workshop on Measuring Realized Investments in December 2009, Training on the 2009 PSIC for Compilers of FDI Statistics in October 2010, among others.

►► **Study on the measurement and generation of statistics on realized investments.** The initiative involved the following activities: creation of the interagency Technical Working Group on Realized Investments (TWGRI) in 2008 to formulate and recommend an official/standard operational definition of realized investments, develop interim and long-term methodologies or approaches to monitor and measure realized investments, review FDI compilation of individual IPAs as well as the consolidated statistics on realized investments, and submit quarterly reports to the IACFDIS. The interagency collaboration has so far developed a conceptual framework and statistical definition, designed and pilot tested the monitoring form and formulated a mechanism for the collection and compilation of statistics.

## Issues and challenges

The key issues and challenges in the compilation, improvement and dissemination of the industry, trade and investment statistics are as follows:

» Data gaps have widened due to increasing demand for more detailed data and related indicators as well as for local-level data in the business and industry sectors.

- Data from existing statistical activities are deemed insufficient to monitor industry development especially in new and emerging areas.
- With increasing public policy thrust in developing MSMEs and the resurgence of interest in addressing informal sector issues, the need for more industry-related statistical information with spatial dimensions has become more imperative.
- Demand for regular generation and release of data on IT-BPO services mounts as the call center industry continues to expand.
- Similarly, there is increasing clamor for more relevant and detailed statistics and indicators that measure the country's trading activities.
- There are persistent requests for commodity flow, distributive trade, and foreign trade data at the local levels.
- More detailed data especially on SITS has long been recognized as vital in international trade analysis and negotiations.

» Utilization of administrative-based data on establishments, enterprises, and households has become more imperative due to increasing costs of surveys.

- Unlike many national statistical systems and despite strong demand from stakeholders, the PSS lacks a statistically useful business register to serve as principal basis of sampling frames of economic surveys and to generate business and industry statistics. There has been no commitment from the relevant agencies to build a sustainable and comprehensive register of enterprises, including FDI enterprises, which can significantly reduce costs of listing of establishments/enterprises and provide more comprehensive information on businesses, industries, and investments.
- There are several potential sources of business and industry data that may have not yet been fully tapped such as the databases of relevant government agencies such as the DTI, SEC, BIR, and LGUs.
- There is lack of or weak concrete legal basis for the generation and sharing of data on corporate data, taxpayer's information, and business licenses.

» There has not been significant improvement in making statistics more timely and easily accessible to users.

- In general, establishment-based censuses and surveys have long time lags which may have rendered data less relevant for intended uses. Most business and industry statistics, *e.g.*, *ASPBI results*, come out almost two years after the reference year.
- There is general sentiment that many business, investment, and industry-related data are not being disseminated enough to users. While most of these data may be available in databases, users may find it more useful if data are presented in user-friendly format or media.
- Some users find that some datasets are not easily accessible. Some data are not available in electronic or online media and some need to be extracted from basic sources, *e.g.*, *administrative forms*.

- Detailed survey data or microdata are deemed too costly by users such as students and researchers.

» There are currently no statistical coordination mechanisms that address issues in the generation and dissemination of industry statistics.

- Primary data on industries provide the main basis and sectoral dimension of important macroeconomic frameworks and indicator systems such as the PSNA, including the informal economy. Unlike in other statistical fields though, such as trade and investment, there has been no established interagency mechanism in the PSS to address statistical issues and coordinate the improvement of basic data on industries and household economic activities.

» There is no clear policy on the timely adoption and implementation of national and international standards, guidelines, and recommendations in the compilation of statistics.

- Continuous efforts are needed to ensure improvement in the quality of statistics.
- For trade in services in particular, some issues persist such as undercoverage, incorrect valuation, and long time lags of data releases, especially for distributive trade and SITS despite adoption of international standards and data protocols.

» Existing administrative and statistical policies and interventions are inadequate to address data quality issues.

» Current data systems are inadequate to collect statistics on all forms of investments, especially small to medium scale investments and those at the local levels.

- Current monitoring systems are only capable of monitoring certain investments. Relatively smaller investments such as community-based activities are not yet captured while monitoring of realized investments has not been established.
- While there is growing demand for local-level investments data in support of local economic development policies and plans, there has been little initiative to systematically collect such data.

» While MSAs have adequate knowledge and capacity, other data producing agencies need to be strengthened to facilitate development of alternative or parallel sources of business, industry, and investment statistics.

- There is need to develop the institutional capacity in statistical data generation and analysis of government agencies that exercise administrative or regulatory functions pertaining to business and industry.
- More training is needed to enhance the technical knowledge and skills of SITS compilers.
- To ensure cooperation and better appreciation of the importance of responding to statistical inquiries, data providers need to be 'trained' in providing the right information to surveys or administrative forms.
- Users especially those engaged in international trade analysis and negotiations need to enhance appreciation of statistics and learn how to better use analytical tools in policy and impact monitoring.



►► Capacity gaps among producers, providers and users of industry, trade and investment statistics have persisted.

- There is need to enhance knowledge and capacity of PSS on internationally recommended standards, methodologies and best practices and to strengthen relations with the international community, including ASEAN, for internationally-comparable industry, trade, and investments data

►► Constraints in statistical human resources and financing remain as the most important challenge in the production of comprehensive, more timely and better quality statistics.

- Current statistical surveys are unable to provide comprehensive information on businesses and industries not only because of insufficient sample sizes, which is directly affected by lack of financial resources, but also due to inadequate statistical human resources.
- The government's rationalization plan policy has taken its toll on the production of improved trade statistics, *e.g., processing of voluminous customs declaration to generate IMTS and conduct of establishment surveys that includes data on distributive trade.*
- Lack of funding has prevented the conduct of certain statistical activities, *e.g., survey of foreign affiliates in trade in services and conduct of methodological studies to address data gaps.*

## Statistical programs

For the plan period 2012-2017, the PSS shall exert stronger efforts to resolve critical data gaps, improve data quality, strengthen statistical capacity, and explore ways to address emerging data needs in support of the nation's goals. The key strategies in achieving these are as follows:

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

### 1. Improvement of the generation and compilation of industry, trade, and investment statistics and indicators

- Development of a statistical business register to serve as principal basis of economic survey frames and to generate business, industry, and investment data
- Rationalization of establishment/enterprise-based censuses and surveys, *e.g., medium- and long-term plan for establishment and enterprise surveys*
- Improvement of sampling design of surveys to ensure generation of reliable local-level data and overall quality of statistics
- Institutionalization of the generation of data on the informal sector, *e.g., informal sector and time-use surveys*
- Generation of MSME statistics and indicators
- Study on the generation of local-level data from local government administrative systems such as business licensing and tax mapping systems

- Generation of IMTS consistent with the latest international IMTS manual/recommendations
- Conduct of a benchmark survey of major electronic companies and regular surveys thereafter
- Regular conduct of the Retail Sales Survey
- Compilation of the chained foreign, wholesale, and retail trade indices
- Enhancement in the compilation of commodity flow statistics
- Compilation and generation of foreign affiliates trade statistics (FATS)
- Institutionalization of the generation of data on IT and IT- BPO services
- Regular updating of the Register on FDI Enterprises in the Philippines and generation and dissemination of statistics
- Regular conduct of the Coordinated Direct Investment Survey (CDIS)

### 2. Enhancement of existing data/information systems for more comprehensive statistics

- Strengthening of the validation process of import/export declaration manifests
- Enhancement of SITS compilation in the BOP by tapping other data sources to expand coverage and generate data by partner country
- Compilation of approved FDI data from all investment promotion agencies
- Review and improvement of estimation methodologies in the generation of foreign and Filipino direct investments
- Review of LGUs' business licensing and relevant systems and development of appropriate mechanisms to generate local-level investment statistics
- Development of a system to collect and compiled realized investment statistics
- Development of a system for the compilation/estimation of total investments

### 3. Automation of data collection and processing through ICT applications/solutions

- Implementation of the Electronic-to-Mobile (E2M) system for transmission of trade in goods data from the BOC to NSO
- Application of geographic information system/geospatial information management technology in censuses and surveys
- Use of e-questionnaire (online) in data collection

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

### 4. Formulation of policy and appropriate mechanisms to ensure interconnectivity and facilitate data sharing among administrative-based data systems based on the principles of public good

### 5. Development and improvement of a statistics web portal for business and industry, trade (goods and services) and investment statistics

- Development of interactive and online user database on IMTS

- Development of interactive, web-based data submission/reporting system
- Establishment of a data enclave among producers of industry-related statistics to facilitate data use and dissemination to users

## 6. Strengthening of advocacy and data dissemination, and capacity building towards rational use of industry, trade, and investment statistics in effective policy formulation, planning, and monitoring

- Appreciation seminars and training of IPAs and LGUS on use of investment and related statistics in development policy and plans
- Conduct of users forums, data dissemination, and advocacy at the national and local levels, *e.g., among locators (investors) and enterprises*
- Publication of statistical reports and information papers, *e.g., industry analysis*, according to needs of primary user groups
- Training of international trade negotiators and analysts on trade data management and analysis
- Media releases and press conferences
- Application of GIS/GIM in the dissemination of statistics and other data visualization techniques

## 7. Archiving of industry, trade, and investment statistics

### *To enhance statistical capacities of data producers and providers*

## 8. Conduct of methodological studies to address data gaps and develop/improve the quality of selected industry, trade, and investment statistics

- Improvement of methodology for measuring the informal sector, economic activities of households, economic contribution of women and men, and MSMEs
- Enhancement of coverage and methodology for the compilation of SITS, including medical tourism and ICT
- Improvement of the coverage of BOP services account, in particular, transportation, financial, personal, cultural and recreational, and government services categories
- Study on the compilation of foreign trade statistics (imports/exports) at the local levels
- Study on appropriate methodology to compile realized investments
- Study on appropriate approach/es for collecting local-level data

## 9. Development and conduct of regular training and other capacity building programs for producers, providers, and compilers of industry, trade, and investment data at the national and local levels towards better quality statistics

- Institutional capacity development of BIR and SEC in data collection, processing, and analysis of data derived from administrative or regulatory functions

## 10. Participation in international cooperation and capacity building programs/projects, international

## conferences, workshops, and expert group meetings

- Participation in meetings and activities of the ASEAN task forces on IMTS and SITS, WGFDIS, and other relevant international meetings, conferences, and projects organized by international development partners, *e.g., UNCTAD, APEC, and UNESCAP*
- Provision of inputs in the updating of methodological frameworks and standards on ASEAN common data framework (IMTS and SITS)

### *To improve coherence, effectiveness, and efficiency of the statistical system*

## 11. Improvement of interagency mechanisms to initiate and coordinate the development of business and industry-related statistics

- Creation of an interagency committee on industry statistics
- Strengthening of the Task Force on MSMEs
- Adoption of statistical standards and classification systems, etc.
- Reconstitution of the IACFDIS into an interagency committee on statistics on all forms of investments

## 12. Development of the statistical framework for investments

- Data assessment and metadata compilation
- Development of statistical framework to consider foreign and domestic and national and local-level investments, and relevant development indicators

## 13. Comprehensive review and enhancement of designated statistical activities on industry, trade, and investment towards reduced time lag, improved accessibility, and generation of local-level and other spatial data, and designation of new statistics

## 14. Formulation and implementation of standards and policies on the generation, dissemination, and use of industry, trade and investment statistics, including administrative-based data

- Formulation of standard concepts and definitions
- Institutionalization of advance release calendar and appropriate data revision policies
- Adoption of common definition, framework, and classification for IT- and IT-BPO Services
- Implementation of the 2012 PSCC in IMTS
- Adoption of the ASEAN IMTS Data Protocols for regional trade data exchange
- Adoption of international recommendations/standards such as BPM6 in the compilation of SITS
- Formulation of policies and standards for the reporting, compilation, and dissemination of new investment data, including revision and updating

## 15. Implementation of the ARRCs towards improved or new/alternative sources of data

## 16. Implementation of a data quality assurance framework (DQAF) for industry, trade, and investment statistics



17. Consultations among data producers and other stakeholders for periodic data quality assessment and analysis of user needs

- Advocacy among locators and investors, and other data providers for increased support to statistical surveys and monitoring systems on investments

*To increase and sustain resources for statistics*

18. Strengthening of institutional coordination within the PSS and between PSS and the DBM, legislative bodies, and development partners to ensure funding for continuous improvement of industry, trade, and investment statistics

19. Implementation of sustainable financing and resource mobilization program to support methodological studies and data collection

- Creation of statistical units and positions in concerned agencies and LGUs
- Integration of statistical activities in the related agencies' and LGU budgets
- Institutionalization of funding for the conduct of methodological studies towards improved statistics

20. Upgrading of ICT resources to support automation of collection, processing and dissemination of industry, trade, and investment statistics

## Chapter 9

# Tourism statistics

### Introduction

Tourism is widely considered as a powerful driver of economic growth due to the influx of foreign exchange from visitor receipts as well as the employment and investments generated. Tourism is one of the key priority areas of the **PDP 2011-2016**. With many attractive destinations to offer to tourists, the country enjoys a good comparative advantage in the tourism industry. Hence, the PDP envisions “a globally-competitive and innovative industry and services sector that contributes significantly to inclusive growth and employment generation.” To attain this vision, the PDP shall focus on the following areas for sustained tourism development:

- strengthening national brand/identity awareness to promote the Philippines not only as an investment site and tourist destination but as producer and supplier of quality world-class products and services;
- development and promotion of tourist destinations;
- enhancement of tourism products and services;
- strengthening capacity of LGUs to plan, regulate and guide tourism development;
- formulation of a national tourism development plan (NTDP) as the framework for the identification, marketing and promotion of tourism destinations and products and prioritization of tourism infrastructure; and
- promotion of public-private sector partnership both in infrastructure development and capacity expansion and modernization in the accommodation and recreation sectors.

In support of tourism development policies and programs are tourism statistics and indicators that are essential in designing marketing programs and policy and decisionmaking.

This chapter provides a strategic plan to sustain initiatives in improving tourism statistics and to promote wider use of statistics in national and local tourism development plans and policies.

### Scope and coverage

This chapter covers data and indicators identified based on the tourism statistics supply-demand framework of the UNWTO International Recommendations for Tourism Statistics (IRTS) 2008. Thus, in general, tourism statistics can be grouped broadly into supply and demand statistics.

Supply-side tourism statistics pertain to data on *tourism products* and their *suppliers*. Among these are data on events, attractions, and service industries, *e.g., accommodation establishments, transportation, travel and tour providers, and ancillary services providers*.

Demand-side tourism statistics on the other hand consist of data on visitors or the consumers of tourism products including their profile and characteristics, arrivals/departures, length of stay, and other visitor activities.

Tourism statistics measure inbound and outbound tourism as well as domestic and internal tourism. The statistical framework for tourism revolves around three components:

- Visitor – refers to the consumer or the one who is undertaking the activity or transaction. This component includes statistics on visitor activities—*arrivals/ departures, length of stay, and expenditures, classified into domestic, inbound, and outbound*.
- Product – refers to the activity or the transaction itself. This component includes the goods and services visitor obtained *such as food and beverage, accommodation, travel/holiday/tour package, transport, recreation, culture, medical tourism, shopping, others*.
- Supplier – refers to the provider of productive activities and the goods and services that visitors acquire. This component includes statistics on tourism-related industries/establishments, *e.g., hotels and restaurants, transportation, travel agencies, cultural, sports, and recreational services, and infrastructure, e.g., airports/seaports, nautical highway, ecotourism sites, convention/meeting facilities, etc..*

The Philippine System of National Accounts (PSNA) provides a framework for measuring economic activities associated with tourism and thus generates relevant indicators on tourism trends and patterns and its impact to employment and economy.

## Situational analysis

The tourism statistical system is among the fast developing sectoral data systems in the PSS. It is a system where there is dynamic coordination and collaboration among government, the private sector, and academe in the development of statistics that are relevant to planning and policymaking in tourism. This healthy institutional setup has resulted in significant progress in the generation and compilation of relevant tourism data and indicators as follows:

### «Key developments in 2005-2011

» **Design and conduct of the Household Survey of Domestic Visitors (HSDV).** The survey collects data on both domestic and outbound tourism to aid in the analysis of trends and patterns of Filipino tourists. It was conducted by the NSO in 2005, 2009 and 2010 in collaboration with the DOT that also funded the survey. Outbound tourism was included only in the 2010 survey.

» **Design and conduct of the Survey of Tourism Establishments in the Philippines (STEP).** The first ever STEP was conducted in 2010 by the NSO in consultation with the DOT. The survey generates data on the supply-side of tourism particularly on the number, types, and characteristics of tourism establishments in the country as well as the number and activities of visitors.

» **Formulation of the Philippine Tourism Statistical Classification System.** The classification system was developed by the IACTS and NSCB based on WTO-recommended list, 1994 PSIC, and 2002 PCPC. It was approved by the NSCB Executive Board through NSCB Resolution No. 4, series of 2005, as basis for the generation of tourism statistics, specifically in the compilation of the PTSA.

» **Improved methodology for the PTSA and data updates.** Approved by the NSCB Executive Board through NSCB Resolution No. 6, series of 2009, the methodology produced updated PTSA estimates for 2000-2010 and updated estimation parameters based on the revised/rebased PSNA. The updated methodology is based on the UNWTO IRTS 2008 and TSA Recommended Methodological Framework 2008.

» **Development of the conceptual and statistical frameworks and methodology for measuring health and wellness tourism.** In 2008, NSCB, with guidance of the IACTrS and assistance from the European Union (EU) - Trade-Related Technical Assistance (TRTA), formulated the definition, defined the scope and coverage, and developed a methodology for measuring health and wellness tourism. The initiative aimed to quantify the contribution of health and wellness tourism services to the economy as input in trade negotiations and as data support in the formulation of national positions.

» **Implementation of the Tourism Statistical Capacity Building Program.** The program upgraded knowledge and skills of personnel of the DOT central and regional offices and LGUs in the data collection, recording, and report generation, and in the analysis and use of statistics in

tourism plans, policies and programs competitiveness of their respective tourism-specific areas. The program was implemented by the DOT and JICA during the period 2009-2012.

» **Development of Tourism Statistics Manual and Tourism Planning Guidebook.** The Manual and Guidebook were prepared by the DOT and JICA to serve as guide for data collection, generation, dissemination and accessibility of tourism statistics, as well as, illustrate and show how statistics is used in development planning. The preparation of both the Manual and Guidebook was started in 2011 for publication in 2012.

» **Enhanced dissemination of tourism statistics through the DOT website.** The DOT has expanded the database of tourism statistics disseminated on its website. Continuous improvements are being done to enhance the dissemination and accessibility of tourism statistics.

» **Participation in advocacy activities for tourism statistics.** Several advocacy activities, such as presentation of papers and publication of articles on the web, participation in worldwide consultations in the revision of standards, and participation in local and international meetings and conferences, were undertaken to promote use of tourism statistics.

» **Membership of the Philippines in international statistical bodies on tourism.** The Philippines has progressively gained international recognition in the development of tourism statistics. Through the NSCB, the country has been elected as member of the Technical Advisory Board (TAB) to the UNWTO Statistics and TSA, the Committee on Statistics and the TSA, and Steering Committee of the International Statistical Institute's Committee on Tourism Statistics (ISI-COTS).

### «Issues and challenges

While demand-side tourism statistics have been fairly developed at the national level, there is growing clamor and initiative to develop and generate statistics for local or destination-specific tourism development planning.

On the other hand, supply-side statistics has remained inadequate due to resource constraints and methodological challenges.

Some of the key issues and challenges in developing tourism statistics are as follows:

» **Reporting of data needed in DOT's statistical reports and in the computation of tourism development indicators has been perennially delayed.**

- Despite coordination mechanisms and data reporting systems in place, data from the field – DOT regional offices, LGUs, and data providers such as tourism establishments generally come late affecting the timeliness of statistical reports for policy use.
- There is weak or lack of concrete legal framework for reporting of tourism statistics. While Republic Act No. 9593 (Tourism Act) and the NTDP articulated the need for the collection and generation of tourism statistics at the sub-national level, the LGUs have not been able to

pursue this requirement due to lack of local institutional mechanisms, such as legislation and ordinance, to set up the system and require compliance from data sources.

►► **Accessibility of tourism data remains a problem for users.**

- While there have been various efforts to make tourism data more accessible to the users, there are still other ways and strategies that can be implemented for enhanced dissemination and accessibility of data.
- The promotion of increased use of tourism statistics needs to be improved for more evidence-based policies.

►► **New tourism statistics and indicators have to be generated to support more appropriate tourism policies and programs.**

- With increasing demand and new/emerging concerns of data users and stakeholders and the data requirements of the NTDP, it is imperative that mechanisms to generate and disseminate new tourism statistics/indicators to address these concerns be put in place.

►► **Local-level tourism statistics are largely lacking.**

- As tourism development and promotion intensifies and industry competition increases, the need for local or area-specific statistics especially in key/priority tourist destination areas has become more urgent.
- Demand for local-level statistics including basic data and indicators and tourism satellite accounts has mounted in recent years which the data system has been unable to meet due to resource and capacity constraints.

►► **Current statistical capacity building initiatives are insufficient.**

- Statistical agencies need further training on methodological frameworks and standards to facilitate development and improvement of important tourism indicators such as the tourism satellite accounts.
- Tourism institutions and LGUs need continuous training in both statistical data collection and use.
- Increasing appreciation of data providers such as households and tourism establishments is crucial in the generation of quality tourism statistics.

►► **Resources, especially human resources, for generating tourism statistics and indicators have remained inadequate.**

- There is dearth of statisticians in government agencies responsible for tourism statistics.
- As the tourism industry continues to expand, demand for data also increases which will be increasingly hard to meet by the existing statistical human resources in government.
- The DOT and MSAs need more dedicated personnel to collect, compile, and manage the growing tourism database in the country.

increasing the capacity of the statistical system to provide more useful data for sound tourism supply and demand analysis as well as for more effective tourism development and promotion.

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

22. **Improvement of statistical surveys on tourism in terms of coverage and timeliness and development of new ones to generate priority data concerns**

- Improvement and regular conduct of the HSDV and STEP to include reliable local-level disaggregation
- Design of appropriate statistical surveys on eco-tourism and medical tourism

23. **Enhancement of existing administrative-based information systems and databases on tourism and development of new ones**

- Improvement of system for collecting and compiling data on meetings, incentives, conventions and exhibition
- Enhanced compilation of data on same-day visitors and regional travelers report
- Expansion of existing administrative-based information systems and development of databases on travel and transportation services under the BOP framework

24. **Development of mechanisms to generate local-level tourism statistics and to compile tourism satellite accounts for key/priority tourist destination areas**

25. **Improvement of the compilation of the PTSA**

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

26. **Development and improvement of a tourism statistics web portal**

27. **Development of IEC strategies and tools for the dissemination and communication of tourism statistics and indicators**

- Enhancement of DOT's tourism database system to facilitate processing and report generation and increase data accessibility through acquisition of new ICT resources
- Application of appropriate technology in the dissemination of tourism statistics, *e.g., data visualization techniques, GIS/GIM*, among others
- Conduct of statistical advocacy programs in the tourism industry and among policymakers and other stakeholders

28. **Conduct of training on the use of tourism statistics in policy and other purposes for stakeholders—media, policymakers and program**

## Statistical programs

The following statistical programs aim to sustain the improvement of tourism statistics with added focus on

implementers, tourism associations, research institutions, among others

*To enhance statistical capacities of data producers and providers*

29. Conduct of methodological studies for the improvement of the PTSA, medical and wellness tourism, and basic data collection methodologies

30. Conduct of statistical and related training for tourism and related agencies and LGUs

- Training on design and conduct of statistical surveys, indicators development and compilation, statistical analysis and data visualization, etc.
- Technical training on database development and technology application such as GIS/GIM
- Training on statistics and implementation of data guidelines in the generation and dissemination of tourism data

31. Participation in and hosting of international conferences, training, workshops, and expert group meetings on tourism statistics co-organized by/with the UNWTO, UNSD, Pacific Asia Travel Association (PATA), ASEAN, and other relevant organizations

*To improve coherence, effectiveness, and efficiency of the statistical system*

32. Strengthening of institutional coordination among tourism agencies and LGUs for recurrent generation and dissemination of local-level tourism statistics

33. Enhancement of the statistical framework for the compilation of tourism statistics and indicators, consistent with the latest international standards and recommendations

34. Review and improvement of designated statistical activities in the tourism sector and other statistical coordination mechanisms towards reduced time lag, increased accessibility and generation of local-level data

- Adoption of advance release calendar
- Establishment of regular dialogues and institutional arrangements for periodic assessment of tourism statistics

35. Participation in international and bilateral cooperation for methodological development and capacity building in tourism statistics such as relevant programs of JICA, UNWTO, PATA, ASEAN, and other relevant organizations

*To increase and sustain resources for statistics*

36. Strengthening of institutional coordination within the PSS and between PSS and the DBM, legislative bodies, and development partners to ensure funding of the continuous improvement and production of critical statistics on tourism

37. Institutionalization of sustainable financing for tourism statistics

- Creation of statistical units and positions
- Integration of statistical activities in the tourism and related agencies' and LGU budget







cluster4

Infrastructure  
development

## Chapter 10

# Transport statistics

### Introduction

Transportation plays an important role in the economy and society. It brings people to school, the hospital, and the workplace as well as to places for sports, leisure, and cultural activities. It carries livestock, produce, and goods and services from production bases to markets and consumers. Transportation is vital to tourism and business activities and thus contributes to employment generation and economic growth.

In 2010, transportation services had a share of 3.4 percent at current price and 2.7 percent at constant price of the country's gross domestic product. Tourism consumption expenditures on passenger transport services comprise 5.8 percent of total tourism consumption expenditures.

From 2005 onwards, there were more motorcycles/tricycles than utility vehicles and the gap between them appears to be increasing gradually which close to half of private vehicles roaming the streets are motorcycles or tricycles!

Land Transport in the Philippines: Retrogressing Towards Motorcycles? Dr. Romulo A. Virola, Secretary General, NSCB (posted on [www.nscb.gov.ph](http://www.nscb.gov.ph) on 12 October 2009)

As significant as the contribution of the transport sector is, it is also a major user of energy, mostly fossil fuel. It creates air and noise pollution and significantly contributes to global warming through emission of carbon dioxide.

The basic goals of transportation are mobility and accessibility to enable people conduct their day-to-day social and economic activities. An efficient system of transportation moves people and goods fast, safely, and efficiently, and provides access to basic and other services. With the varied physical, social and economic topography of the country, careful thinking and in-depth study are crucial in determining the appropriate transport infrastructure, resources, and technology, as well as the most suitable policy to ensure that mobility and accessibility are attained with optimal use of energy and least impact to environment.

While most transportation services in the country are run by individuals and corporate business, the overall planning and policy creation, infrastructure development, regulatory functions, and monitoring are

lodged with the government through the DOTC and its bureaus and offices and the DPWH.

The **PDP 2011-2016** envisions the transport sector as "a safe, secure, efficient, viable, competitive, dependable, integrated, environmentally sustainable, and people-oriented Philippine transportation system". To attain this vision, the PDP aims to achieve the following goals:

- to ensure an integrated and coordinated transport network through comprehensive long term national transport policy, development of strategic transport infrastructure and efficient management of transport infrastructure assets, and development of integrated multimodal logistics and transport system;
- to address overlapping and conflicting functions of transport and other concerned agencies;
- to ensure transport safety and security; and
- to promote development of conflict-affected and highly impoverished areas.

Development initiatives place emphasis on asset preservation, provision of access to major and strategic tourism destinations and production areas, and promotion of environmentally sustainable and people-oriented transport sector.

Supporting the development of the Philippine transportation sector is a wide range of data and indicators to support effective policy analysis, formulation, and implementation and efficient regulatory administration of transport systems and services.

This chapter provides a general plan for the improvement of the transport data system to ensure availability of timely and reliable statistics.

### Scope and coverage

Transport statistics describe the various components that make up the transportation system across different modes. These statistical data and indicators provide quantitative measures of stocks and flows pertaining to the transport of persons, animals and goods and services as follows:

- Transport infrastructure, *e.g., national/provincial/city/municipal/barangay roads, bridges,*

*public utility vehicle terminals, seaports, airports, railway lines/stations, etc.*

- Transport equipment, *e.g., vehicles, train coaches, vessels, and aircrafts*
- Transport measurement, *e.g., passengers, cargo/freight, traffic, throughput, etc.*
- Transport enterprises, economic performance and employment, *e.g., transport operators/drivers/navigators/ pilots, output, revenue, production, exports/imports, prices, investment, logistics, etc.*
- Transport safety and security, *e.g., accidents, traffic violations, impacts of disasters to the transport sector, etc.*
- Energy consumption and environmental impact of the transport sector, *e.g., carbon monoxide and dioxide emission, fuel consumption, etc..*

Statistics on transport enterprises and economic performance are also covered in various chapters such as on Chapter 5 – Macroeconomic accounts and statistics, Chapter 8 – Industry, trade, and investment statistics, Chapter 9 – Tourism statistics, and Chapter 11 – Energy statistics. On the other hand, data on transport employment are also included in Chapter 15 – Labor and employment statistics while data on transport safety and security may also be discussed in Chapter 23 – Peace and security statistics.

## Situational analysis

Most of the data collection is done through the administrative or regulatory registration and reporting systems of the transport program agencies namely the DOTC and its bureaus and offices—LTO, PNR, PPA, MARINA, ATO, CAB, and the DPWH.

Meanwhile, the NSO generates basic transport data through censuses and surveys while NSCB and BSP compile economic production and international trade data on transportation services. Other related data are gathered by the PNP, the Philippine Coast Guard of the Philippine Navy, and DILG through the LGUs.

## Key developments in 2005-2011

► **Development of Traffic Accident Recording and Analysis System (TARAS) using GIS.** Initially developed by the WB in 2005, the TARAS which is a traffic accident data warehousing system of the DPWH is now operational. Several areas of improvement have been identified as requisites for an efficient traffic accident information system which include better traffic accident investigation procedure, *e.g., accident site measurements and reconstruction*. Specifically, the following activities have been undertaken:

- Adherence to the official Traffic Accident Investigation Report (TAIR);

- Creation of an integrated traffic accident database system;
- Geo-referencing of accident occurrences;
- Utilization of available cost-effective technologies, *e.g., GIS, GPS*;
- Utilization of Client/Server Network Architecture for better information delivery; and
- Education and training on traffic accident investigations and reconstruction.

## Issues and challenges

There has not been significant progress in the improvement of transport statistics in the previous Plan period even as data collection has continued as part of the administrative functions of the principal data producers.

► While there are data available, the generation of transport statistics remains fragmented and uncoordinated making data not easily accessible to users.

- There is no common data framework that guides which statistics to produce/prioritize and which agencies bear the attendant statistical responsibilities.
- Standards and approaches vary across modes or functional areas in the transport sector rendering the data incoherent and inadequate for comprehensive analysis of the multi-modal split and for other policy uses.
- There remains a lack of institutional mechanism for coordination, consolidation, dissemination and use of transport statistics.

► While there is a steady supply of data for some aspects of transport, notably, motor vehicle registration, gaps in important basic data such as local road network still exist.

- Aside from those generated through a few general censuses and surveys, there has been little transport-specific data or indicators generated through statistically designed approaches. Such data include those that can support deeper industry/sector analysis, *e.g., quality, efficiency, cost standards, supply and demand, commodity routes, etc.* as well as those that can measure development outcomes.
- There is limited local-level transport data for national and local development planning, infrastructure and services improvement, and other rural development initiatives.
- Gaps in basic data such as local roads, transport in trade in goods, etc., appear to have widened in recent years and may continue to increase if not addressed soon. For instance, the inventory of local roads, which has been devolved to the LGUS, has been found to be extremely delayed or not conducted on a regular basis which has affected the representativeness and reliability of road network indicators. Stronger policy interventions may be urgently needed to ensure timely and regular reporting of such data.

► Most transport statistics are perceived to have issues in terms of coverage, timeliness, and reliability, which is typical in data collected through

registration or reporting systems. However, there is little information on the extent of the problems.

- A more comprehensive data assessment is needed to determine quality levels and gaps and provide basis for interventions.

►► The technical statistical skills and capacity of data producing transport agencies need strengthening to ensure the generation of more timely, relevant, and coherent transport statistics.

- Many of the personnel engaged in data collection and dissemination activities do not have formal education or training in statistics or related fields.
- There is general assessment that access to technical training on statistical concepts, methods and practices by the transport agencies has been limited.

►► Resources, especially human resources, are insufficient to sustain the regular collection, compilation, and dissemination of transport statistics and to make data analysis in support of policy uses.

- Typically, statistical work is only part of the planning, research or information technology/services functions of transport agencies. In most agencies, few people are assigned to do statistics work.
- Some transport agencies experience high turnover of statistical personnel, which affects the timeliness and quality of data compiled.

## Statistical programs

The major statistical programs to develop/ improve the transport data system include the following:

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. Enhancement of existing statistical surveys on transport and development of new ones to generate priority data to support transport sector analysis and policy
  - Survey of motor vehicle traffic volume
  - Monitoring of domestic and international passenger and cargo flow
  - Conduct of a statistical count survey of road-based passenger on public utility vehicles and transport infrastructure/facility, including utilization rates
  - Gathering of data for yearly updating of road crash costs and estimation
2. Improvement of administrative-based reporting and information systems and identification of new ones to collect/generate essential transport data
  - Regular updating of the inventory of national and local roads and bridges, including the farm-to-market roads, e.g. road and bridge information application
  - Building up of a database of municipal and *barangay* roads
  - Periodic inventory of transport facilities and building of a registry of transport equipment, especially at the

local levels to capture information on tricycles and other community-based transport

- Enhancement of the TARAS
- Development of a performance evaluation and monitoring system for public transport
- Generation of relevant statistics from transport agency registration/reporting systems, e.g., e-seafarers identification and record book application, e-registration (for vessels engaged in international trading), motor vehicle inspection and registration, etc.

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

3. Establishment of an integrated statistics web portal on transport to consolidate and disseminate available data and metadata
  - Linking of agency databases and information systems
  - Convergence program to build an integrated database and GIS/GIM on centers of growth and tourism, ports and airports, national and local roads, and rail transport network
  - Archiving of transport data
4. Development of IEC strategies to advocate use of transport statistics/indicators in policy
  - Conduct of user-producer dialogues, user appreciation seminars, and media briefing
  - Publication of transport statistics such as compendium of transport statistics and analytical/information papers
  - Strengthening the dissemination of transport statistics through public private partnership and use of appropriate technology, e.g., data visualization techniques, GIS/GIM, social networking sites
5. Conduct of training on transport statistics for stakeholders such as the media, policymakers, planners, and analysts, transport associations, research institutions, among others

*To enhance statistical capacities of data producers and providers*

6. Regular conduct of statistical training program for transport and related agencies
  - Training on survey design and operations, statistical analysis and visualization, database development, and GIS/GIM applications
7. Conduct of statistical training and implementation of guidelines for LGUs in the generation, reporting, and dissemination of transport statistics, especially local roads and bridges, farm-to-market roads
8. Participation in and hosting of international conferences, training, workshops, and expert group meetings
  - Participation in activities organized by the International Civil Aviation Organization, ASEAN Transport Information Platform Project, among others

*To improve coherence, effectiveness, and efficiency of the statistical system*

9. Development of a statistical framework on transport and formulation and implementation of appropriate standards, policies, and guidelines for the generation and dissemination of transport statistics
10. Strengthening of institutional coordination among transport and concerned agencies and local governments for the generation and dissemination of local-level transport statistics
  - Creation of an interagency committee on transport statistics to coordinate development activities and address statistical issues and concerns
  - Advocacy and coordination for consideration of statistics in pending legislative proposals and bills on transport for sustained financing and improvements
11. Conduct of methodological studies to develop and improve statistics and indicators or analytical frameworks on transport such as

- Study on transport supply and demand
- Study of special transport subsectors
- Study on traffic volume count

12. Assessment and improvement of transport statistics in terms of reduced time lag and greater accessibility of data, and production of local-level data towards inclusion in the SDS

*To increase and sustain resources for statistics*

13. Institutionalization of sustainable financing for transport statistics
  - Creation of statistical units and positions in transport agencies to ensure continuous production and improvement of transport statistics
  - Integration of statistical activities in the regular and development budget of transport and related agencies

# Chapter 11

## Energy statistics

### Introduction

Energy is an instrument to poverty reduction and social equity as it serves as an enabling factor to channel grassroots development with the delivery of much needed public services to marginalized and disadvantaged sectors of the society.

Along these lines, the energy sector underscores its guiding vision of “Energy Access for More” to mainstream access of the larger populace to reliable and affordable energy services to fuel, most importantly, local productivity and countryside development. In achieving this vision, the government’s key priority is to ensure the delivery of secure, sustainable, sufficient, quality and environment-friendly energy to all sectors of society through the consultation and mobilization of the private sector and other concerned stakeholders.

Data on energy resources, especially power supply and demand and fuel prices are among the most critical and highly watched indicators in the country due to its implication on business, industries, and daily lives of the people. Thus, the development and generation of reliable and accurate key energy statistics as basis for sound policy and decisionmaking are critical in planning and implementing activities and programs in the energy sector.

This chapter outlines the strategic statistical programs to improve the collection and compilation of energy data and indicators towards better energy surveillance and monitoring and swift policy response and mitigating actions.

### Scope and coverage

This chapter covers data and statistics that describe, measure, and analyze the developments in the energy sector based on the energy accounting framework. These include data on energy sources, supply, transformation, generation, transmission/ delivery, and final demand. More specifically, energy statistics are comprised of the following groups of data and indicators:

- Energy source/supply statistics, *e.g., stock of energy resources and exploration, production, trading, and inventories of energy supply such as crude oil, coal, natural gas, geothermal, hydropower, solar, wind, and biofuel, and other alternative energy sources*

- Transformation, energy conversion and delivery statistics, *e.g., secondary energy supply including production, importation and distribution of petroleum products and generation, transmission and distribution of electricity*
- Final energy demand statistics, *e.g., consumption of different types of energy by households and private and public establishments, including those in the transportation and agriculture sectors.*

This chapter also covers statistics on energy infrastructure and investment, electricity trading and environmental effects of energy use, including those that contribute to climate change.

Related statistics may also be covered in other chapters such as Chapter 5 – Macroeconomic accounts, Chapter 6 – Industry, trade and investment statistics, Chapter 10 – Transport statistics, and Chapter 20 – Environment and natural resources statistics.

### Situational analysis

Energy statistics are produced mostly from the administrative and regulatory systems of energy and related agencies while some data are provided by major censuses and statistical surveys conducted by the NSO.

#### Key developments in 2005-2011

Aside from the regular collection and analysis of basic data on energy supply and production, power and electrification, fuel prices, and the compilation of the energy balance table (EBT), there have not been many significant initiatives in the improvement of energy statistics in the previous Plan period. Among the significant activities ones are:

» **2011 Household Energy Consumption Survey (HECS).** The 2011 HECS, the fourth in the series since 1989, collected/updated data on residential energy consumption patterns and preferences. It was conducted by the NSO in coordination with and funding from the DOE.

» **2010 Survey on Energy Consumption of Establishments (SECE).** The survey, conducted through the collaborative efforts of NSO and DOE, collected benchmark information on the country’s energy utilization pattern by sector and generated data on energy demand. The 2010 SECE covered 9,440 establishments in the various economic sectors/ industries, among others, agriculture, forestry and fishing, mining and quarrying, manufacturing, land, water and air transport, and business services.



►► **Sustained compilation of the EBT.** From 2005 onwards, the DOE has institutionalized the annual compilation of the EBT. EBT allows users to see the fuel conversion efficiencies and the relative importance of different fuel supplies in their contribution to the economy. It is also the natural starting point for the construction of various indicators of energy consumption (per capita, or per unit of GDP, sectoral consumption, etc.) and of energy efficiency.

►► **Asia Pacific Economic Cooperation (APEC) Energy Statistics Capacity Building for the Philippines.** This activity has provided DOE units and relevant government agencies with better understanding of technologies and platforms used in generating energy statistics of APEC member economies. It was conducted in collaboration with the Institute of Energy Economics Japan (IEEJ) and the Energy Data Modeling Center (EDMC), the coordinating agency of the APEC Expert Group on Energy Data and Analysis (EGEDA) in February 2011. The activity was an international commitment under the Asia Pacific Economic Cooperation-Energy Working Group (APEC-EWG) of which DOE is a member.

►► **Capacity Building on Energy Database for the Philippines.** The project was conducted in August 2011 in collaboration with IEEJ-EDMC and a follow-up activity after the successful capacity building on energy statistics. It provided an overview of database technology and applications that can be utilized by DOE to develop and institutionalize its own database in MS Access. This paved way for a more organized and relatively sophisticated system of updating and maintaining the Philippine energy data which is currently stored in MS Excel format. Also, this is a necessary step in facilitating online data collection and access among the various DOE units.

## ◀◀ Issues and challenges

Some key issues and challenges on energy statistics have been identified in various discussion and consultation among energy data producers and users as follows:

►► **There are data gaps in some critical energy statistics.**

- Although there are many data available, some critical data gaps remain as demand for new and relevant indicators for more incisive analysis and use in sector outcome monitoring are needed.

►► **Some of existing data needs improvement in terms of coverage and timeliness.**

- More timely and better quality statistics are needed to maximize their usefulness in policy and decision-making such as those generated from administrative reporting/monitoring systems.

►► **Coordination of energy data production and dissemination is perceived weak despite institutional dialogues and linkages initiated by the DOE.**

- There is consensus on the need for the establishment of an interagency committee on energy statistics to sustain sectoral coordination mechanisms, formulation of strategies/policies and standards towards more integrated and coherent energy statistics.

►► **There is limited local-level energy statistics and indicators needed for national and local energy planning and monitoring, especially on sectoral energy consumption.**

►► **Statistical capacity needs to be strengthened in all energy data producing institutions.**

- There is need to build knowledge and skills on the application of statistical standards, data quality validation, and dissemination and communication.
- As primary users, energy data producing institutions also need training on the rational analysis and use of statistics in energy study, policy creation, and monitoring.

►► **Resources, especially human resources, are insufficient relative to the magnitude of work involved in the regular collection, processing, validation, dissemination and analysis of energy statistics.**

- Funding for critical statistical activities has not been provided on a regular basis affecting the continuity and quality of indicators dependent on basic data generated from such activities, *e.g., consumption surveys for on demand side of the energy balance table.*

## Statistical programs

In order to address the above statistical issues and emerging demand for energy statistics, the energy data producing agencies plan to undertake the following major statistical programs:

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. Institutionalization of regular energy consumption surveys, *i.e., HECS and SECE*
2. Enhancement of surveys and administrative-based information systems to generate local-level energy statistics
3. Improvement of administrative-based information systems to generate better quality energy statistics
  - Energy prices monitoring
  - Rural electrification monitoring
  - Generation of data on importation of energy products
  - Monitoring of renewable energy
  - Generation of data on energy emissions in line with MDGs monitoring
4. Compilation of the energy accounts
  - Enhancement of the EBT compilation
  - Compilation of the System of Environmental-Economic Accounts (SEEA) for energy

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

5. Development of an energy statistics web portal to consolidate all available energy data and statistics

6. Development and implementation of more effective IEC strategies and mechanisms on energy statistics

- Compendium of available energy statistics
- User guide for interpretation and analysis of energy statistics
- Application of data visualization technology and GIS/GIM in data dissemination
- Conduct of statistical advocacy forums
- Data documentation and metadata development

7. Conduct of user needs assessment among stakeholders to determine most relevant data and quality gaps that need to be addressed by PSS

8. Conduct of statistical training and appreciation forums for data users towards more rational use of energy statistics

- Inclusion of statistics in the Energy 101 users training program of the DOE
- Appreciation seminars among concerned regional bodies/agencies and LGUs on the use of energy statistics in local development planning

*To enhance statistical capacities of data producers and providers*

9. Conduct of methodological studies in aid of the development of energy frameworks and indicators

- Development of methodology to gather data on energy use in transport, agriculture, and commercial sectors
- Study on methods of valuation of energy resources
- Study on measuring domestic trading of energy

10. Conduct of statistical training and appreciation forums for data producers and providers to improve timeliness and coverage of data reporting

- Technical training of energy data producing agencies on data collection, management, processing, and validation
- Training on framework and indicators development, e.g., *Energy Commodity Account, EBT, SEEA-Energy, energy development outcome indicators, etc.*
- Appreciation seminars among energy data producing organizations and data providers (energy establishments, e.g., independent power producers and electric cooperatives, for timely and regular provision of data and adoption of quality standards
- Training of energy organizations in the collection and dissemination of local-level energy data

11. Participation in and hosting of international conferences, training, workshops, and expert group meeting on energy statistics

*To improve coherence, effectiveness, and efficiency of the statistical system*

12. Creation of an interagency committee on energy statistics to coordinate policies, standards and mechanisms for improvement of energy statistics

13. Development/enhancement of energy statistical frameworks, standards, and classification systems

14. Formulation and implementation of policies and guidelines in the generation, reporting and dissemination of energy statistics

- Designation of statistical responsibilities
- Increasing data sharing among agencies compiling energy statistics
- Adoption/implementation of dissemination policies and standards such as on data revision, and pricing of statistical outputs

15. Review and improvement of designated statistical activities in the energy sector towards reduced time lag and greater accessibility of data, and production of local-level data

16. Implementation of a data quality assurance framework (DQAF) for energy statistics

17. Implementation of the ARCS for energy statistical activities

18. Adoption/adaptation of international principles, frameworks and declarations in the compilation and dissemination of energy statistics

- Compilation of MDG indicators on energy
- Adoption of the UN SEEA/IEA frameworks and standards in the compilation of the environment accounts
- Implementation of ASEAN agreements on energy data sharing

19. Participation in international cooperation and capacity building programs/projects, and standards and methodological development activities on energy statistics

*To increase and sustain resources for statistics*

20. Institutionalization of a sustainable resource mobilization program to support regular and new statistical data collection, training and technology utilization

- Integration of statistical activities in the regular and developmental budget of energy agencies
- Cost-sharing for the conduct of sectoral energy statistical surveys

21. Strengthening of institutional coordination between the PSS and DBM and other oversight agencies for provision of human resources for the continuous improvement and regular compilation of energy statistics

- Creation of statistical units and positions in energy agencies to ensure continuous production and improvement of energy statistics

## Chapter 12

# Information society statistics

### Introduction

The Philippines has a high diffusion of information and communications technology (ICT) that extends to most parts of the archipelago. The continued expansion of ICT especially cellular mobile telephone services and broadband internet has allowed ideas, information, and knowledge to cross over physical, economic, and social barriers.

Technological advancement and economic development have created many growth opportunities in the ICT sector. Leading the way in tapping to these opportunities is the private sector—corporations and enterprising individuals alike, who continue to invest in research and technology, capacity building, and infrastructure development in ICT. The government does its part by strongly promoting ICT and providing a policy environment that facilitates interconnectivity to aid in economic and social development.

The improvement of ICT forms part of the infrastructure development program in the **PDP 2011-2016**. ICT development strategies have been designed primarily to support the economic sectors and enable equitable access to infrastructure and social services. More specifically, the PDP has set to develop ICT infrastructure that spurs social and economic activities and encourages innovation to support achievement of inclusive growth and reduced poverty. With that, the PDP more than embraced a parallel target in the MDGs, that, of making available and accessible new technologies, especially ICT, to the people.

ICT infrastructure and services are primarily provided by private telecommunications operators and driven by consumer demand—individuals, industries, and governance institutions. There are however remaining physical and institutional challenges that need to be addressed through appropriate policy measures and regulatory reforms to help sustain and further advance the ICT sector.

Information society is a people-centered inclusive and development-oriented society, where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life.

Source: World Summit on the Information Society (WSIS)

The ICT sector is now more than ever compelled to:

- provide fast, reliable and affordable access to information and communications services;
- cultivate an enabling environment to further attract and sustain private sector investments in ICT infrastructure development; and
- achieve increased transparency, efficiency and trust in government through enhancement of e-government systems.

The availability of information society (IS) statistics, including ICT-related statistics, is key to the formulation of appropriate regulatory and policy reforms that will harness the full potentials of the sector towards achieving economic growth and social development.

This chapter presents general strategies and programs to further develop a dynamic yet dependable IS/IE/ICT statistical data system.

### Scope and coverage

Information society statistics are meant to capture actual and potential impacts of the highly evolving and ubiquitous ICT to the economic, social, political, and cultural life of the country.

This chapter covers statistical data and indicators that are needed in monitoring the development of an information society, specifically:

- ICT Infrastructure and access, *e.g., telephone/cellular phones, broadband internet subscription, etc.*;
- Access to and use of ICT by households, individuals, businesses, and government, *e.g., internet usage, PC penetration rate, web presence, online products and services, e-commerce, etc.*;
- ICT producing sector, *e.g., manufacture of electronics, telecommunication services*;
- International trade of ICT goods and services, *e.g., exports/imports of ICT products and services.*

## Situational analysis

The compilation of comprehensive and coherent IS statistics in the PSS is significantly still a work in progress.

IS/ICT statistics are generated mainly through the administrative-based information systems of the NTC and CICT/DOST and censuses and surveys conducted by the NSO and BSP.

### Key developments in 2005-2011

Some of the major initiatives that have been conducted in the past Plan period to collect basic data and compile relevant indicators on IS are as follows:

►► **Creation of the Interagency Committee on ICT Statistics (IACICTS).** NSCB Memorandum Order No. 005, series of 2006 provided for the creation of the IACICTS primarily to serve as a forum for discussion and resolution of issues relating to ICT statistics, recommend policies geared towards its improvement and monitor the overall development of ICT statistics in the country. Specifically, the IACICTS is tasked to formulate an ICT statistical framework, provide direction and support in the development of a satellite accounts on ICT and provide inputs to classification systems relating to ICT statistics.

►► **Information Economy (IE) defined.** The NSCB Executive Board has approved, through NSCB Resolution No. 6, series of 2011, the definition and scope and coverage of IE which provides the framework for the generation, compilation, and dissemination of ICT and related statistics, serves as basis in the compilation of the satellite accounts on ICT and measurement of the contribution of IE to the Philippine economy.

►► **Conduct of the Survey on Information and Communications Technology (SICT).** Launched in 2006, SICT follow-up surveys were conducted by NSO in 2008 and 2009. The surveys collected information on the availability, distribution and utilization of ICT among industries and businesses in the country and generated indicators of progress that will aid decision-making, policy formulation and investment in ICT. Some of the indicators include ICT resources of establishments, uses of ICT resources, use of internet, e-commerce, use of mobile phones, purchase and disposal of ICT equipment, among others.

►► **Conduct of the Survey of IT-BPO Services.** This annual survey, conducted by the BSP since 2005 and formerly known as the Survey of IT and IT-Enabled Services, provides information on the economic contribution of the IT and IT-Enabled services in the country.

►► **Conduct of ICT Statistics Stocktaking and Assessment Workshop in the Philippines.** Sponsored by the ITU and CICT, the Workshop served as a forum for exchange of ideas and thorough discussion on the identification, prioritization, and assessment of Philippine ICT statistics both from the producer and user sides.

►► **Generation of household data on ICT-related indicators.** The 2010 CPH included seven ICT indicators on

mobile phone subscription, households with PCs, usage of PCs, type and frequency of access to internet, usage of internet by type of activity. The triennial FIES generates ICT-related statistics on proportion of households with personal computer, family expenditures on communication, internet subscription, and ownership of ICT devices.

►► **ICT concepts and definitions identified.** On the recommendation of the IACICTS, the NSCB Executive Board has approved Resolution Nos. 2, Series of 2008, and 21, Series of 2009, on the 16 official concepts and definitions for statistical purposes for the ICT sector that would allow comparability of statistics across national and international boundaries.

►► **Periodic monitoring of government ICT resources and web presence of government agencies.** Conducted by the NCC, this activity provides indication of the state of e-government in the country that affects the delivery of government services from the NGAS to the LGUS and SUCs.

►► **Conduct of the Consultative Workshop on the Definition, Framework and Indicators for the Measurement of e-Commerce.** The NSCB in collaboration with the DTI conducted the Workshop with the objective of formulating a definition of and statistical framework for electronic commerce for measurement purposes and identifying its coverage considering both local setting and practices of international organizations and other countries.

### Issues and challenges

The key challenges in IS statistics include:

►► **Although the compilation of ICT statistics and indicators has been ongoing in the PSS, the statistical framework for IS Statistics has yet to be developed.**

►► **Stakeholders of the ICT sector, both the private sector and government have been demanding for greater access to timely and regularly available IS statistics.**

- Demand continues to outpace supply not only in breadth but also in depth and sophistication associated with an ever-changing sector.
- There have only been a few and fleeting activities conducted to generate ICT data while administrative systems have not produced statistics beyond the traditional set of ICT data to address emerging information requirements.

►► **There is a general perception that technical capability to compile, analyze, disseminate and use IS statistics is inadequate.**

►► **There is limited local-level IS statistics and indicators for national and local development planning and monitoring of ICT sector development which has constrained policy analysis and program development.**

## Statistical programs

The following statistical programs, designed to address the issues and challenges in the IS sector shall be undertaken.

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. Institutionalization of the regular conduct of household-based ICT surveys and surveys of ICT usage in government, including LGUs
2. Enhancement and institutionalization of establishment-based surveys to generate ICT statistics on e-commerce, e-business and m-commerce; and the survey on IT-BPO Services on outsourcing revenues and employment
3. Enhancement of administrative reporting systems for the generation of IS statistics/ indicators
  - Compilation of IS-related statistics as part of the administrative/regulatory functions of concerned government agencies, *e.g., student-PC ratio, hospitals using computers/ internet to collect/process/transmit individual patient information, Green ICT, etc.*
  - Modernization of data collection and processing systems
4. Development and compilation of the Satellite Accounts of the IE to provide statistical information on the contribution and role of IE in the country's economic structure and development

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

5. Development of an IS statistics web portal to link and consolidate all ICT statistical information resources produced by various government institutions
6. Enhancement of the dissemination and communication of IS statistics
  - Partnership among concerned agencies in disseminating IS statistics from surveys and administrative data systems
  - Conduct of users' forums and briefings on the importance and uses of IS statistics
  - Compilation and dissemination of comprehensive metadata on IS statistics
  - Aggressive media releases on IS statistics
  - Use of data visualizations and GIS-based presentation of IS statistics
  - Implementation and monitoring of advance release calendars

*To enhance statistical capacities of data producers and providers*

7. Conduct of capacity building programs on IS statistics through partnership among the MSAs and other major IS-related data producers including international development partners

*To improve coherence, effectiveness, and efficiency of the statistical system*

8. Development of a statistical framework for IS to identify the most relevant statistical indicators for the measurement and monitoring of IS
  - Identification of priority IS statistics to be generated
  - Formulation of statistical concepts, definitions, and classification systems consistent with internationally agreed standards and concepts
9. Assessment and improvement of IS statistics towards inclusion in the SDS
10. Review and enhancement of surveys to produce IS data with local-level disaggregation
11. Implementation of a data quality assurance framework for the IS sector
12. Implementation of the ARRCs towards new or alternative sources of basic data and statistics on IS
13. Participation in international programs for the development and updating of standards and methodological frameworks/manuals based on the WSIS and ITU Core ICT indicators

*To increase and sustain resources for statistics*

14. Strengthening of institutional coordination within the PSS and between PSS and the DBM, legislative bodies, and development partners to ensure funding of the continuous improvement and production of critical statistics on IS
  - Creation of statistical units and positions in concerned NGAs to undertake the production and improvement of IS statistics
  - Collaboration among stakeholders to fund ICT related surveys and data collection activities
15. Institutionalization of a sustainable and efficient financing scheme to ensure availability of funds for designated and developmental statistical activities
  - Provision of funding for optimal human resources, regular/new surveys and improvement of administrative data systems, continuous training and capacity building, ICT resources, etc.







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## Chapter 13

# Population and housing statistics

### Introduction

The population and their welfare are at the core of the **PDP 2011-2016**. Broadly, the PDP aims to address the needs of the country's growing population through the improvement of the quality of basic services to reduce poverty and advance human development and growth. More specifically, the PDP provides for strategies that are geared towards the attainment of the MDGs and other social development outcomes in health, education, and social protection and justice, as well as economic goals such as improved employment and decent work, productivity, and income.

Housing and urban development plays an essential role in poverty reduction and human development. In pushing this goal, the PDP envisions "a holistic framework of a home and eventually a harmonious community" for the Filipino people. It plans to achieve this vision through the provision of housing infrastructure, integration of basic services, and implementation of appropriate standards with emphasis on the need for security of tenure and livelihood opportunities.

The PDP supports in particular the MDG of improving the lives of at least 100 million slum dwellers worldwide through a national slum upgrading strategy to alleviate the plight of informal settlers.

With timely and accurate measures of the population and its various subgroups as well as the housing sector, appropriate and sound policies and programs can be designed, implemented, and monitored more effectively.

### Scope and coverage

Statistics on population are among the most sought after and most widely used data in any national statistical system. The importance and use of population statistics span all aspects of the social and economic life of the country. Population data comprise a vital component of demographic information essential in all areas of governance and development work—social, economic, and political—and at all levels of decisionmaking—national, sectoral, institutional, and community levels.

Housing statistics meanwhile aid policy in housing and human settlements development. Specifically, statistics on the housing and urban development sector help analyze the housing conditions and needs of the populace and guide the identification of appropriate

interventions such as housing and resettlement programs, basic infrastructure support, financing scheme, and livelihood assistance to meet those needs.

The collection of basic population and housing data through census taking is probably the single biggest statistical undertaking in the PSS. This chapter covers statistics on population and housing generated through censuses, surveys, demographic frameworks and indicator systems, and administrative registration/reporting/monitoring systems as follows:

- Population
  - Population structure, distribution, and characteristics, *e.g., age-sex structure, population change, household structure, etc.*
  - Fertility, *e.g., births, nuptiality patterns, marriages, etc.*
  - Mortality, *e.g. infant deaths, child deaths, maternal deaths, etc.*
  - Migration, *e.g., internal and international migration*
- Housing
  - Housing needs, demand, stock, and production, *e.g. housing construction, housing structure size, housing units, etc.*
  - Housing finance and expenditure, *e.g., loan availments, cost of housing maintenance, rent, etc.*
  - Housing regulation, *e.g., public utilities/amenities, subdivision planning*

Statistics dealing with fertility and mortality of the population and human development are also covered in Chapter 17 — Health and nutrition statistics and Chapter 14 — Income, poverty and hunger statistics.

### Situational analysis

Population and housing statistics primarily come from decadal and mid-decade censuses and periodic surveys conducted by the NSO. Other relevant statistics are also generated from registration, reporting, and monitoring systems administered by NGAs such as the Civil Registration System of NSO and housing program registration and monitoring systems of the HUDCC, HLURB, NHA, PAGIBIG, GSIS, and SSS.

#### Key developments in 2005-2011

From 2005 to 2011, statistical activities have been continued to generate vital population and housing statistics and improve relevant data systems to address increasing demands from stakeholders.

» 2007 Mid-Decade Census of Population (PopCen) and 2010 Census of Population and Housing (CPH). Originally scheduled in 2005 but was postponed due to budget constraints, the PopCen was conducted with reference period August 1, 2007 to generate population and related data. The CPH was conducted with May 1, 2010 as reference period "to take inventory of the total population and housing units in the country and collect information about their characteristics." While the CPH was completed in 2010, the proclamation of results was delayed.

» 2008 National Demographic and Health Survey (NDHS). Released in December 2009, the 2008 NDHS data provide useful information on the population, family planning, and maternal and child health from 2004-2008.

» Adoption of methodology for national-level estimates of the maternal mortality ratio (MMR) and estimates for 1990 and 2000-2010. On the recommendation of the TCPHS, the NSCB Executive Board through Resolution No. 11, series of 2010, adopted the interim estimation methodology on the generation of national-level estimates of MMR and the estimates for 1990 and 2000-2010.

» Study on the housing gap in the country. The study, conducted by the SRTC for the HUDCC under the Development of Shelter Monitoring System, improved the estimation methodology for determining housing needs and generated baseline information on housing preference and affordability levels. The housing needs framework, estimation methodology, and estimates shall be presented to the NSCB Executive Board for approval and adoption in the PSS.

## « Issues and challenges

While there have been continuing initiatives to improve population and housing statistics, there are still key technical issues that need to be resolved and important challenges to be addressed.

» In addition to addressing data gaps, more attention should be given to resolving data quality issues, i.e., coverage, timeliness, reliability, consistency and coherence.

- Demand for local-level statistics to support local governance and community development has gotten stronger and more urgent than ever especially on social welfare and development concerns.
- Quality of data should not be compromised in efforts to generate more local-level population statistics.
- The much-delayed release of the 2010 CPH results may have affected the design of crucial policies or interventions in various development areas.

» It is important to review and reinforce measures to guard and keep the independence of the PSS and of statistics from unnecessary and inappropriate external pressure or influence.

- Statistical institutions face constant challenge, potential or otherwise, in ensuring the quality of statistics and in keeping them as objective and impartial as possible.

» More timely and relevant statistical indicators and regular updates of basic data on population and housing are imperative in ensuring more appropriate and effective policies, plans and programs.

- Statistics with local level disaggregation and other important dimensions are urgently needed to support increasing requirements of governance and development at the national and local levels.
- The long time lag and delayed update of some basic data and indicators on population and housing, *e.g., maternal health, mortality, housing demand, etc.*, have affected the timely production of other important development indicators as well as the effective planning and targeting of government policies, programs, and services.
- Reforms are urgently needed to improve efficiency in data production towards reduced time lag and more punctual release of data.

» Some administrative-based information systems have not become reliable and dependable alternative sources of basic data on social development concerns.

- Huge amounts of resources and great efforts have been poured into some administrative data systems such as the CRS of NSO and FHSIS of DOH to improve capacities, systems, and procedures. Despite the investments however, these systems have not yet been able to provide recurrent useful statistics to supplement census- and survey-based population data and to provide sound basic data for computation of critical indicators such as MMR and child mortality ratios, among others.
- There are many administrative systems in the housing sector that have yet to be fully tapped or developed to generate reliable housing and human settlement statistics.

» Although key shelter agencies generate various housing statistics, statistical activities are not properly coordinated and databases are fragmented which make consolidation of data and analysis arduous and daunting.

» The statistical frameworks for the population and housing sectors need to be reviewed and made official to ensure that relevant components and critical indicators are regularly produced by the PSS.

» Continuous statistical capacity building of NGAs and LGUs is needed to improve the quality and usefulness of population and housing statistics.

» Financial and human resources are inadequate to produce timely, comprehensive, and accessible population and housing statistics.

- Resource constraints have affected the timely conduct of the PopCen and other major censuses and surveys on population and housing. The delays caused a bevy of problems for the PSS affecting in particular the efficient operational programming of statistical activities and timely computation of critical statistics and indicators that depend on basic data generated by said censuses and surveys.
- The continuing problems with the allocation of resources to key statistical activities indicate the still weak appreciation of statistics and commitment to adhere to

the state's statistical obligation to stakeholders by the government.

## Statistical programs

The following major programs shall be undertaken to address the key statistical issues and challenges towards enhanced coordination, improved statistical methods and processes, and ultimately better quality population and housing statistics.

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. Conduct of regular/periodic censuses and surveys prescribed under E.O. 352 on the SDS as well as implementation of new ones to generate updated/new statistics on population
  - 2015 PopCen
  - 2013 NDHS
  - Family Health Survey
  - National Migration Survey
  - Expanded Housing Preference and Affordability Survey
2. Generation and compilation of new and updated estimates of critical frameworks and indicators such as
  - Life tables
  - Infant and child mortality rates
  - Housing needs/demand
3. Continuous enhancement of administrative registration and reporting systems and generation of improved data
  - Further enhancement of the CRS through greater use of ICT, improvement of civil registry documents, and strengthened advocacy to increase levels of registration towards near completion in areas with low level of registration
  - Improvement of the reporting system on housing construction
  - Generation of informal settler statistics, with aid of GIM/GIS
4. Generation of local-level data on population and migration of indigenous peoples
5. Conduct of special studies and generation of comprehensive statistical profiles of selected population groups, e.g., such as basic sectors, urban and rural households, households of overseas Filipino workers, etc., using census and survey data

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

6. Development and improvement of statistics web portal for population and housing
  - Interconnection of various sources of statistical data, metadata, and other information resources
  - Integrated dissemination of population and housing statistics
7. Development of IEC strategies for more effective dissemination, communication and advocacy of population and housing statistics
8. Conduct of training for local governments on the rational use of population and housing statistics in local development planning and monitoring

*To enhance statistical capacities of data producers and providers*

9. Conduct of methodological studies to develop and enhance statistical approaches and tools to improve quality of statistics
  - Development of methodologies, e.g., population projections by sex and by age group, household population projections at the provincial level, and school-age population by single age at the municipal level, housing needs projections, and data on special population groups such as persons with functional difficulties, indigenous peoples
  - Development of alternative strategies for the conduct of a "mini-Census" with lower resource requirements
  - Development of indicators for assessment of housing policies and programs
  - Development of methodology for determining costs of housing construction and rental housing
  - Generation of more reliable migration estimate
10. Conduct of statistical education, training, and other capacity building programs for producers and providers of population and housing statistics
  - Technical statistical skills education and training for statisticians through scholarships/fellowships and in-house programs
  - Interagency technical workshops and exercises
  - Technical field studies/visits, etc.
11. Participation in and hosting of international conferences, training, workshops, and expert group meetings on population and housing statistics

*To improve coherence, effectiveness, and efficiency of the statistical system*

12. Improvement of the statistical frameworks on population and housing to consider emerging information needs and statistical developments
13. Comprehensive review and improvement of the designated statistical activities on population and housing towards reduced time lag and generation of more local-level data, and designation of new activities

- Review of the CPH, PopCen, and population projections
14. Integrated review and rationalization of household surveys to address duplication and ensure consistency and coherence of population and housing statistics
  15. Implementation of the ARRCs towards new or alternative sources of basic data on population and housing statistics
  16. Continuing development and updating of statistical standards on population and housing
    - Formulation of standard concepts and definitions, *e.g., urban-rural areas and internal and international migration*
  17. Implementation of a data quality assurance framework for population and housing statistics
  18. Participation in international cooperation and capacity building programs/projects and standards and methodological development initiatives on population and housing statistics
- Development and updating of standards and methodological frameworks/ manuals
  - Technical assistance to other national statistical systems, etc.
  - Participation in ESCAP/WHO efforts on the formulation of a regional plan for the improvement of civil registration and vital statistics system

#### *To increase and sustain resources for statistics*

19. Institutionalization of a sustainable and efficient financing scheme to ensure availability of funds for designated and developmental statistical activities
  - Review of the cost structure of relevant statistical activities towards an integrated and rational expenditure framework
20. Strengthening of institutional coordination within the PSS and between PSS and the DBM, legislative bodies, and development partners to ensure availability of funds for the continuous improvement and regular compilation of population and housing statistics.

## Chapter 14

# Income, poverty and hunger statistics

### Introduction

Income, poverty and hunger are interrelated characteristics that can help describe the state of human development in the country. Poverty stems mainly from people's lack of resources, income, or means to be able to survive or live a decent life. While in reality these concepts are much more complex, their interrelationship points to a simple realization that in order to address poverty and hunger there should be at least reasonable income to satisfy human's minimum basic needs. Poverty in particular has many dimensions and manifests in various forms which cannot always be addressed by having income alone. It is this recognition of the many facets of poverty that guides government and society to continuously seek and implement solutions to reduce if not totally eliminate poverty.

Poverty reduction has been one of the overarching goals of the Philippine government through administrations. Despite this perennial thrust to address poverty however, the country still lags in halving absolute poverty based on the MDGs. The slow rate of poverty reduction should therefore bring greater attention to the protecting the poor and the vulnerable against social, economic, and environmental risks.

The **PDP 2011-2016** has identified a number of strategies to achieve the MDGs and to fast track overall social development. Among the integrated and more comprehensive big ticket anti-poverty programs are the *Pantawid Pamilyang Pilipino Program* (4Ps) and the *Kapit-bisig Laban sa Kahirapan*-Comprehensive and Integrated Delivery of Social Services (Kalahi-CIDSS).

In order for government and stakeholders of poverty alleviation to better monitor outcomes of anti-poverty programs, including progress towards the MDGs, a comprehensive poverty monitoring and indicator system is needed to ensure the production and analysis of timely and quality statistics on income, poverty, hunger, and other human development statistics.

This chapter outlines key strategies that are aimed to ensure the availability of quality income, poverty and hunger statistics in support of society's efforts to reduce poverty and achieve human development.

### Scope and coverage

This chapter covers statistics on income, poverty and human development, and hunger in the country.

- Income and expenditure

- Total household/family and per capita income and expenditure
- Total household/family and per capita savings/income deficit
- Income inequality and gap
- Poverty
  - Income/Expenditure-based poverty
    - Food and poverty thresholds
    - Subsistence poverty
    - Foster Greer Thorbecke (FGT) measures of poverty, *e.g., income gap, poverty gap and severity of poverty*
    - Small area poverty (city, municipal, and congressional district levels)
    - Poverty in the basic sectors
    -
  - Non-income/Non-expenditure-based poverty
    - Shelter and security of tenure, *e.g., households who are informal settlers, households who live in makeshift housing, etc.*
    - Universal access to basic education, *e.g., participation, literacy, cohort survival, etc.*
    - Access to health care, *e.g., maternal health, infant and child health, etc.*
    - Access to productive employment and decent work indicators, *e.g., jobs generated, working poverty, etc.*
    - People empowerment, *e.g., gender parity index, voters, etc.*
    - Public order, safety and justice, *e.g., crime incidence rate, proportion of landless farmers, number of displaced households due to armed conflict, etc.*
    - Environmental sustainability, *e.g., communities with disaster risk reduction management plan, families living in geohazard areas, etc.*
    - Millennium Development Index
- Human development
  - Human development index (HDI)
  - Progress and well-being of society, *e.g., Philippine Happiness Index (PHI)*
- Hunger
  - Underweight children
  - Household per capita (food) energy consumption
  - Hunger index
  - Inflation of basic food commodities
  - Rice self-sufficiency

Statistics related to income, poverty, and hunger are also tackled in Chapter 13 – Population and housing statistics, Chapter 15 – Labor and employment statistics, Chapter 16 – Education and cultural statistics, Chapter 17 – Health and nutrition statistics, Chapter 18 – Social protection statistics, Chapter 19 – Statistics on children and gender and



## Situational analysis

Income and expenditure statistics are generated mainly by the NSO through the triennial Family Income and Expenditure Survey and Annual Poverty Indicators Survey.

Poverty statistics, which include among others, national, regional, and provincial food/ subsistence and poverty thresholds and incidences, and poverty among the basic sectors, are compiled by the NSCB. The NSCB also computes city, municipal and congressional level poverty estimates using small area estimation technique and provincial data on HDI.

Hunger data are generated through periodic surveys and administrative monitoring system of the FNRI and NNC.

Statistics on poverty correlates and other MDGs such as shelter, employment, child and maternal health, universal education, social justice, and environmental sustainability, among others, are collected/compiled through censuses, surveys, administrative-based data systems, and indicator systems administered by relevant NGAs.

### Key developments in 2005-2011

The major statistical development activities on income, poverty and hunger statistics during the previous Plan period are:

►► **Improvement of official poverty statistics.** To address issues raised on official poverty statistics, the Technical Committee on Poverty Statistics (TCPovStat) conducted an overall review of the estimation methodology from 2008 to 2011. The review led to the adoption of improvements through NSCB Resolution No. 9, Series of 2011 - Refinements in the Official Poverty Estimation Methodology. The 2009 poverty estimates based on the refined methodology were released in February 2011 together with the revised estimates for 1991, 2003, and 2006. The release of the new/revised estimates included corresponding measures of error such as coefficients of variation on pertinent indicators to promote transparency by informing the public about the limitations of the estimates.

►► **Development of a methodology for the generation of poverty statistics among the basic sectors.** In 2005, the NSCB started the development of a methodology for the estimation of poverty in the basic sectors to address growing demand for sectoral dimension of poverty. The basic sectors, as defined in Section 3 of RA 8425, also known as the Social Reform and Poverty Alleviation Act, are the disadvantaged sectors of Philippine society which include the women, youth, children, senior citizens, urban poor, migrant and informal sector workers, farmers and the

fisherfolks. The NSCB generated poverty statistics for only 8 of the 14 basic sectors due to data constraints. The methodology was approved through NSCB Resolution No. 11 Series of 2007 - Approving the Methodology for the Generation of Poverty Statistics for the Basic Sectors. The NSCB released the first official poverty statistics for the basic sectors for the years 2000, 2003 and 2006 in 2007.

►► **Development of model-based estimation methodology for annual food and poverty thresholds.** The estimation of food and poverty thresholds relied heavily on availability of periodic price data. By using an alternative model-based approach, it became possible to produce advance estimates of the annual poverty thresholds which can be used as a reference in wage setting. The methodology was approved through NSCB Resolution No. 5, Series of 2007 - Approving the Model-Based Estimation for the Annual Food and Poverty Thresholds. Model-based estimates of the thresholds for the years 2006-2007 were released in 2007.

►► **Generation of city and municipal level poverty estimates.** In 2005, the NSCB developed a methodology to generate small area estimates of poverty for cities and municipalities. Using the small area estimation technique based on *Elbers, Lanjouw* and *Lanjouw* (ELL) method of the WB, the NSCB compiled and released for the first time city and municipal level poverty estimates for 2000. Previously, only provincial estimates were being compiled. The 2003 updates of small area estimates of poverty were released in 2008 using a modified ELL methodology developed by the NSCB.

►► **Generation of congressional district-level poverty estimates.** In 2008, the NSCB produced and provided to the House of Representatives' Congressional Planning and Budget Office the 2003 poverty estimates for congressional districts to aid legislative work related to poverty reduction and social development.

►► **GIS-based poverty mapping.** Using GIS, the NSCB started generating poverty maps for selected provinces and cities based on the minimum basic needs framework. Poverty maps for almost all provinces in Regions I, CAR, V, VI, VIII, IX, X, XI, and XII and a few cities/municipalities in CAR, and Region XI have been produced to support implementation and monitoring of poverty reduction and social development programs at the local levels.

►► **Development of the Philippines' MDG statistics.** The PSS has pioneered the development of national and local statistical databases on the MDGs. The NSCB, designated by NSCB Resolution No. 10, Series of 2004 as the repository of country data on the MDGs, launched in 2008 an interactive online statistical database on the MDGs with data visualization features. Periodic data updates were disseminated through publications and web releases such as the MDG Watch and MDG brochure. The NSCB through its regional divisions has also developed and compiled regional and local level MDGs statistics.

►► **Community-based monitoring system (CBMS).** In 2005, the NSCB issued Resolution No. 6 Series of 2005 – Recognizing and enjoining support to the CBMS as a tool to strengthen the statistical system at the local levels. First developed in 1992 as part of the Micro Impacts and Macroeconomic Adjustment Policies Project, the CBMS has evolved into a viable source of local-level statistics that is mainly focused on MDGs indicators and related statistics.

As of 2011, CBMS has been adopted by the LGUs in 65 provinces (33 of which are implementing it province-wide), 764 municipalities, and 49 cities covering at least 20,382 *barangays*. Implementation of the CBMS by the LGUs has been enjoined by the NAPC and the DILG. The CBMS Network, a civil society organization, oversees the technical design concerns and assists LGUs in statistical capacity building.

►► **Establishment of the National Household Targeting System for Poverty Reduction (NHTS-PR).** To facilitate the government's poverty reduction strategy, the DSWD launched in 2009 the NHTS-PR to establish a socio-economic database of households to identify beneficiaries of national social protection programs. The interactive database containing information on 5.2 million households was officially launched on 3 October 2011 during the Opening Ceremonies of the 22<sup>nd</sup> NSM.

►► **Development of framework and methodology for the computation of the hunger index and generation of estimates of hunger index.** In 2007, the NSCB, with funding assistance from FAO, conducted a project on the Establishment of Benchmark Data and Index on Hunger. The project aimed to provide data support for more focused interventions to address hunger and to identify and recommend statistical policies to the NSCB Executive Board for the institutionalization of data generation for the Hunger Index. The 2003 Hunger Index data with national, regional and provincial disaggregation were released in December 2007.

►► **Hosting of the first and second International Conferences on MDGs Statistics (ICMDGS) in 2007 and 2011.** The ICMDGS originated from the initiative of the PSS spearheaded by NSCB to contribute to global monitoring of the MDGs and sustained improvement of relevant statistics. The PSS through NSCB and with support from the DFA's International Commitment Fund (ICF) co-organized the two events with the UNSD. A total of 77 and 102 representatives from different countries and international organizations participated in the First and Second ICMDGS, respectively.

The First ICMDGS served as forum for good practices on new MDG targets and indicators, *i.e., decent and productive work*, and for a mid-term evaluation of the MDGs since the Millennium Declaration in 2000. The 2<sup>nd</sup> ICMDGS served as venue to support initiatives to adapt the MDG process to the national situation, reiterate the importance of increased communication and better coordination between national statistical systems, and international and regional organizations, acknowledge continuing efforts to enhance data management and analytical tools, advocate increased promotion of MDG statistics, and agree to start discussion of plans beyond 2015.

►► **Hosting of the 20<sup>th</sup> Meeting of the Interagency Expert Group (IAEG) on MDG Indicators in 2011.** The IAEG, composed of various departments within the UN System and national statisticians, reviews and defines methodologies and technical issues in relation to the MDG indicators, and produces guidelines and helps define priorities and strategies in the data collection, analysis, and reporting on the MDGs. The 20<sup>th</sup> meeting was part of the yearly consultation with national experts and international agencies and focused on identifying technical cooperation needs and defining statistical capacity development strategies to improve MDG monitoring. The hosting of the meeting gave the Philippines through NSCB an opportunity

to participate in and learn from the discussions on emerging issues on MDG monitoring.

## «Issues and challenges

The key issues and challenges in the generation and dissemination of quality income, poverty and hunger statistics are as follows:

►► **Statistical policies, standards, and coordination mechanisms for the production and dissemination of income, poverty, and hunger statistics need to be enhanced.**

- There is duplication in the collection of consumption data among various government agencies, namely, NSO, BAS, and FNRI.
- There are subjective questions regarding hunger that are being asked from respondents which may affect the quality of hunger data.
- There have been considerable delays in the release of public use files/data files by NGAs such as the results of the National Nutrition Survey (NNS).

►► **Increased government and public interest in poverty concerns has created more demand for better quality statistics on income, poverty, and hunger, and has subsequently highlighted significant data gaps.**

- Monitoring of government's big-ticket anti-poverty programs in terms of effectiveness and efficiency has become more crucial and imperative especially with the huge amount of resources being invested. However, there are still many indicators that could not be compiled due to lack of basic data support such as city- and municipal-level poverty thresholds and barangay-level poverty incidences.
- Effective local development planning and targeting, including the localization of the MDGs, require availability of relevant local-level statistics to inform policy and assist in monitoring progress. Unfortunately, most surveys and administrative monitoring systems are unable to generate local-level data due to various reasons such as sampling design limitations, inadequate personnel or technical skills, insufficient financing, or lack of political support.
- While many LGUs have pursued initiatives to develop their local data system and database, *e.g., CBMS*, more effort and resources are needed to capacitate more LGUs to produce local-level data.

►► **Basic data on income, poverty and hunger have long time lags and the corresponding microdata are tardy and difficult to access.**

- There is need to review and improve the time lag of surveys on income, poverty, and hunger, *e.g., FIES, APIS, NNS, etc.*, to make data more relevant and useful.
- Microdata of censuses and surveys on income and expenditure and nutrition are made available way after the release of the main data/survey results rendering the data less useful for policymaking and strategic planning.
- Many users have also complained of difficulties in accessing microdata or the prohibitive costs of acquiring microdata sets even for official or research purposes.

►► **Dissemination of income, poverty, and hunger statistics is deemed inadequate; needs improvement.**

- It has been observed that most of the basic data on income and hunger have long time lags which render data less relevant to users.
- Dissemination of available data needs to be improved to be able to reach more users especially at the local levels.

►► The proliferation of poverty monitoring and indicator systems has led to confusion among users about the statistics being produced or used.

- Because poverty reduction is an overarching goal of government, anti-poverty programs and support activities are undertaken by various agencies each designing or using own parameters and systems for monitoring. This has caused confusion among users as to which indicators and analysis to base their decisions or policies on.
- There is an urgent need to integrate most, if not all, poverty monitoring and indicator systems to standardize references, *e.g., indicators, concepts, and methodologies*, and to consolidate, and thus save on, resources for the collection, processing and management of data.

►► With more demand for new, relevant, and better quality statistics, it has become more critical to strengthen statistical research and development to ensure better methodologies and statistics.

- Currently, there are a number of limitations in household surveys on income and nutrition to be able to produce accurate data with lower levels of disaggregation, which are more relevant in planning and policy-making.
- A methodology for household projections is needed to enhance the estimation of weights in household/family surveys.
- Response rates of household surveys are relatively low among high-income groups which leads to less reliable estimates of poverty and related indicators.

►► While the MSAs have the relevant technical skills, their institutional capacities have weakened due primarily to declining human resources and insufficient financing for sustained statistical capacity development.

- The government's rationalization plan has significantly affected the capacity of data producers to sustain statistical work much less introduce innovation.
- The PSS needs to continuously build knowledge and capacity on international standards and best practices through participation in training, workshops, and expertise sharing and collaboration with relevant international institutions.
- The gap between the costs (human and financial) required to produce critical income, poverty and hunger statistics and the resources provided by the government to the statistical agencies continues to widen.

►► Statistical capacity of the LGUs may not be adequate to generate sound data on income, poverty, and hunger.

- In general, LGUs have very little statistical human resources that can implement and sustain statistical activities to address information needs at the national and local levels.
- There is need to increase training of LGU staff in administering the CBMS and similar statistical activities as well as in the rational use of statistics in local development work.

## Statistical programs

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. Generation of small area estimates of income, poverty, hunger, and other related indicators
  - Regular compilation of poverty statistics for the basic sectors
  - Regular generation of poverty statistics at the congressional district, city and municipal levels
2. Improvement of methodologies and updating of critical indicators on income, poverty, hunger, and related concerns
  - Identification of the poor and generation of relevant statistics through the NHTS-PR
  - Improvement of the estimation of city and municipal level poverty statistics
  - Enhancement of the compilation of MDG statistics at the local levels
  - Improvement of the estimation of hunger index
  - Improvement of income, poverty and hunger indicators from FIES/APIS/NNS/updating of nutritional status/ Survey on Food Demand and Agricultural Consumption (SFDAC).
  - Adoption of updated methodologies on MDGs statistics, *e.g., post 2015 MDGs*
  - Improvement of relevant indicators from the Food Insecurity and Vulnerability Information and Mapping Systems (FIVIMS)

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

3. Development and improvement of the Philippine Poverty Statistics Portal for more punctual release and improved accessibility of relevant statistics
4. Training of users of statistics on income, poverty, and hunger
  - Training of media on data interpretation and analysis
  - Training of NGAs and LGUs in the analysis and use of income, poverty, hunger and related statistics in poverty reduction strategies
5. Strengthening advocacy/communication strategies on the importance and rational use of statistics on income, poverty and hunger
  - Consultative and dissemination forums, briefing/appreciation seminars for media
  - Preparation and dissemination of more user-friendly information materials
  - Dissemination of statistics through social networking sites

6. Development and use of effective tools for monitoring/assessing the impacts of poverty reduction efforts

- Impact assessment of the 4Ps

*To enhance statistical capacities of data producers and providers*

7. Conduct of methodological studies on income, poverty, hunger and other related indicators

- Improvement of methodology for HDI and middle-income class
- Development of methodology for estimating annual income using the 1<sup>st</sup> survey round of the FIES
- Study on the generation of annual income and poverty-related statistics
- Study on the methodology for determining probability of MDGs attainment

8. Training of compilers of income, poverty and hunger statistics

- Technical training on generation/compilation and analysis of income, poverty, hunger and other related statistics, *e.g., training on small area estimation (other techniques aside from the ELL methodology being used by NSCB on poverty)*, which can be useful for compilers of income, poverty and hunger statistics

9. Training of LGUs in the implementation and use of the community-based monitoring systems to support monitoring of poverty

10. Participation in and hosting of international conferences, training, workshops, and expert group meetings on income, poverty, hunger and other related statistics

- Sharing of country experience and participation in UN expert group meetings
- Participation in the meetings, conferences and workshops organized by UNSD, UNESCAP, UNSIAP, ASEAN, and ADB

*To improve coherence, effectiveness, and efficiency of the statistical system*

11. Strengthening of statistical policies and coordination on income, poverty, hunger, and other related concerns

- Formulation of policies on an integrated poverty monitoring information system

12. Development of new statistical framework/s and standards on income, poverty, hunger and other related concerns and continuous improvement of existing ones

- Development of the conceptual and statistical framework of the Philippines Poverty Monitoring and Indicators System (PMIS) and Hunger Index

13. Rationalization of surveys that collect data on income, poverty, hunger and other related concerns

- Redesign of the master sample of households to generate data with lower level disaggregation
- Review and improvement, among others, of the FIES, APIS, NNS, Labor Force Survey, and Survey of Food Demand for Agricultural Commodities

14. Review and improvement of designated statistical activities on income, poverty, MDG and well-being sector towards reduced time lag, improved accessibility, generation of local-level data, and designation of new ones

15. Implementation of a data quality assurance framework for income, poverty, hunger and other related statistics

16. Participation in international cooperation and capacity building programs/projects, and standards and methodological development activities on income, poverty, hunger and other related statistics

- Development/updating of standards and methodological frameworks and manuals
- Technical assistance to other national statistical systems

*To increase and sustain resources for statistics*

17. Strengthening of institutional coordination within the PSS and between PSS and the DBM, legislative bodies, and development partners to ensure funding of the continuous improvement and production of critical statistics on income, poverty and hunger statistics

18. Institutionalization of sustainable financing for income, poverty, hunger, and other related indicators

- Creation of statistical units and positions at the NSCB, NSO, and LGUs
- Integration of statistical activities in the relevant agencies' and LGU budgets

19. Implementation of sustainable resource mobilization program for critical statistical activities



## Chapter 15

# Labor and employment statistics

### Introduction

In September 2007, the MDGs monitoring framework was revised to include new targets to promote “full and productive employment and decent work for all” as part of national development strategies towards poverty reduction.

The latest 2009 poverty statistics for the basic sectors released by the NSCB shows that poverty incidence among the employed population, or the working poor, which is 22.4 percent, is worse than that among the unemployed population, which stands at 17.3 percent. This highlights the need not only for improved job and employment creation but also for ensuring quality employment.

Decent work is integral to efforts in reducing poverty and is a key mechanism for achieving equitable, inclusive, and sustainable development. It involves opportunities for work that is productive, delivers fair income, and provides security in the workplace and social protection for workers and their families. It also gives people the freedom to express their concerns, to organize themselves, and to participate in decisions that affect their lives.

The new benchmarks embody a more focused outlook in the design and implementation of more appropriate and effective policy and program interventions to ensure a dynamic, highly competent, and globally competitive labor market in the country.

With a commitment to reducing poverty and the worst forms of human deprivation, the government launched the 22-Point Platform and Policy Pronouncements on Labor and Employment with the overarching goal “to invest in the country’s top resource making us more competitive and employable while promoting industrial peace based on social justice.”

The Philippine Labor and Employment Plan (PLEP) 2011-2016, a sectoral plan in support of the **PDP 2010-2016**, provides the strategic directions for increased growth in labor and employment in the medium term that is inclusive and embodies the four decent work pillars as follows:

- full and productive employment, which explores opportunities for increased investments in human resource development and improved working conditions and seeks to achieve full and productive employment;
- rights at work, which aims to strengthen observance of the constitutionally protected rights of workers;

- social protection, which seeks to improve access to social protection mechanisms, improved wages, better working conditions and expanded employment opportunities for all; and
- promotion of social dialogue, which seeks to strengthen tripartism and broaden representation of workers as a tool for attaining employment goals.

This chapter provides a strategic plan for the development and improvement of statistical data and indicators that aid in the creation, implementation and monitoring of policies and programs to promote and ensure productive employment and decent work in the country.

### Scope and coverage

This chapter covers basic data and indicators that describe the characteristics, state, and activities of the labor force within the framework of productive employment and decent work as follows:

- Labor force, including the Overseas Filipino Workers (OFWs)
- Employment, unemployment and underemployment including the working poor
- Wages and hours of work, *e.g., wage rates, earnings, labor cost and hours of work, etc.*
- Labor productivity
- Occupational injuries and diseases
- Labor governance, *e.g. employment creation, livelihood assistance, skills development, labor migration, industrial disputes, etc.*

Other statistics related to labor and employment are covered in Chapter 7 – Agriculture, fisheries, and agrarian reform statistics, Chapter 14 – Income, poverty and hunger statistics, Chapter 18 – Social protection statistics, and Chapter 19 – Statistics on children and gender and development.

### Situational analysis

The collection and compilation of statistics on labor and employment are primarily lodged with the NSO, which conducts the quarterly Labor Force Survey (LFS), and the BLES of the DOLE, which administers an array of regular survey- and administrative-based data collection activities. Other labor and employment-related data are generated by bureaus and attached agencies of DOLE as well as the BAS, POEA, OWWA, ECC, SSS, GSIS, and PHIC.

## Key developments in 2005-2011

Significant interventions have been implemented to address major issues and concerns raised in the 2005-2010 PSDP and emerging developments as follows:

►► **Identification of decent work indicators and compilation of relevant statistics.** In 2007, the NSCB approved the methodology for the regular generation of poverty statistics for the basic sectors, including the formal and migrant workers. In 2010, the NSCB, as designated repository of the country's official MDG indicators, included five new MDG indicators on decent work in its regular MDG monitoring. In 2011, BLES compiled statistics on decent work indicators based on the recommendations of the 2008 International Tripartite Meeting of Experts on Decent Work. The data and analysis of trends were featured in the "Philippines Decent Work Country Profile" in support of the Monitoring and Assessing Progress on Decent Work (MAP) project of the ILO to help strengthen national capacities to self-monitor and self-assess progress made towards decent work.

►► **Adoption of operational framework for counting overseas Filipinos.** An operational framework for counting overseas Filipinos was adopted through NSCB Resolution No. 13, series of 2008, which will ensure more comparable and accurate estimates in support of sound policies and programs for the protection and welfare of overseas Filipinos.

►► **Conduct of the first nationwide informal sector survey.** The survey, conducted in 2008 by the NSO in collaboration with the UNESCAP as rider to the LFS, produced benchmark information on the informal sector including data on the demographic and socio-economic characteristics of persons and enterprises engaged in informal sector activities. Statistics on the informal sector is one of the most in-demand information in the country due to the sector's importance to the economy.

►► **Development of statistical data archives system for labor and employment statistics.** The three major data producing agencies in the PSS, namely, the NSO, BAS, and BLES, started the process towards the establishment of their respective data archives to ensure systematic storage and retrieval of statistical information, including labor and productivity data and metadata of surveys and censuses. NSO and BAS have started building up the NSODA and BEANS, respectively, in 2009 while BLES has launched its BLES Electronic Archived Microdata System (BEAMS) in June 2010, all with technical and financial support from PARIS21's ADP.

►► **Regular release of annualized labor and employment statistics.** NSCB Resolution No. 9, series of 2009 provided for the adoption of official methodology for annual estimates of labor and employment statistics using the average of the four quarterly rounds of the LFS. Previously, estimates from the October round of the LFS were also used as annual estimates. Back estimates of the annualized data were produced starting 2006 considering the change in the definition of unemployment starting April 2005 round of the LFS.

►► **Improvement of the LFS.** In 2011, the NSO, BLES, and SRTC conducted a joint review of the LFS questionnaire

through the "Re-thinking of the Labor Force Survey" to better capture labor market developments and user needs. Pilot testing of the revised questionnaire is set to in 2012 in two provinces namely, *Agusan del Sur* and *Antique* while the adoption of the complete questionnaire shall commence in 2014.

►► **Online and real-time access to information on labor and employment statistics.** In 2011, the BWSC facilitated the integration of online and real-time access and management of information on the DOLE Integrated Livelihood Program through the DOLE's *Kabuhayan* Information System (DKIS). DKIS processes, generates, and assesses data/information gathered, verified, and updated by the DOLE regional/field offices to support monitoring and evaluation by livelihood programs managers and implementers and other stakeholders.

Also, in 2011, DOLE introduced the online Statistical Performance Reporting System (SPRS) to enable the regional and field offices to provide top management with data on pre-defined key performance indicators covering various DOLE functions, programs, projects, and activities. During the same year, the Office of the President established a Technical Working Group on Overseas Filipinos Information Sharing System (OFISS) chaired by the DFA. With technical assistance from the Advanced Science and Technology Institute of the DOST, the Group established an online database on overseas Filipinos using data from the DFA, POEA, and BI, among others.

►► **Integration of Overseas Filipino Workers' contract documentation systems.** The fully activated E-Link documentation system integrates the documentation systems of the OWWA and PHIC which greatly reduces delays and costs in the processing of OFW contracts and in the monitoring of status of OFW applications. This documentation system is used by the POEA and OWWA in monitoring documented OFWs.

►► **Development and institutionalization of a data quality assessment system (DQAS) for labor and employment statistics.** The DQAS was initiated in 2006 by the DOLE to come up with standards and guidelines to ensure that statistics generated by the DOLE from administrative reports/records and surveys are of acceptable quality and are "fit to use".

## Issues and challenges

The key issues and challenges identified regarding labor and employment statistics are as follows:

►► **Data gaps and quality issues, i.e. coverage, timeliness, and reliability, have remained.**

- Data gaps at the local levels have persisted due to the inability of national surveys to provide local-level data.
- There is currently no data being collected on micro establishments.
- The design and frame of some establishment-based surveys exclude agricultural establishments.

►► **More and continuing researches and methodological studies to address measurement issues and other data quality gaps are urgently needed.**



- There is need to revisit existing and/or study new statistical measures related to critical indicators such as informal employment, labor productivity, labor underutilization, and inclusion of overseas employment in the LFS.

►► Existing coordination mechanisms need to be enhanced to facilitate improvement in the generation and dissemination of labor and employment statistics.

- Current designated statistics on labor and employment need to be reviewed and improved to reduce time lag and improve accessibility of data.
- There has not been any government funding support for the regular conduct of the Survey on Children (SOC) and Informal Sector Survey (ISS). The 1995, 2001, and 2011 SOC and the ISS in 2008 were all foreign-funded.
- The IACLPS should revisit existing and/or study new frameworks related to labor and productivity statistics, e.g., *decent work framework*, *operational framework on counting OFs*, etc..
- The initial work done by the TWG on OFISS must be further improved to validate the system of integrating information from various source agencies, particularly those with multiple entries and to enhance the usefulness of the database.

►► There is urgent need to preserve labor and employment statistics and to develop a systematic storage and retrieval of data for future use.

- Systematic storage and preservation of data are needed to promote proper use and interpretation of data given the context in which these are generated and the available resources at the time of their production.
- Data generation activities should be documented to provide reference for future improvement and for users to understand and access historical data.

►► Resources, especially human resources, have remained inadequate to sustain critical statistical activities and to address data gaps and other data quality issues.

- Increased and continuing investment in statistics is crucial in ensuring steady supply of important data and development of new statistical indicators to support measurement of emerging developments in the labor and employment sector.

## Statistical programs

The following statistical programs are aimed to improve the current state of labor and employment statistics by way of enhanced processes to generate and disseminate quality data, increased statistical capacity and resources for statistics, and strengthened advocacy for wider and rational use of statistics in policy and other purposes.

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

### 1. Improvement of methodologies for data collection and compilation of critical indicators

- Improved measurement of labor productivity, labor underutilization, informal employment, working poor, and overseas employment in LFS
- Generation and compilation of statistics on decent work, including MDG indicators on employment

### 2. Regular conduct of surveys on labor and productivity

- Conduct of the LFS using the improved questionnaire starting 2014
- Compilation of labor and employment statistics from the CPBI, ASPBI, QSPBI, and Survey of Overseas Filipinos (SOF)
- Improvement of the BLES Integrated Survey (BITS), Labor Turnover Survey (LTS), Occupational Wages Survey (OWS), and Agricultural Labor Survey (ALS)
- Institutionalization of regular surveys on children, informal sector/employment, and micro establishments

### 3. Generation and improvement of local-level labor and employment statistics

- Generation of local-level data on labor force, employment, unemployment and underemployment, including local-level MDG indicators on employment

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

### 4. Development and improvement of the Indicators Interactive Database of Philippine Decent Work in support of the PSS integrated statistics web portal

### 5. Institutionalization of data archiving systems and policies

- Continued development of the NSODA, BEANS, and BEAMS

### 6. Strengthening of advocacy and communication towards rational use of statistics in evidence-based decisionmaking and policy and program formulation

- Development of appropriate data dissemination mechanisms at the national and local levels
- Dissemination of labor and employment statistics through social media

### 7. Improvement of tools for monitoring/assessing the impacts of labor and employment programs

*To enhance statistical capacities of data producers and providers*

### 8. Conduct of methodological and research studies on labor and employment statistics

- Study on labor flows
- Construction of a wage index
- Statistical analysis of specific segments of the labor sector
  - Demographic, social and economic profile of new entrants to the labor force

- Study on the demographic, social and economic profile of discouraged workers

9. Training of data compilers at the national and local levels in data collection and dissemination

- Training on survey design and conduct, statistical analysis, database development, data visualization, and GIS/GIM applications, among others

10. Participation in and hosting of international conferences, training, workshops, and expert group meetings on labor and employment statistics

- International Conference of Labor Statisticians (ICLS)
- World Statistics Congress
- UNESCAP meetings on informal sector employment

*To improve coherence, effectiveness, and efficiency of the statistical system*

11. Strengthening of intra-agency and interagency coordination of statistical activities

- DOLE Interagency on Statistical Matters
- Formulation of the DOLE annual statistical calendar
- Improvement of interagency coordination and policy formulation through the IACLIPS

12. Development of new statistical frameworks and standards and continuous improvement of existing ones

- Institutionalization of the Decent Work Framework in the PSS
- Improvement of the framework for counting overseas Filipinos

13. Rationalization of censuses and surveys that collect data on labor and employment

- LFS, OWS, BITS, LTS, ALS, and SOF

14. Review and improvement of designated statistical activities on labor and employment towards reduced time lag, improved accessibility, and generation of local-level data, and designation of new ones

- Redesign of the master sample of household surveys to generate data with more relevant level of disaggregation
- Review and improvement of the survey design of the LFS and SOF
- Expansion of the coverage of the BITS and OWS
- Designation of BITS, LTS, ALS

15. Improvement and full implementation of the DOLE's data quality assurance system (DQAS) for administrative-based labor and employment statistics

16. Participation in international cooperation and capacity building programs and projects, and standards and methodological development studies

- Updating of the International Standard Classification of Occupations (ISCO)
- Review of methodological frameworks and standards through the ICLS

*To increase and sustain resources for statistics*

17. Strengthening of institutional coordination within the PSS and between PSS and the DBM, legislative bodies, and development partners to ensure funding of the continuous improvement and production of critical statistics on labor and employment

## Chapter 16

# Education and cultural statistics

### Introduction

Education and culture weave a common thread towards learning and human development.

Education along with training constitutes the broader concept of learning to provide important means to develop and realize one's full potentials and to make informed choices and decisions. Education allows people to participate in social, economic, political, and cultural activities that shape their lives and the society they live in. Productive education and training are necessary to build competently skilled and higher-level professional workforce to support industry needs, basic services delivery, and good governance.

The development of education in the Philippines adopts a trifocal approach, which structures planning and decisionmaking according to the three levels of education—basic, technical, and higher education.

- The Education for All (EFA) 2015 Plan aims for a holistic program for basic education reforms to improve the quality of basic education for every Filipino.
- The National Technical Education and Skills Development Plan (NTESDP) 2011-2016 aims to increase training participation, improve training responsiveness and relevance, and achieve effective training management.
- The higher education subsector focuses on the formation of high-level human resources and the generation, adaptation, and transfer of knowledge and technology for national development and global competitiveness.

Culture, on the other hand, represents a timeline of integrated human behavior patterns and societal beliefs and traits of the nation that are transmitted through generations. Appreciating a country's culture and one of its notable manifestations, the arts, is key to understanding the very foundation of the nation and where it is headed through generations.

The **PDP 2011-2016** upholds the government's commitment to improve access to universal and quality education through different forms and means, to promote and preserve the nation's culture and arts, and to develop sports. Achieving universal primary education and gender equality in education is among the targets in the MDGs.

An integrated and comprehensive set of statistics will provide good metrics of the implementation of educational reforms such as the *K to 12* program, and

help track the development of culture and sports in the country.

This chapter presents statistical development programs that address issues and demands for education and cultural statistics.

### Scope and coverage

Education and cultural statistics consist of the statistical data and information collected and used to measure the characteristics and performance of the sector covering statistics on:

- Educational services
  - Enrolment by level of formal education and by sector—public and private
  - Enrolment in technical vocational education and training (TVET) by qualification
  - School participation, cohort survival, and transition
  - Gender parity in enrolment and participation
  - Learners in alternative learning systems
- Educational resources
  - Teaching resources by major subject area
  - Teachers by source of funding—national and local
  - Student-teacher ratio by major subject area, ratio of students to selected educational infrastructure
  - Education expenditure by source and use of funds, by sector—public or private
- Educational attainment and achievement
  - Literacy
  - Completion in years and level of schooling
  - National assessment, accreditation and equivalency tests
  - Graduation rate
  - Licensure examinations
- Manpower development
  - Out-of-school youths
  - Trained, assessed, and certified skilled TVET graduates
  - Absorption/placement of TVET graduates by qualification
  - TVET trainers by qualification
  - Science and technology scholars and graduates
  - Faculty with master's and doctoral degrees
- Culture, media, and sports
  - Household exposure to media
  - Household ownership of media appliances

- Cinema and museum attendance
- Cultural publications and presentations
- Participation and performance in organized sports
- Infrastructure and other investment in organized sports

Statistics dealing with media exposure and ownership of media appliances are also covered in Chapter 12 – Information Society Statistics.

## Situational analysis

### Key developments in 2005-2010

During the period, the key program agencies—the DepEd, TESDA, CHED, DOST, and NCCA, have continued collecting and disseminating data on basic education, TVET, higher education, education science and technology, licensure performance, and culture through their administrative and regulatory functions.

The NSO, on the other hand, has conducted some censuses and surveys that produced education and culture data.

At present, there is little statistics on sports that is being collected and/or compiled in the PSS.

The major initiatives during the previous Plan period are the:

▶▶ **2008 Functional Literacy, Education and Mass Media Survey (FLEMMS).** A designated statistical activity under EO 352, this quinquennial survey provides information on the state of literacy and mass media in the country to serve as basis of interventions towards improved education and eradication of illiteracy. The survey results, which were released in October 2010, include information on highest educational attainment, basic literacy rates of the population 10 years old and over, functional literacy rates of the population 10 to 64 years old, and population's exposure to mass media, among others. The 2008 FLEMMS also included four new questions to test a proposed new definition of functional literacy rate. Although the test pointed to the need for further study, the exercise nonetheless represented efforts by the LCC, DepEd, and NSO to improve the FLEMMS.

▶▶ **2005 and 2008 Impact Evaluation Studies of TVET.** The two rounds of survey, conducted by TESDA with the graduates of their TVET programs as respondents, provided the basis to determine the progress of TVET programs and aid in the estimation of labor requirements and the extent of employability of graduates.

▶▶ **Youth Profiling for Starring Career (YP4SC).** The activity, launched in March 2005 and conducted every three years thereafter, assesses students' aptitude in a particular field, profession or occupation through identification/ listing of regional/provincial skills in priority sectors and critical skills area identified by industry experts and endorsed by relevant government institutions.

▶▶ **Annual compilation of statistics on the performance of higher education institutions (HEIs) in licensure examinations.** Started as a joint project of CHED and PRC through the Educational Statistics Task Force (ESTF), the activity produced the 2005-2008 Book Report and 2009-2010 CD on HEI statistics. The reports featured statistics on the distribution of examinees and passers by discipline, type of school, number of examinees, regional location of schools, and by sex along with descriptive analysis.

### Issues and challenges

As debate over policies and strategies to improve the educational system continues, so does the discussion of data gaps and issues of coverage, timeliness, accessibility, and actual policy uses of statistical information.

The key issues and challenges on education and cultural statistics are as follows:

▶▶ **Data gaps continue to persist and may have widened faster than emerging information needs. More relevant statistical indicators and timely and regular updates of basic data on education and culture are needed for more appropriate and effective policies, plans, and programs.**

- While subnational/local-level data on education continue to be sought by stakeholders for planning and targeting of development programs, the publication of regional level information on basic, TVET, and higher education used to be done by the three pillar agencies of education has been discontinued.
- Indicators available in agency websites are too aggregated, i.e., national level when there is great need by education managers for more disaggregated data, *e.g., by division, municipality, district, or even school level*. Currently, researchers in need of more detailed information have to make special requests if at all details are available.
- There is no standard policy on dissemination and advocacy of education statistics, *e.g., technical notes on new estimation methodology in the computation, revision, backtracking of indicators*, as there is no clear set of standards or metadata to guide users. The current practice is to use footnotes.
- There is need to track the impact of the conditional cash transfer program on education which can also help determine the contribution of educational outcomes in poverty reduction.
- Information on the match between fields of study and demand for skilled and knowledgeable workforce has been found to be inadequate. Better market information is needed to minimize the mismatch between jobs and skills or degree programs. This could be lessened with easily accessible information on status/analysis of enrolment and sufficient information about market demands to students through websites.
- Statistical information on culture and sports is significantly wanting. It is not clear which agency or agencies should take the initiative and responsibility to collect primary data.

▶▶ **The administration of education has been trifocalized since 1996. In spite of this or because of**

it, there is still the need for continuous coordination of data collection, integration, analysis, and dissemination not only among the three key agencies but also among other data sources.

- A more integrated statistical framework is needed to guide the production of statistics that is consistent across different sources and relatable to other statistics. The framework should be rooted in a good set of appropriate and relevant metrics of the educational system.
- There is need for a complete picture of education covering both formal and non-formal, public and private, and including the hybrid—partially public-funded but privately-provided education via Government Assistance to Students and Teachers in Private Education (GASTPE). Implementation of the K to 12 system however has made coordination even more challenging and urgent.
- A statistical framework for culture and sports in particular will help build statistical data and indicators that can support strategies to further promote and develop culture, arts, and sports. It may help that awareness of sports and culture has increased due to a large extent to the popularity of Filipino athletes in the international sports arena, such as boxing champion Manny Pacquiao, the Philippine Azkals and Volcanoes, increasing nationwide and global recognition of Filipino artists, the buzz created by the UNESCO heritage site declaration of the Palawan Underground River and tourism promotion initiatives, as well as the meteoric rise of travel blogs and media feeds that feature a vast wealth of cultural resources and artwork in the country.

►► Quality issues in current administrative-based data on education and culture have remained.

- Issues on coverage, time lag, and accessibility of data need to be resolved soon. As government embarks on new programs and strategies such as the DepEd's *K to 12* program, more reliable indicators will be critically needed.

During the PSDP plan period 2011-2017, a major education reform will be implemented. The phased implementation of the *K to 12* program is set to begin in 2012. Pupils who are in Grade 1 and Grade 7 (the new first year of secondary education) in June 2012 will be taught using the new curricula for these two grades. Henceforth, curriculum revision will proceed year by year so that by June 2018, all basic education students in the country will be under the new *K to 12* curriculum.

To evaluate the effects of *K to 12*, DepEd will start with a research study with 2012-13 as baseline data. Thereafter, it will conduct regular assessments to measure the effects of *K to 12*. All these will require intensive data gathering and analysis. An example would be to determine the effects of this program on the reasons for leaving school in addition to other indicators, such as gross/net enrolment and cohort survival, and school leaver or dropout rates from the E-BEIS.

- In a multi-dimensional education sector, consistency and coherence of statistics produced by related statistical activities such as the APIS, FIES, and the Enhanced Basic

Education Information System (E-BEIS), among others, should be given priority action to maximize use of data and save on resources.

►► Intended users of education and cultural statistics need capacity building on the rational use of statistics in planning, programming, and targeting. It is not clear, however, if there is real demand for and use of certain indicators.

- Improvement of the National Education Expenditure Accounts (NEXA) was no longer included in the IACES agenda as there was no clear indication that NEXA was being used in resource planning for education.
- Stakeholders may need to review and strengthen their policy and practices on the use of statistics. Meanwhile, communication between policy and statistical institutions could be further improved.

►► Statistical capacity of data producers needs further strengthening for more efficient collection and dissemination of more timely and reliable education and cultural statistics.

►► More relevant methodological studies are needed to develop collection methods and approaches and statistical indicators on education and culture.

►► Resources, financial and especially skilled human resources, for the improvement of education and cultural statistics have been inadequate.

## Statistical programs

The following major programs shall be undertaken by the key program agencies and MSAs to address the principal issues towards improved statistics on education and culture:

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

### 1. Improvement of information systems on education and culture and development of new ones

- Enhancement of the E-BEIS to include key indicators on public and private schools by division (or municipality), early child education (ECE), alternative learning systems (ALS), national assessment examinations, and utilization of GASTPE grants
- Conduct of the 2013 FLEMMS
- Development of Data Element Manuals (DEM) for TESDA and updating of the DepED and CHED DEM to standardize definitions, examples and counter-examples, terminologies, interpretations, and coding for all education stakeholders
- Compilation of student's profile and movement through the educational system and the labor market from the unified identification system (Learner's Reference Number)
- Updating of impact evaluation studies of TVET, *e.g., tracer studies on graduates*, higher education programs, and student financial aid programs



- Development of indicators on culture, sports participation, infrastructure, and related statistics
- Application of GIS/GIM in the production and dissemination of education statistics

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

2. Development and improvement of a web portal for education and cultural statistics
  - Development of a unified web-based data collection forms for all levels
  - Development of statistical databases on early childhood care and development, science education and technology, etc.
3. Development of IEC strategies for more effective dissemination, communication and advocacy of education and cultural statistics
  - Development of handout information materials on the performance of schools in terms of assessment accreditation, equivalency, licensure, etc.
  - Regular dissemination of education and related statistics on agency websites
  - Conduct of appreciation seminars for school heads in the elementary and secondary education levels
  - Conduct of dissemination, consultation, advocacy forums on education-related outputs and activities among major stakeholders including civil society groups, academe, and LGUS

*To enhance statistical capacities of data producers and providers*

4. Conduct of methodological studies on education and related indicators
  - Study on the operational definition and indicators of expanded functional literacy
  - Study to establish link between the education system and the skills required in the employment market
5. Conduct of training and other capacity building programs for data producers in the compilation, analysis, and utilization of education and cultural statistics
  - Conduct of training for education managers in all levels (school, division, region, central offices) and compilers of statistics on culture and sports on how to appreciate, interpret, use, and disseminate information gathered from raw data.
6. Participation in international technical cooperation, conferences, and expert group meetings related to education and cultural statistics, such as EFA, ASEAN Summit for Education, etc.

*To improve coherence, effectiveness, and efficiency of the statistical system*

7. Enhancement of the statistical framework on education and development of the statistical framework on culture

- Comprehensive review of the statistical framework for education
- Comprehensive review of the framework, methodology, and data inputs for the improvement of the NEXA as well as its use for education resource planning
- Development of conceptual and statistical framework on culture based on international recommendations such as those provided by UNESCO

8. Continuing development and/or updating of statistical standards, policies, and guidelines for education and cultural statistics
  - Formulation of standard education and culture concepts and definitions
  - Policy on the preparation, release, and revision of key education indicators
9. Comprehensive review and improvement of designated statistical activities towards reduced time lag and improved accessibility of data and micro-data, generation of more local-level data, and designation of new/critical activities/statistics
  - Modification of designation of FLEMMS, basic literacy, and BEIS
  - Designation of key indicators on TVET and higher education, etc.
10. Implementation of the ARRCs towards new or alternative sources of basic data on education and cultural statistics
11. Implementation of a data quality assurance framework in the education and culture sectors
  - Comprehensive data assessment of existing systems on all levels of education (methodology, indicators and statistics, data gaps, and policy uses)
12. Formulation of strategies to address low rate of compliance of data reporting by private schools, technical vocational institutions, and local and state universities and colleges

*To increase and sustain resources for statistics*

13. Strengthening of institutional coordination within the PSS and between PSS and the DBM, legislative bodies, and development partners to ensure funding of the continuous improvement and production of critical statistics on education and culture
  - Creation of statistical units and positions in NGAs with competitive salaries for the production of better quality education and cultural statistics, e.g., NCCA, PRC
  - Stakeholder collaboration to fund surveys and related activities to generate data on education and culture, e.g., LCC and DepEd for the 2013 FLEMMS, DepEd and concerned agencies for new surveys and supplementary data collection and advocacy for NEXA
14. Institutionalization of a sustainable and efficient financing scheme to ensure availability of funds for designated and developmental statistical activities
  - Integration of statistics in the medium-term expenditure framework for education



## Chapter 17

# Health and nutrition Statistics

### Introduction

**Kalusugan Pangkalahatan** or universal health coverage aims to contribute to total human development, increase productivity and ultimately bring about social and economic development.

The improvement of the health status of the people hinges on the combined effects of better nutrition, expanded basic health services, improved sanitation, and more efficient allocation of health resources among different health and nutrition programs.

The **PDP 2011-2016** aims to achieve universal health care as the health sector's vision in the medium-term. In order to attain this vision, the PDP shall ensure the achievement of better health outcomes, equitable health financing, and responsive health systems that provide all Filipinos, especially the poor with equitable access to quality health care.

Meanwhile, the primary objective of the nutrition sector is to reduce disparities in nutrition by focusing on population groups and areas highly affected by or at risk of malnutrition, specifically, pregnant women, infants, children 1-2 years old, underweight children 0-5 years old, and LGUs with high levels of child undernutrition or at risk of undernutrition.

Determining appropriate measures to address health and nutrition issues and effective monitoring of these interventions require statistical information that is timely and reliable. This chapter outlines key statistical programs meant to improve the quality of existing health and nutrition statistics as well as to develop new and more relevant critical statistics and indicators.

### Scope and coverage

This chapter covers statistics on the two broad components of the sector. Specifically, health and nutrition statistics cover data and indicators on the *status* of the population and communities, and the *resources* and *services* provided by national/local government and the private sector.

Health statistics cover a wide range of measures including outcome indicators, program information, and scientific data to monitor health status of the population and to evaluate the effectiveness and efficiency of health systems in dispensing health resources and services. These also include data and microdata vital in health surveillance to monitor, arrest, or prevent outbreaks of critical diseases. Health

statistics are usually grouped according to the following:

- Health status
  - Incidence/prevalence of diseases
  - Causes and patterns of mortality and morbidity
  - Fertility
  - Life expectancy
  - Prevalence rates for disabilities
- Health resources
  - Health workers, facilities, and financing (expenditure and insurance)
- Health services
  - Case detection for tuberculosis
  - Contraceptive prevalence
  - Antenatal care coverage
  - Births attended by skilled health personnel

Nutrition statistics covers the following:

- Nutrition status
  - Malnutrition and nutrition deficiencies among children and the rest of the population
- Nutrition resources
  - Nutrition personnel such as dietitians and nutrition officers
  - Number of weighing scales
  - Government expenditures for nutrition programs
- Nutrition services
  - Nutrition programs
  - Households using iodized salt
  - Children aged 0 - 5 years given vitamin supplements
  - Pregnant women who availed of vitamin A and iron supplement
  - Lactating mothers who availed of vitamin A and iron supplement

Statistics on fertility, mortality, and vital statistics are also presented in Chapter 13 – Population and housing statistics while those dealing with hunger and FBS statistics are also covered in Chapter 14 – Income, poverty and hunger statistics and Chapter 5 – Macroeconomic accounts and statistics, respectively.

### Situational analysis

The main stakeholders of health and nutrition statistics are the DOH and its bureaus and attached agencies, the FNRI and NNC, and LGUs, as well as health service providers and consumers.

Health and nutrition statistics are produced by the government, both at the national and local levels, private health sector, and academe. The DOH collects and disseminates administrative data on notifiable

diseases and public health programs and the FNRI and NNC on nutrition statistics. The NSO meanwhile generates periodic data and indicators on health and nutrition through censuses and surveys while the NSCB compiles the PNHA and FBS.

## Key developments in 2005-2011

The Plan period 2005-2011 has brought about some key developments in health and nutrition statistics.

### Groundwork for the establishment of the Philippine Health Information Network (PHIN).

Completed in 2010 through the collaboration among the DOH, NSCB, NSO, the Philippine Council for Health Research and Development (PCHRD), and the UP Statistical Center Research Foundation, the project assessed existing health information systems and formulated a strategic plan to integrate health information in the country. The DOH has started implementing some of the recommendations of the study, which includes the improvement of processes and forms of the Field Health Service and Information System (FHSIS). NSO, on the other hand, has piloted a number of initiatives to improve coverage and completeness of the CRS. The World Bank assessment of the PSDP 2005-2010, however, still reports delayed vital statistics from civil registration.

### Improvement and approval of the PNHA estimation methodology.

On the recommendation of the IACHNS, the NSCB Executive Board through Resolution No. 8, Series of 2011 approved the estimation methodology for the compilation of the PNHA to improve estimates. The revised PNHA estimation methodology was endorsed by major forums such as the IACHNS and DOH Executive Committee Meeting in 2010, 7th Meeting of Regional Health Accounts Experts in Seoul and 11<sup>th</sup> National Health Research Forum for Action in 2011. Among the improvements include the: identification of additional agencies and health-related activities in government; use of new approaches to estimate local government health, private out-of-pocket health expenditure, private insurance companies and health maintenance organizations; and classification of foreign grants under the Rest of the World.

### Conduct of key censuses and surveys on health and nutrition.

Among the major health and health-related surveys conducted were: the 2005 and 2011 Updating of Nutritional Status of Filipino Children and Other Population Groups, 2006 Family Planning Survey (FPS), 2007 Sub-Regional Multiple Indicators Cluster Survey, 2008 National Demographic and Health Survey (NDHS), 2008 National Nutrition Survey (NNS), 2009 Global Adult Tobacco Survey, and 2011 Family Health Survey (FHS).

The 2008 NNS was the most comprehensive since the first survey was conducted in 1978. It included eight major components including food insecurity, government nutrition/health program participation, and health survey. The results were released through the FNRI website for wider and faster access by users. Data on anthropometric results for children 0-19 years old were computed based on the newly adopted WHO Child Growth Standards.

The 2011 nutritional status survey provided updated information to track changes in nutritional status of all population groups. This survey also provided information necessary to monitor MDG 1 targets, in particular

underweight prevalence among under 5 year-old children and household meeting energy requirements.

The 2011 FHS is similar to those collected in the 2006 FPS and the 2008 NDHS with questions designed to estimate some MDG indicators such as MMR, under-five mortality rate, contraceptive prevalence rate, and antenatal care coverage.

### Eighth Annual Meeting of the Washington Group on Disability Statistics (WGDS).

The NSCB recognizes the importance of disability statistics in the development of appropriate policies and measures to address disability issues. The Philippines, in coordination with the WGDS Secretariat and the United States National Center for Health Statistics, hosted the meeting on 29-31 October 2008 with participants from 27 different countries. The group discussed the core set of questions for disability statistics (for censuses) and the extended set of questions (for surveys). The results of data analyses from both cognitive and field testing based on the Philippine experience were presented at the 9<sup>th</sup> meeting of the WGDS held in Tanzania in October 2009.

### Testing of the International Classification of Functioning, Disability and Health (ICF)-based disability questions for surveys.

The NSO conducted cognitive and field tests of the ICF-based disability questions for surveys in 2009 as part of the project, Improvement of Disability Measurement and Statistics in Support of the Biwako Millennium Framework and the Regional Census Programme of the Statistics Division of UNESCAP in close collaboration with the WGDS. The core questions on functional difficulty were included in the 2010 CPH.

### Adoption of methodology for national-level estimates of MMR for 1990 and 2000-2010.

On the recommendation of the TCPHS, the NSCB Executive Board through Resolution No. 11, series of 2010, adopted the interim estimation methodology on the generation of national-level estimates of MMR and the estimates for 1990 and 2000-2010.

### Compilation and updating of indicators to monitor MDGs on health specifically on eradicating extreme poverty and hunger, reducing child mortality, improving maternal health, and combating HIV/AIDS, malaria, and other diseases.

The 18 health-related MDG indicators periodically compiled in the PSS are the:

- Prevalence of underweight children under 5 years of age,
- Percent of household with per capita energy less than 100% adequacy,
- Proportion of population with mean one-day energy intake less than 100% adequacy,
- Under-five mortality rate,
- Infant mortality rate,
- Proportion of 1 year-old children immunized against measles,
- Maternal mortality,
- Proportion of births attended by skilled health personnel,
- Contraceptive prevalence rate,
- Antenatal care coverage (at least one visit and at least four visit),
- Unmet need for family planning,
- Prevalence associated with malaria,
- Death rate associated with malaria,
- Prevalence associated with tuberculosis,
- Death rate associated with tuberculosis,

- Proportion of tuberculosis cases detected and cured under directly observed treatment short course (DOTS), and
- Proportion of tuberculosis cases cured under DOTS

## «Issues and challenges

Despite the long history of data collection and statistical coordination on health and nutrition and the resources spent by the government, problems in making available timely and reliable basic data and key indicators persist. Among these issues and challenges are:

### »The current framework of health and nutrition statistics may no longer be relevant to emerging developments in the health sector and to the needs of primary stakeholders.

- There is a need to revisit and enhance the framework to ensure that it addresses the most relevant and critical information needs of the health sector reform agenda, specifically on policy creation and analysis, program implementation and monitoring, and service delivery.
- The enhanced framework should consist of priority statistics and indicators that must be collected on a regular basis, such as the MDG health indicators and FHSIS data.
- New and other relevant indicators, standards, and methods need to be studied and developed to support among others, the estimation of the support value of social insurance, enhanced compilation of the PNHA, etc.

### »Health information systems have remained fragmented despite the existence of statistical coordination mechanisms.

- Past assessment of health and nutrition statistics revealed overlapping activities and/or duplication of information being generated by different government agencies, thereby unnecessarily increasing the burden on field health workers that collect the basic data and the resources for statistical activities.
- The establishment of the PHIN, planned in 2007, aimed to develop an integrated and harmonized Philippine health and nutrition information system has yet to be carried out due to resource constraints.
- The DILG must be considered as a major stakeholder of health and nutrition statistics to coordinate the production of local-level statistics by the LGUS and to consolidate statistics for wider dissemination to users.

### »There are mounting concerns regarding the continued unavailability and poor or undetermined level of quality of some health and nutrition statistics and indicators.

- Past assessments revealed that while there are identified information gaps, there is also perceived excessive generation and hence underutilization of data.
- Data on key health and nutrition concerns targeted in the PSDP 2005-2010 such as mortality indicators, access to affordable drugs, etc., have been delayed or have not been produced at all. Data releases have remained few and far between due to resource

constraints and inadequate technical capacity and skills.

- There are lingering issues on the accuracy, completeness, reliability, and validity of some data as well as the consistency and coherence of survey-based and administrative data on key indicators that have yet to be resolved.
- Administrative-based statistics including those generated by the FHSIS are, in general, still not released in a timely manner. Furthermore, there is little information on their reliability due to incomplete coverage and other data issues. It is reported that time lag of FHSIS reports has been reduced from three years to one year, but a previous assessment found that there is no improvement from 2004 to 2007.
- Currently available local-level statistics is inadequate to address the much-increased demand for timely and relevant information needed in more effective implementation of health and nutrition programs at the community level.

### »Statistical capacity building of data producers and users needs to continue and expanded to the LGUs to improve the collection of basic health and nutrition data.

- Many field health workers are found to have inadequate skills in data or information management.
- Institutional coordination among DOH, SRTC, and academic partners, and the DILG and LGUs must be improved to ensure conduct of continuous and cost-effective training programs for data collectors and compilers.

### »There are perceptions that available health and nutrition statistics are not adequately and effectively disseminated to users and the public.

- Many statistics have been found inaccessible to some users and the public.

### »There is apparent dearth of human resources to generate and disseminate health and nutrition data and statistics.

- Resources have remained insufficient for the regular conduct of statistical activities that produce critical health and nutrition indicators such as MMR, PNHA, FBS, FIVIMS, etc..
- Many LGUs do not have enough personnel to collect, process, and consolidate health and nutrition data at the community level, which has affected the reliability and timeliness of statistics for national, sectoral, and local use.
- Investment in ICT resources must be given priority to systematize information management - data collection, processing, and organization, and data dissemination.

## Statistical programs

The following statistical programs are meant to address persistent issues and challenges in the production and dissemination of more timely and reliable health and nutrition statistics in support of effective policies and programs on health and nutrition, including the monitoring of the MDGs on health:

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. **Improvement in the conduct of critical periodic surveys to generate health and nutrition statistics**
  - NDHS, FHS, NNS, Updating of the Nutritional Status of Filipino Children and Other Population Groups, and health risk behavior surveys
2. **Improvement of administrative reporting systems on health and nutrition statistics such as the**
  - FHSIS, CRS, Operation Timbang Database Management System, Philippine Registry for persons with disability, FIVIMS, National Health Insurance Program (NHIP), and Employee's compensation, claims and benefits paid
3. **Improvement and compilation of the PNHA**
  - Conduct of special surveys to update estimation parameters
  - Generation of more disaggregated information on out-of-pocket health expenditures
4. **Generation and improvement of local-level health, nutrition, and other related statistics**
  - Compilation of local health accounts
  - Updating of LGU health scorecard
  - Improvement of the FHSIS
  - Development of Community Health Information Tracking System
  - Implementation of CBMS
  - Improvement of the NHTS-PR and generation of relevant statistics
  - Compilation of local-level MDG indicators/ statistics
  - Compilation of IMR/CMR estimates

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

5. **Development and improvement of an integrated health and nutrition statistics web portal under the PHIN**
  - Design and establishment of a data warehouse for health and nutrition statistics
  - Development of data sharing and dissemination protocols
6. **Development of IEC strategies and tools for more effective dissemination, communication, and advocacy of health and nutrition statistics**
  - Development of appropriate data dissemination and feedback mechanisms at the national and local levels
  - Dissemination of health and nutrition statistics through social media
  - Improvement/development of statistical publications
  - Conduct of user-producer forums
  - Conduct of special studies on disability statistics

*To enhance statistical capacities of data producers and providers*

7. **Regular conduct of training and other capacity building programs for data producers in the compilation, analysis and utilization of health and nutrition statistics such as**
  - Training of barangay health workers and nutrition scholars and volunteer workers
  - Training on integrated food security phase classification
  - Training on the nutrition early warning system
8. **Participation in and hosting of inter-national conferences, training, workshops, and expert group meetings on health and nutrition statistics**
  - WGDS,
  - Asia-Pacific National Health Accounts Network, and
  - OECD Health Accounts Experts

*To improve coherence, effectiveness, and efficiency of the statistical system*

9. **Enhancement of the statistical framework on health and nutrition**
  - Review of the statistical framework of the benefit package of the social insurance program specifically on support value
  - Review of the selected infant and young child indicator monitoring system through the MDG Achievement Fund 2030: Ensuring Food Security and Nutrition for Children Aged 0-24 Months
  - Review of the estimation methodology of the MDG indicator on HIV prevalence among the population aged 15-24 years
10. **Implementation of the PHIN to harmonize and integrate health and nutrition information systems**
11. **Continuing development and updating of standard concepts and definitions on health and nutrition**
12. **Comprehensive review and modification of designated statistical activities on health and nutrition towards reduced time lag, improved coverage and accessibility, and generation of local-level statistics, and designation of new ones**
  - FHSIS and NDHS
13. **Rationalization of surveys that generate data on health and nutrition to eliminate duplication and ensure consistency of resulting statistics**
  - FHS,
  - NDHS,
  - NNS, and
  - Updating of the Nutritional Status of Filipino Children and Other Population Groups
14. **Implementation of a data quality assurance framework for health and nutrition statistics**

- Continuous quality improvement of the FHSIS at the national and local levels
- Improvement of the DOH public health surveillance system

15. [Conduct of special studies on disability statistics](#)

- Compilation and analysis on disability statistics

16. [Formulation/Updating of the Strategic Plan for the Philippine Food and Nutrition Surveillance System](#)

*To increase and sustain resources for statistics*

17. [Strengthening of institutional coordination within the PSS and between PSS and the DBM, legislative](#)

[bodies, and development partners to ensure funding of the continuous improvement and production of critical statistics on health and nutrition](#)

- Creation of statistical units/positions for the continuous improvement and regular compilation of health and nutrition statistics
- Development of mechanisms for regular financial support to statistical activities, including acquisition of ICT resources, and for sustainable human resources



## Chapter 18

# Social protection statistics

### Introduction

Social protection is vital to the well being of society. It empowers people who may not have benefited from economic growth and development to deal with economic and social risks they have to face. It has important benefits that uplift human well being, bring social justice, and contribute to inclusive growth and sustainable development.

Social protection as defined by the international development community concerns policies and programs that are designed primarily to reduce poverty and vulnerability that result from economic deprivation and social deficiencies. Social protection strategies seek to promote efficient labor markets, diminish people's exposure to risks, and enhance capacities in managing such risks.

In 2007, the Philippines adopted an official definition of social protection through the NEDA Social Development Committee (SDC) Resolution No. 1, Series of 2007 - Adopting a Philippine Definition of Social Protection. The resolution states that *"social protection constitutes policies and programs that seek to reduce poverty and vulnerability to risks and enhance the social status and rights of the marginalized by promoting and protecting livelihood and employment, protecting against hazards and sudden loss of income, and improving people's capacity to manage risk."*

The government is committed to achieving the MDGs in the country by 2015 through various programs and strategies for national social development. The **PDP 2011-2016** explicitly states that "investment in the country's human resources, together with physical investment, is the key to sustained and broad-based growth, which would require equitable access to basic social services, as well as stronger social safety nets and social protection against shocks."

The PDP's social protection agenda is to ensure the empowerment and protection of the poor, vulnerable and disadvantaged individuals, families, and communities from all types of risks—individual life cycle, and economic, environmental, and social risks.

The MDG monitoring framework includes targets on halving the proportion of people who suffer from extreme poverty and hunger by 2015 as well as achieving full and productive employment and decent work for all, including women and the youth.

With significant investment and efforts being poured into social protection programs such as the *4Ps*, it is imperative to periodically measure and account for all the resources and interventions and to monitor

corresponding development outcomes and impacts of programs to society.

This Chapter is a new addition to the PSDP. In previous PSDP's, some statistical programs and activities related to social protection such as generation of statistics on social needs, welfare, and development, including women and children, were spread across several chapters/sectors. As the sector is still evolving, the Chapter shall be revisited and updated as the statistical information requirements are being drawn.

Statistics on related areas are discussed in Chapter 14 – Income, poverty, and hunger Statistics, Chapter 15 – Labor and employment Statistics, Chapter 16 – Education and cultural Statistics, Chapter 17 – Health and nutrition Statistics, and Chapter 19 – Statistics on children and GAD.

### Scope and coverage

Social protection is a relatively new concept in the PSS hence there is no corresponding statistical framework that provides how it can be measured and monitored. As there are currently no known international standards either, the scope and coverage of the statistics to be tackled in this Chapter shall be aligned with the major policy domains of the sector as follows:

- Labor market, *e.g., employment, rights and welfare of workers, skills development and training, compliance with labor standards such as minimum wages or health and safety in the workplace*
- Social insurance, *e.g., income, health insurance, social security, etc.*
- Social welfare, *e.g., poverty reduction measures, assistance programs, social services, etc.*
- Social safety nets, *e.g., stop-gap mechanisms or urgent responses to economic shocks, disasters and calamities on specific vulnerable groups*

A full statistical framework shall be developed during the current Plan period which shall be anchored on the PDP chapter/discussion on social protection and appropriate operational framework and strategy. The framework shall identify the most important and relevant data and indicators that will guide the development of the data system for social protection.

### Situational analysis



While there is no existing statistical framework on social protection, some relevant statistics are being generated through surveys and administrative reporting systems.

Social insurance data are generated from the administrative systems of the SSS, GSIS, PHIC, ECC, OWWA, PVAO, HDMF, etc.. Labor and employment and related data are collected by the NSO and BLES. The NSO also gathers income data and poverty indicators while the official poverty statistics are compiled by the NSCB.

Meanwhile, data on social welfare and development assistance are compiled and reported by the DSWD and other government program agencies implementing poverty reduction strategies.

## Key developments in 2005-2011

The major statistical developments on social protection-related statistics are as follows:

► **Establishment of the NHTS-PR.** In 2009, the DSWD launched the NHTS-PR to "establish a socio-economic database of households that will be used in identifying the beneficiaries of national social protection programs". Executive Order No. 867, Series of 2010, issued on 9 March 2010, provides the adoption of NHTS-PR as the mechanisms for identifying poor households as recipient of SP programs. The NHTS-PR makes use of proxy means test to evaluate eligibility of households to receive certain government poverty assistance.

► **Inclusion of social protection module in the 2011 APIS.** The survey was conducted by NSO in collaboration with ADB to generate comprehensive data on beneficiaries of different social protection mechanisms of the government.

► **Conduct of the "Assessment of Vulnerability to Poverty in the Philippines".** The study conducted by NSCB in 2004 to 2005 developed a methodology for estimating the vulnerability to income poverty of individual households in the Philippines. Estimates using the methodology were generated and disseminated in 2005.

► **Conduct of the first informal sector survey.** The survey, conducted in 2008 by the NSO in collaboration with UNESCAP as rider to the LFS, produced benchmark information on the informal sector including data on the demographic and socio-economic characteristics of persons and enterprises engaged in informal sector activities.

► **Improvement of the LFS.** In 2011, the NSO, BLES and the SRTC conducted a joint review of the LFS questionnaire through the "Re-thinking of the Labor Force Survey" project to better capture labor market developments and emerging user needs. Pilot testing of the revised questionnaire was set to be conducted in 2012 in two provinces namely, Agusan del Sur and Antique while the adoption of the complete questionnaire shall commence in 2014.

## Issues and challenges

In addition to the absence of a statistical framework, the key issues and challenges on social protection statistics are as follows:

► **There is need to establish statistical coordination mechanisms to initiate the development of comprehensive social protection statistics.**

- Interagency mechanisms need to be put in place to develop the statistical framework, formulate standards and policies, and discuss data issues towards the regular production of social protection statistics at the national and local levels.

► **There is inadequate data to provide baseline information against which social protection outcomes can be defined and measured.**

- There are some data generated by several agencies. However, there has not been a comprehensive data assessment to determine available data series and identify gaps and issues.
- There is little information to assess adequacy of data to measure effectiveness and efficiency of government social protection programs.
- There is urgent need for research to develop appropriate statistical indicators and methods of data collection on social protection.

► **There is need to strengthen institutional capacities for the generation and use of social protection statistics.**

- Data producing agencies need statistical capacity building on various aspects of data production including the adoption or adaptation of internationally recommended standards, methodologies, and best practices.
- Data users also need to be made more aware and equipped with skills in the rational use of statistics for informed policy on social protection.
- Government investment in social protection statistics needs to be increased to ensure that critical statistical activities are undertaken. As the current statistical workforce has more than enough responsibilities to attend to, increasing statistical human resources is imperative to generate social protection statistics.

## Statistical programs

Below are some of the statistical development programs that are planned towards the establishment of the social protection data system.

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

### 1. Improvement of the generation and updating of critical indicators on social protection

- Updating of statistics on working children, decent work indicators
- Estimation of informal employment statistics

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

2. Improvement of dissemination and accessibility of social insurance data generated by major data source agencies, *i.e., SSS, GSIS, PAGIBIG and PHIC*
3. Development of the Philippine Social Protection Statistics web portal
4. Strengthening of advocacy and communication strategies for rational use of social protection statistics
5. Development and use of effective tools for monitoring and evaluation of the impacts of social protection programs
  - Impact Assessment of 4Ps
6. Capacity building of social protection institutions at the national and local levels on rational use of statistics
  - Training of concerned NGAs on data interpretation and analysis and use of statistics in policy and monitoring
  - Appreciation seminars for media and stakeholders of social protection programs
  - Training of LGUs in the implementation and use of CBMS to collect data on social protection

*To enhance statistical capacities of data producers and providers*

7. Conduct of methodological studies to develop and improve social protection statistics
  - Development of the social protection index
  - Valuation of social protection expenditures
  - Review of indicators on benefit payments and employees compensation, which are also inputs to the PNHA
8. Statistical capacity building of social protection statistics producers
  - Training of data producing agencies and LGUs on data collection and processing methods and data organization and management
  - Training on data analysis and visualization, database development, and GIS/GIM application
9. Participation in and hosting of inter-national conferences, training, workshops, and expert group meetings on social protection and other related statistics

*To improve coherence, effectiveness, and efficiency of the statistical system*

10. Strengthening of coordination of intra/interagency statistical activities on social protection
  - Creation of an interagency committee on social protection statistics, in coordination with the NEDA SDC-Sub-Committee on Social Protection
  - Institutional coordination of data source agencies to strengthen networking and data sharing
  - Harmonization of existing information systems through the use of
  - Improvement of the information system/ management on social insurance
11. Development and adoption of statistical framework and standards on social protection consistent with international recommendations
  - Development of statistical and operational framework on social protection
12. Implementation of appropriate statistical policies and standards in the production and dissemination of social protection statistics
  - Formulation of statistical standards in the collection and compilation of social protection statistics
  - Formulation of policy/standard on the dissemination of information from the NHTS-PR database/registry
  - Formulation of policy on the production and dissemination of disaster and calamity statistics at the local levels
13. Assessment and improvement of statistical activities including censuses and surveys for the generation of relevant social protection statistics
  - Review and enhancement/expansion of censuses/ surveys and administrative systems to generate relevant social protection statistics
14. Development and implementation of a data quality assurance framework for social protection statistics
15. Participation in international cooperation and capacity building programs/projects, and standards and methodological development activities on social protection and other related statistics

*To increase and sustain resources for statistics*

16. Strengthening of institutional coordination within the PSS and between PSS and the DBM, legislative bodies, and development partners to ensure funding of the continuous improvement and production of critical statistics on social protection
17. Institutionalization of sustainable financing for social protection statistics
  - Creation of statistical units and positions at the DSWD and its bureaus and attached agencies, and LGUs
  - Integration of statistical activities in the related agencies' and LGU budgets

## Chapter 19

# Statistics on children and gender and development

### Introduction

Children are among the most vulnerable population groups in society. Their survival and living conditions, health, and education are of utmost importance to society; hence, their rights, welfare, and development are always at the core of the country's social development goals.

Women belong to the same paradigm. But while significant strides have been made in improving gender balance in the country, there are considerable barriers that have yet to be hurdled and challenges loom yet ahead as homes, schools, and workplace continue to bear witness to unresolved gender inequalities.

Achieving child development and gender equality are therefore society's moral obligation, one that transcends political, economic, and social boundaries to continuously strive for. The MDGs rightly emphasize the need for concerted efforts to improve the plight of children and to address gender inequalities towards reducing poverty and the worst forms of human deprivation. Specific targets and milestones for children and gender and development (GAD) include universal primary education, reduced child mortality, and improved maternal health.

The **PDP 2011-2016** accords significant focus on children by increasing access to improved basic education and health care services, caring for abandoned and neglected children and children with special needs, and ensuring rights, freedoms and protection of youth and promoting youth empowerment.

The PDP also sets out to strengthen mainstreaming of GAD concerns in governance. Mainstreaming GAD is one of the priority strategies of the Aquino administration for the social development sector as reflected in his Social Contract with the Filipino People, to wit: *"From a lack of concern for gender disparities and shortfalls, to the promotion of equal gender opportunity in all spheres of public policies and programs"*.

Through the PDP, differentiated needs of women and men as well as children shall be addressed so that they can participate actively and appropriately in the development process and benefit from sustainable outcomes.

Statistics on children and gender concerns helps inform policies and interventions that facilitate results-based

and rights-based human development and sustainable social progress.

### Scope and coverage

This chapter covers statistical data and indicators used in describing the characteristics and conditions of children and women, and in assessing GAD concerns in the country.

Statistics on children are based on the conceptual framework for monitoring child development which concerns

- Poverty and disparities,
- Education,
- Health and nutrition, and
- Child protection/Social welfare.

Similarly, statistics on GAD are based on the Core GAD Indicators Framework, which monitors the role and status of women and men in

- Education and training,
- Economy,
- Health,
- Poverty,
- Institutional mechanisms,
- Media,
- Power and decisionmaking,
- Environment,
- Violence against women/girl child, and
- Armed conflict/human rights.

Statistics on children and GAD are also covered in other sectoral frameworks and data systems such as Chapter 4 – Local-level statistics development, Chapter 13 – Population and housing statistics, Chapter 14 – Income, poverty and hunger statistics, Chapter 16 – Education and cultural statistics, Chapter 17 – Health and nutrition statistics, Chapter 18 – Social protection statistics, Chapter 22 – Governance statistics, and Chapter 23 – Peace and security statistics.

### Situational analysis

#### Key developments in 2005-2011

Some of the major statistical development activities that have been implemented to address statistical needs, issues and challenges on children and GAD are as follows:

#### ►► Development of methodology for the Child

**Development Index (CDI).** The methodology developed by NSCB ensures the measurement of the development of children not only in terms of their economic well being but also their educational and health development. The first CDI estimates at the regional level for the years 2000 and 2003 were released in 2008 and updates for 2006 were released in 2009. A study in 2010 led to estimates of CDI by life stages for the years 2000, 2003, 2006, and 2008. Further improvements were made in the CDI methodology in 2011, which yield provincial level estimates for the reference year 2008.

#### ►► Adoption of an official methodology for the generation of poverty statistics for the basic sectors, including children and women, youth, and senior citizens.

In 2007, the NSCB issued Resolution No. 11 that institutionalized the generation of poverty statistics for the basic sectors. Following this initiative, the 2000 and 2003 poverty statistics for the basic sectors were released in September 2007, while the 2006 estimates were released in June 2009.

#### ►► Development of a methodology and estimation of Gender Development Index (GDI) at the local levels.

The IACGS undertook an assessment of existing indicators on gender vis-à-vis the statistical requirements of the approved GAD framework which point to the need to develop an estimation methodology for GDI. The index will provide gender-related development measures as well as serve as tool in integrating gender issues into analytical work, development operations and capacity building. The study covered all provinces in the Philippines and all municipalities of five pilot provinces, namely, Ilocos Norte, Palawan, Guimaras, Compostela Valley, and Sarangani. Estimates for 2000 and 2003 were released in 2008.

#### ►► Development of methodology to measure contribution of women and men in the economy.

Using the results of the 2000 Pilot Time Use Survey and the LFS, the methodology produced estimates of the number of hours spent on unpaid work (housework services), valuation of unpaid work, and share of the value of unpaid hours to GDP for 2000-2009.

#### ►► Hosting of the 3<sup>rd</sup> Global Forum on Gender Statistics (GFGS) and the United Nations Inter-Agency and Expert Group on Gender Statistics (IAEG-GS) Meeting in October 2010.

The Forum brought together 77 official statisticians, and experts and advocates of GAD measurement from 43 countries and international organizations. Co-organized by the Philippines through NSCB and UNSD, the back-to-back events highlighted the need for statistical agencies and their partners in the national statistical system to develop national plans to improve their gender statistics and make their needs known to donors, strengthen the overall national capacity for data analysis, and harmonize data from different sources within the national statistical system.

#### ►► Election of the Philippines, through the NSCB, as Chair of the UN IAEG-GS from 2010-2012.

The NSCB has been chosen to lead the international expert group in recognition of the significant achievement of the Philippines in advocating at the national and local levels the measurement and monitoring of GAD concerns as well as the country's valuable contribution to global initiatives in mainstreaming gender concerns through statistics.

#### ►► Mandatory generation and use of gender statistics.

The Magna Carta of Women (MCW) of 2009 mandated, among others, the generation and maintenance by all government offices (all departments, including their attached agencies, offices, bureaus, SUCs, GOCCs, LGUs, and other government instrumentalities as defined in the MCW) of gender statistics and sex-disaggregated databases to aid in planning, programming and policy formulation [Chap.VI, Sec. 36 (c), MCW]. Its implementing rules and regulations further mandates that "The National Statistical Coordination Board, upon the recommendation of the Inter-Agency Committee on Gender Statistics, shall issue statistical policies on the generation of data support on gender issues and improve the system of collection and dissemination of gender statistics at the national and local level" [Rule VI, Sec. 37, D., MCW IRR].

#### ►► Adoption of policy for institutionalization of the Core GAD Framework.

In 2005, the NSCB through Resolution No. 12, approved the recommendations of the IACGS to ensure continuing efforts in the generation of gender statistics and institutionalize the implementation of the Core GAD framework.

#### ►► Compilation and dissemination of statistics on children and GAD.

The PSS has continued the development of statistical information tools intended to help stakeholders in policy and monitoring work on children and GAD. Among the key outputs are the:

- Statistical Annex on Global Study on Child Poverty and Disparities;
- Interactive online database on children on the NSCB website;
- Statistical Handbook on Women and Men in the Philippines;
- Annual Factsheets on Women and Men;
- Annual Factsheets on Filipino Women and Men;
- Statistical Series on Reported Rape Cases in the Philippines;
- 2005 Updating of Nutritional Status of Filipino Children and Other Population Groups;
- 2007 Sub-Regional Multiple Indicators Cluster Survey;
- 2008 NNS;
- Women's Safety Module in the 2008 NDHS;
- Quarterly Gender QuickStat;
- 2011 Gender Statistics on Labor and Employment Publication; and
- Data updates on the MDG indicators to monitor Goal 3 – Promote Gender Equality and Empower Women:
  - Ratio of girls and boys in primary, secondary, and tertiary education
  - Ratio of girls to boys in elementary and secondary participation rates
  - Share of women in wage employment in the non-agricultural sector
  - Proportion of seats held by women in national parliament

#### ◀ Issues and challenges

The key issues and challenges identified regarding statistics on children and GAD are as follows:

#### ►► Data gaps have expanded amidst increased demand for better quality and more disaggregated indicators/statistics.

- As concern for children and awareness of gender issues increases, the need for more timely and relevant statistics becomes more urgent for policymakers and social service providers especially at the local levels. This has widened data gaps due to the still inadequate data on children and GAD, including the inability of national surveys to provide local-level data.
- There is generally lack of local-level data on children and GAD, *e.g., poverty statistics for the basic sectors, which include women and children, are available only at the national and regional levels.*
- Conduct of the SOC is irregular while there is demand for a national time use survey (NTUS).
- The data collection on violence against women, reproductive health, wage gap and rural women, *e.g., Women's Safety Module that was included for the first time in the 2008 NDHS, should be improved/institutionalized.*
- Updated/regular data for MDG monitoring is needed, *e.g., MMR indicators, adolescent birth rate, proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs, etc..*

►► **Enhanced coordination mechanisms are needed for more coherent statistics on children and GAD.**

- There is no established statistical framework on children to serve as reference for government and non-government organizations in the formulation of indicators for monitoring and assessment of outputs and impact of programs for children.
- The IACGS should be expanded and include agencies that also focus on statistics on children.

►► **Planners and policymakers need to better appreciate and be able to analyze and use statistics effectively in programs and policies on children and GAD.**

- There is general observation that statistics is not being fully utilized, if at all, in the design and implementation of policies and programs as well as in monitoring outcomes because of lack of technical statistical capacity. Programs on women's economic empowerment, gender equality, and improvement of the welfare of children should benefit from the use of statistics.
- Collectors of basic data at the local levels such as those on vital events, health, education, and social welfare need continuous training and development to ensure the regular supply of quality data.

►► **Existing information systems are inadequate to ensure protection and preservation of data on children and GAD.**

►► **More and continuing research is crucial in improving current indicators and in developing better approaches of basic data collection on children and GAD.**

►► **Knowledge and capacity building of the MSAs and relevant data producers need to be sustained to ensure quality statistics on children and GAD.**

- Statistical data compilers need to keep updated on the latest methodological frameworks, standards and best practices.

- Some data collectors and compilers lack the technical knowledge and skills required to undertake statistical data collection, dissemination, and management especially through administrative-based information systems.

►► **While there has been continued government support for children and GAD programs, resources for generating pertinent statistics have been inadequate.**

- The number of statisticians in government has been dwindling in recent years which has not only affected the regular production and dissemination of the current set of statistics but also prevented the development and collection of more relevant statistical information, including that on children and GAD.
- Resources for statistical activities that generate basic data for the computation of critical development indicators have been inadequate which has resulted in data gaps or delayed release of data.

## Statistical programs

The following statistical programs comprise the major interventions needed to address identified statistical issues and challenges in the generation, dissemination, and use of statistics on children and GAD:

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. **Generation of statistics and updating of critical indicators on children and GAD through censuses and surveys and administrative reporting/registration systems**
  - Integration of existing systems such as the National VAW Documentation System for monitoring violence against women and children
  - Generation of sex-disaggregated poverty and MDG statistics
  - Improvement of the Civil Registration Information System
  - Conduct of the NDHS, Multiple Indicators Survey (MIS), and Updating of the Nutritional Status of Filipino Children and other population groups
  - Institutionalization of the SOC and FHS

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

2. **Development and improvement of the Philippine statistics web portal on children and GAD**
  - Enhancement of existing children and gender statistical databases
3. **Training of users in government, media and other relevant sectors on statistics on children and GAD**
  - Training of media and relevant stakeholders on rational interpretation and analysis of statistics



- Training of LGUs on the use of statistics in the development of local plans and policies concerning children and GAD

4. Development and improvement of archiving systems/documentation of actual policy uses of statistics on children and GAD
5. Strengthening of advocacy/communication strategies for more rational use of statistics on children and GAD

#### *To enhance statistical capacities of data producers and providers*

6. Conduct of methodological studies to review and develop/improve the compilation of indicators on children and GAD
  - Study on valuation of unpaid work of women and men
  - Improvement of the GDI and CDI by life stages
  - Study on local-level poverty statistics for children and women, HDI, GDI, and CDI
  - Study on the use of administrative-based data for the generation of local-level statistics on children and GAD
7. Training of compilers of statistics on children and GAD in national and local governments
8. Participation in and hosting of inter-national conferences, training, workshops, and expert group meetings on statistics on children and GAD
  - Global Forum on Gender Statistics, and
  - Interagency and Expert Group on Gender Statistics

#### *To improve coherence, effectiveness, and efficiency of the statistical system*

9. Strengthening of statistical coordination mechanisms on children and GAD
  - Creation of an interagency committee on statistics on children or expansion of the IACGS to include agencies that focus on statistics on children and their welfare

10. Development of new statistical frameworks and standards on children and GAD concerns, and continuous improvement of existing ones

11. Rationalization/Review of censuses and surveys that collect data on children and GAD

- Review of the objectives and questionnaires of different household surveys such as the NTUS, Women's Safety Module of the NDHS and SOC
- Expansion of the coverage of the TUS and the Women's Safety Module

12. Development and implementation of a data quality assurance framework for statistics on children and GAD

13. Review and improvement of designated statistical activities on children and GAD towards reduced time lag, improved accessibility, and generation of local-level data

- Redesign of the master sample of household surveys

14. Participation in international cooperation and capacity building programs/projects, and standards and methodological development activities

#### *To increase and sustain resources for statistics*

15. Strengthening of institutional coordination within the PSS and between PSS and the DBM, legislative bodies, and development partners to ensure funding of the continuous improvement and production of critical statistics on children and GAD
  - Creation of statistical units/positions for the continuous improvement and regular compilation of statistics on children and GAD
  - Development of mechanisms for regular financial support to statistical activities.





cluster6

Environment and  
technology

## Chapter 20

# Environment and natural resources statistics

### Introduction

The Philippines is widely acknowledged to have an outstanding endowment of natural resources. It is identified as one of the world's 17 "mega-diverse" countries as well as a biodiversity hotspot.

By 2016, the Philippine government envisions the country as "an environment that is healthy, ecologically balanced, sustainably productive, climate change resilient, and one that provides for the present and future generations of Filipinos". To attain this vision, the **PDP 2011-2016**, in consideration of the Philippine Agenda 21 and the country's international commitments to environment and natural resources management (ENRM), aims to:

- improve conservation, protection and rehabilitation of natural resources,
- improve environmental quality for a cleaner and healthier environment, and
- enhance resilience of natural systems and improve adaptive capacities of human communities to cope with environmental hazards including climate related risks.

Concerns on the environment have evolved rapidly due to the alarming changes in climatic conditions on one hand and to favorable potentials and opportunities of social and economic significance. And so has the demand for statistics that can provide realistic quantifiable measures of the continuing environmental changes and natural events and their impact to people and society.

This chapter aims to enhance the framework and the system for the generation and dissemination of environment and natural resources (ENR) statistics in support of the country's social and economic development goals.

### Scope and coverage

ENR statistics cover data on the state and utilization of the different natural resources in the country, namely, flora and fauna, land/soil, mineral resources, and water resources. ENR data consist of quantitative measures of the impact of resource utilization on the conditions of environmental media, i.e., air, water and land/soil, across ecosystems, and the changes in stock brought about by socioeconomic activities and natural processes. These include metrics of climate change and

disaster-related events and data on emissions from the use of fuels.

ENR statistics also include information on the economic aspects of the sector such as income, investment, and employment as well as environmental education and research and development (R&D), risk transfer mechanisms, and ENR governance.

A few environmental indicators are included in monitoring the MDGs, of which only the following are available in the Philippines: proportion of land covered by forest, ratio of area protected to maintain biological diversity to surface area, consumption of ozone-depleting chlorofluoro-carbons (CFCs), proportion of households with access to secure tenure, proportion of households with access to safe water supply, and proportion of households with access to sanitary toilet facility.

As ENR concerns are spread across many sectors, some ENR-related statistics are discussed in almost all chapters, particularly, Chapter 5 – Macroeconomic accounts and statistics, Chapter 10 – Transport statistics, Chapter 11 – Energy statistics, and Chapter 23 – Peace and security statistics.

### Situational analysis

ENR statistics are primarily produced by the DENR and its various bureaus and attached agencies. Additional ENR data can be sourced from other agencies depending on the resource and environmental media concerned, e.g., fishery resource data are generated by the BFAR, soil erosion data can be sourced from the BSWM, streamflow data from Bureau of Research and Standards of the DPWH, energy related natural resource statistics from the DOE, etc..

Almost all of ENR statistics are generated through a mix of statistical surveys, field assessments, monitoring stations, scientific measurements, and administrative-based data reporting systems.

#### ◀ Key developments in 2005-2011

The major developments in improving ENR statistics during the period 2005-2011 include the:

- ▶ Publication of the *Compendium on Philippine Environment Statistics (CPES) 2006 and 2008*, and *Compendium of Basic ENR Statistics for Operations and Management (CBES-OM) 2006 and 2008* of DENR. The CPES was developed and published by the NSCB based on the Philippine Framework for the

Development of Environment Statistics while CBES-OM was a product of the DENR's Statistical Reporting System (SRS).

►► **Creation of the Interagency Committee on Environment and Natural Resources Statistics (IACENRS).** The IACENRS was created in 2007 through NSCB Memorandum Circular No. 004 to institutionalize coordination of statistical initiatives and to address crosscutting statistical issues and concerns such as adoption of common standards in data collection and dissemination.

►► **Full operationalization of the DENR's Forestry Information System (FIS).** The system, which became fully operational in 2009, is designed to improve data collection and information process to aid in the enhancement and promotion of sustainable management of forests in the Philippines. Forestry data collection, encoding and processing are done at the DENR frontline field units called the Community Environment and Natural Resources Offices (CENROs).

►► **Completion of Forest Cover Statistics of 2003.** Forest cover statistics provides a numerical description of the Philippine forest situation giving information on the types of forests, *i.e., closed, open and plantation forests, disaggregated at the provincial level.*

►► **Completion of watershed vulnerability assessments in 2010.** The series of assessments covered 47 watersheds in the country. The study provide indicators on the conditions and vulnerability of aquatic systems, *e.g., biodiversity losses, landslide prone areas, etc.,* and provides a summary measure of overall watershed health which aided LGUs in the formulation of local development plans and disaster risk reduction management plans.

►► **ENR statistical terms and concepts.** On the recommendation of the IACENRS, the NSCB Executive Board has approved twenty-one official concepts and definitions for statistical purposes for the ENR sector that would allow comparability of statistics across national and international boundaries.

## ◀◀ **Issues and challenges**

While there have been efforts to initiate the development of ENR statistics through the 1999 Philippine Framework for the Development of Environment Statistics (PFDES) and 1997 Philippine Economic-Environmental and Natural Resources Accounting (PEENRA), and despite the necessity to regularly monitor progress of the country vis-à-vis the Philippine Agenda 21 and the MDGs, the development of ENR statistics has not been fully sustained. The major issues and challenges are as follows:

►► **Resources, including human resources, are wanting and are not able to sustain the development of ENR statistics.**

- The PFDES and PEENRA have been considered pioneering among global efforts towards the development of ENR statistics. In 1997, the government issued Executive Order No. 406–Institutionalizing the PEENRA System and Creating of the PEENRA Units in the DENR, NEDA and NSCB. Fourteen years since the issuance of the EO however, none of the PEENRA units

prescribed in the EO has been created due to non-provision of budget by the DBM. This indicates the country's failure to sustain its comparative advantage as a leading nation not only in green accounting but also in the organized generation and dissemination of ENR statistics.

►► **Data gaps and other quality issues continue to persist.**

- Certain critical indicators have not been updated for quite some time such as land area, which has not been fully determined because the cadastral survey from which data are generated has been taking a long time to complete. As of December 2010, only 56 percent of the total land area of the country has been approved based on the master list of the LMB submitted to the DBM.
- Administrative systems and surveys that collect ENR data have not been extensively explored and tapped to produce ENR statistics.
- Data and indicators on new and emerging concerns such as climate change and disaster risk reduction and management (DRRM) have yet to be identified or developed.

►► **There has been little progress in the improvement of ENR statistics due to inadequate coordination, standards and policies.**

- While there are data gaps, there is a wide range of ENR statistics that is being produced by the PSS. However, the generation of data remains fragmented and uncoordinated.
- Implementation of policies and guidelines on ENR data reporting, management, sharing and dissemination is deemed weak despite coordination mechanisms in place.
- Existing frameworks and standards for the production of ENR statistics are found insufficient to meet current information needs and are not always consistent with internationally recognized standards.

►► **Strategies and tools to communicate ENR statistics to stakeholders are inadequate.**

- Users need to be equipped with knowledge in the rational interpretation and use of ENR statistics.

►► **Mechanisms to regularly monitor quality of ENR statistics as well as its sources and methods are wanting.**

- While data validation exercises are being done on some ENR statistics, there is a need for a more detailed and comprehensive data quality review or assessment.

►► **Current infrastructure and technology for data collection are either limited or outdated to meet and keep pace with user demands for more timely and detailed ENR data.**

- There is need to set up more water gauging stations to monitor streamflow in other major water bodies in the Philippines.
- Air pollution monitoring devices have to be installed in other major urban centers of the country to gather more complete data.

►► **The statistical capability and skills of personnel in ENR data producing agencies need strengthening to**

support increasing demand for more relevant, frequently available, and better quality ENR data.

- DENR personnel at the local levels need to enhance capability to carry out statistical activities/projects through the conduct of training in data generation, management and dissemination and analysis.

►► Allocation of resources for statistical activities needs to be rationalized.

- Statistical human resources for the generation of ENR data are declining and may prove incapable of addressing the continued rise in demand for more and improved ENR statistics, *e.g., inadequate statistical personnel for field and onsite data collection*. Separate units or positions dedicated to statistics in critical ENR data producing agencies such as the DENR and its bureaus and attached agencies, NSCB, and NEDA are imperative.
- There is need to increase financial resources to support regular collection and dissemination of ENR statistics and production of new ones.

## Statistical programs

The following are the major statistical programs to improve and further develop ENR statistics:

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. Generation of updated ENR data with more area-specific disaggregation through surveys, assessments, inventory, and environmental monitoring stations
  - Completion of cadastral surveys
  - Generation of new data on protected areas, forestland/cover, wetlands, areas susceptible to geohazards, and mineral explorations
  - Review and designation of more ENR statistics
2. Development and generation of ENR data from administrative-based information systems
  - Environmental Impact Assessment (EIA)
  - Monitoring of atmospheric temperature and typhoons
3. Development and compilation of ENR indicators relating to MDGs, climate change, including PEENRA and wealth accounts
4. Automation of data collection and processing systems through ICT applications and solutions
  - Application of GIS/GIM technology, remote sensing, and other appropriate ICT tools in statistical activities
  - Operationalization of the Philippine Geoportal

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

5. Development and improvement of an ENR statistics web portal as means for data sharing among ENR data producers and stakeholders, and for improving information validation and diffusion
6. Development of statistical reports, publications and analytical papers on ENR and related concerns
  - Regular/periodic publication of a statistical report on the State of the Environment (SOE) in the Philippines
  - Updating and regular publication of the compendium of ENR statistics, etc.
7. Conduct of statistical appreciation, training, and consultation forums
  - Appreciation and consultation workshops among environmental and local development planners, policymakers, ENR program implementers/law enforcers, academe, environmental advocacy groups, local communities, among others
  - Training of users including media, policymakers and planners on rational interpretation and use of statistics

*To enhance statistical capacities of data producers and providers*

8. Conduct of statistical and related technical training for agencies and personnel involved in the collection, management, reporting/dissemination and analysis of ENR statistics
  - Compilation and analysis of environmental accounts and other ENR related indicators
  - Basic ENR data collection by DENR and relevant NGAs and LGUs
9. Conduct of methodological studies to develop and enhance frameworks and methodologies for analyzing impacts of climate change in different ecosystems, researches and studies on valuation and vulnerability
10. Participation in and hosting of international conferences, training, workshops, and expert group meetings to develop and upgrade methodological frameworks and manuals on ENR statistics
  - United Nations Committee of Experts on Environmental-Economic Accounting (UNCEEAA)
  - London Group on ENR statistics

*To improve coherence, effectiveness, and efficiency of the statistical system*

11. Adaptation of updated/new international ENR statistical frameworks, standards and classification systems
  - Updated PFDES
  - Revised SEEA, green economy and wealth accounts
  - Classification of Environmental Activities (CEA), and
  - Standard ENR concepts and definitions
12. Formulation and implementation of appropriate policies, standards, and guidelines for the

generation, reporting and dissemination of ENR data, which include, among others

- Data reporting on small-scale mining, stone quarrying, and solid wastes
- Validation of data on forest products
- Data sharing and pricing of ENR statistical outputs

13. Implementation of the ARRCs in the ENR sector

14. Implementation of a data quality assurance framework for ENR statistics

*To increase and sustain resources for statistics*

15. Strengthening of institutional coordination within the PSS and between PSS and the DBM, legislative bodies, and development partners to ensure

funding of the continuous improvement and production of critical ENR statistics

- Increased coordination and cost sharing for the conduct of multi-sectoral statistical undertakings including integrated mapping activities

16. Institutionalization of sustainable financing for ENR statistics

- Creation of statistical units and positions at the DENR and its bureaus and attached agencies, NSCB, and LGUs
- Integration of statistical activities in the related agencies' and LGU budgets



## Chapter 21

# Science and technology and innovation statistics

### Introduction

Science and technology and innovation (STI) are key to the country's economic and social progress. Traditionally, STI are viewed as sources of new knowledge, products, and services that benefit the economy and society. In recent years, STI is increasingly viewed as key solution providers towards addressing many of society's challenges, such as speeding up industrial development, slowing down if not combating environmental degradation and resource depletion, promoting sustainable agriculture, developing renewable energy, reducing and managing disaster risks, addressing impact of climate change, and narrowing social and economic gaps.

The level of scientific and technological reception and diffusion is generally considered as an important factor that defines the social and economic divide between developed and developing countries. In more progressive nations, science and technology (S&T) is ingrained in the educational and governance systems which makes easier for technological advances to find their uses in homes and industries. In developing countries like the Philippines, more efforts are needed to increase generation of new knowledge and to facilitate transformation of knowledge into productive uses. Stronger advocacy, increased technological literacy through education and training, better policies, and more investments are therefore crucial.

In line with the goals of the **PDP 2011-2016**, the STI sector commits to contribute a higher share to GDP through investments in S&T education and health, improvement in governance, research and development (R&D), and S&T policies. It shall implement the National Science and Technology Innovation Plan (NSTIP) to address challenges in key result areas of R&D, technology transfer, human resource development, S&T innovation and promotion, information dissemination and advocacy, and networking.

A sound and comprehensive information base on the country's flows and stocks of scientific and technological resources is critical in monitoring progress of STI goals and in guiding the formulation of more effective S&T policies and programs that optimize the benefits of STI in a knowledge-based economy.

This chapter aims to strengthen the STI statistical data system to address information needs for the monitoring and evaluation of STI goals and targets in the NSTIP, PDP, and emerging development concerns.

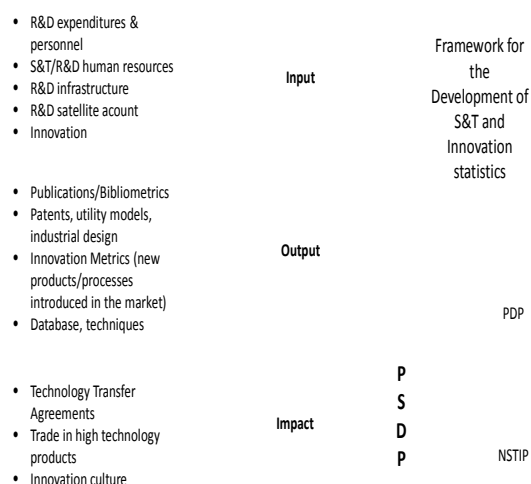
### Scope and coverage

This chapter deals with statistical data and indicators that measure and monitor activities and developments in the STI sector. The statistical framework for the development of STI statistics is based on the STI sector development process as follows:

- STI resources (Input)
  - R&D expenditures
    - R&D expenditures by public and private institutions and by industry and region
    - R&D expenditures as share of GDP
    - R&D satellite accounts
  - S&T/R&D human resources
    - R&D personnel, *e.g., scientists and engineers, technicians, and auxiliary personnel* by sex and region
    - R&D Centers of Excellence/Development
    - Student enrolment, scholarships, and graduates in S&T courses
    - Registered professionals in S&T-related courses/fields
    - Employment of S&T professionals
    - S&T skills inflow/outflow
  - R&D infrastructure
    - Expenditures on capital outlays, *e.g., facilities, laboratories, equipment, and other capital outlays including land, building and structures used for R&D projects and activities*
  - Innovation
    - Innovation (products and services) expenditures
    - Innovation active establishments/industries
    - Product and/or process innovators
- STI products and services (Output)
  - Patents for inventions, utility models and industrial design, and copyrights
  - Scientific publications/bibliometrics
  - R&D services rendered, including assistance to micro, small, medium enterprises (MSMEs)
  - Technology transfer
  - Innovation metrics
- Socio-economic benefits of STI (Impact)
  - Trade in high technology products
  - Innovation culture
  - Collaborations/partnerships in R&D

- New employment generated
- Spin-off companies established
- Public registry of existing inventions that are useful to society

Figure 1. Science & Technology, and Innovation Statistical Framework



Statistics pertaining to ICT are presented separately in Chapter 12 – Information society statistics, while other related statistics are discussed in relevant chapters, among which are Chapter 5 – Macroeconomic accounts and statistics and Chapter 20 – Environment and natural resources statistics.

## Situational analysis

STI statistics are produced through statistical surveys and administrative-based data reporting systems of various government agencies spearheaded by the DOST and its attached agencies. The few statistical surveys are conducted by the NSO. Other agencies and institutions that generate STI related data include the Commission on Higher Education, Intellectual Property Office of the Philippines, Bureau of Product Standards, and state universities and colleges.

Coordination of STI statistics development is lodged with the Interagency Committee on Science and Technology Statistics (IACSTS), the DOST, and the NSCB.

## Key developments in 2005-2011

►► **Conduct of the DOST Survey on R&D Expenditures and Human Resources.** The survey, conducted every two years, gathers statistical data on R&D activities of government agencies, higher education institutions and private non-profit institutions. The results serve as basis of the DOST in setting R&D directions and priority areas as

well as in formulating better policies and programs. The last survey conducted was in 2012, with the year 2011 as reference period. On the other hand, data on R&D expenditures and personnel of the private industry sectors were collected through the ASPBI of the NSO.

►► **Compendium of S&T Statistics.** The publication, which was prepared by the DOST for the first time and released in 2010, is intended to present available statistics on S&T for use by the planners and decisionmakers. The Compendium contains statistics on R&D expenditures and human resources, R&D indicators of selected neighboring countries, intellectual property statistics, and Philippine rankings in world competitiveness factors.

►► **Conduct of the NSO Survey on Innovation Activities by Establishments (SIA).** This is a new survey which was conducted by the NSO in 2010 for the DOST. The survey was intended to establish baseline information on innovative activities of establishments in order to mainstream innovation-system approach into the centerstage of national policymaking. The survey gathered information on innovative behaviour of establishments in selected Philippine areas and industries to determine the factors that drive their innovation performance. Results of the survey were presented in several forums.

## Issues and challenges

Among the key issues and challenges in the development of STI statistics are as follows:

►► **Despite the establishment of the IACSTS, statistical policies and mechanisms are still inadequate to address key issues in the generation and dissemination of STI statistics/indicators.**

- Institutional coordination among STI-related agencies is still deemed weak.
- The IACSTS needs to strengthen strategic planning to be able to identify appropriate policies and mechanisms towards production of priority or critical statistics and/or addressing statistical capacity building needs.
- There have been no initiatives to consider information needs at the local levels.

►► **The existing set of STI statistics and indicators is deemed inadequate to effectively monitor and evaluate development goals.**

- The current statistical framework may need to be revisited and enhanced to consider identification or development of more relevant and appropriate indicators at each level of development framework.
- Plans for the development of the R&D satellite accounts have not been pursued due to inadequate resources and lack of clear direction.
- There is currently no local-level STI data produced in the PSS.
- A comprehensive data assessment is necessary to facilitate analysis of demand for and supply of statistics based on policy needs at the national and local levels.

►► **Although there is reasonable selection of available data on STI, these are not easily accessible.**

- Users in general are not informed about which statistics are available or where their sources are.

- STI statistics are spread among various source institutions. Data sharing and dissemination of STI statistics are limited and mostly confined within agencies or among a few concerned institutions.

►► There is need to create more awareness of STI statistics/indicators among stakeholders and how these are used in planning and decisionmaking.

- Aside from information dissemination, it is also important to illustrate pertinent policy uses of STI statistics among data providers and prospective data users to generate support to statistical inquiries on STI.

►► As collection of STI data increases the need to organize and preserve them becomes more imperative.

- There are currently no established systems to consolidate and preserve STI data.

►► Statistical capability among S&T institutions and personnel and among data providers and users needs enhancement.

- S&T institutions need further training on data collection, processing, data mining and analysis, as well as in the adoption/ implementation of internationally recommended standards, methodologies and best practices.

►► Resources for the generation and dissemination of STI statistics are deemed insufficient.

- The current human resources for statistics in S&T institutions are limited relative to demand. Statistical functions are merely integrated with planning or administrative functions.
- Applications for statistics and related courses under the Science Education Institute (SEI) Scholarship Programs have been very few.
- Financial resources for statistical activities/ operations have not been sustained which caused long time lag of some data.

- Collection of data on production of technology commodities
- Improved data collection on human resources for S&T, patents and R&D expenditures.
- Development of systems to collect data for the compilation of technological readiness, e.g., internet users, broadband internet subscriptions, and internet bandwidth, and innovation indicators (utility patents)

### 3. Development and compilation of the R&D satellite accounts

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

### 4. Development and improvement of a statistics web portal for STI statistics to consolidate all relevant data and information resources

- Establishment of an integrated STI data archive/warehouse system

### 5. Development and dissemination of IEC materials on STI statistics

- Updating of the Compendium of Philippine S&T statistics and indicators
- Publication of S&T Human Resource Indicators
- Media releases
- Partnerships between local and regional institutions

### 6. Conduct of statistical advocacy and appreciation programs

- Conduct of media briefings/press conferences on important data/product releases
- Conduct of appreciation seminars and training on the rational use of STI statistics
- Dialogue/consultative forums among STI data producers, providers and users, including planners and policymakers, media, and other stakeholders for the improvement of STI statistics

### 7. Participation in international cooperation activities on STI statistics and indicators

- Provision of country data and inputs to international inquiries and requests, e.g., World Competitiveness Report (through the Policy Center of the Asian Institute of Management), Global Competitiveness Report (through the Institute for Management and Development), ASEAN S&T Indicators, and UNESCO Institute of Statistics

*To enhance statistical capacities of data producers and providers*

### 8. Conduct of methodological studies for the development and improvement of STI indicators

- Development of methodologies for the compilation of R&D satellite accounts
- Development/study of indicators to measure STI development goals

### 9. Conduct of training and capacity building programs

## Statistical programs

Following are the strategic measures that will be undertaken towards the development of the STI data system:

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

### 1. Improvement of STI and related surveys and conduct of new ones

- Adoption/application of innovative technologies in conducting surveys, e.g. web-based surveys/online questionnaire, etc.
- Improved R&D surveys
- Conduct of innovation surveys

### 2. Enhancement of administrative and reporting forms of S&T institutions for the generation of STI statistics/indicators

- Technical training for the development and compilation of R&D satellite accounts
- Statistical and related technical training of agencies engaged in the collection, management, reporting, dissemination, and analysis of STI statistics
- Appreciation forums for data providers to increase data reporting or improve response to statistical inquiries

10. Participation in and hosting of relevant international conferences, training, workshops, and expert group meetings on STI statistics and indicators

*To improve coherence, effectiveness, and efficiency of the statistical system*

11. Enhancement of the statistical framework for STI to consider emerging developments
12. Strengthening of institutional coordination for improvement of STI statistics
  - Strengthening of the IACSTS and its technical working groups
  - Implementation of statistical coordination mechanisms at the local level such as interagency cooperation
13. Formulation and implementation of policies, standards and programs on the generation and dissemination of STI statistics and indicators

- Formulation of standard concepts and definitions for statistical purposes consistent with international recommendations
- Formulation of policy for the generation and dissemination of local-level STI data
- Adaption/implementation of international principles, frameworks, and declarations on STI statistics

14. Implementation of a data quality assurance framework for STI statistics

*To increase and sustain resources for statistics*

15. Strengthening of institutional coordination within the PSS and between PSS and the DBM, legislative bodies, and development partners to ensure funding of the continuous improvement and production of critical STI statistics
16. Advocacy for availment of scholarship in statistics to promote the statistics profession and increase supply of human resources in the PSS
17. Upgrading of ICT resources to support automation of collection, processing and dissemination of STI statistics consistent with agencies' Information Systems Strategic Plan





cluster7

Governance, peace, and  
security



## Chapter 22

# Governance statistics

### Introduction

Good governance is widely regarded as the collective responsibility of the government, civil society, and the private sector in improving the lives of the people, especially the poor. It has long been recognized that good governance is key to attaining society's development goals.

The **PDP 2011-2016** acknowledges that good governance should set the normative standards of development as it fosters participation, ensures transparency, demands accountability, promotes efficiency, and upholds the rule of law in economic, political, and administrative institutions and processes.

The PDP puts good governance at the core of the government's strategy to create an enabling environment for citizens and all sectors of society to reach their full potentials towards achieving inclusive growth and reduced poverty. In this regard, the PDP provides the strategic framework and identifies the necessary measures and enabling mechanisms to:

- ensure high-quality, efficient, transparent and accountable, financially and physically accessible and non-discriminatory delivery of public services;
- curb both bureaucratic and political corruption;
- strengthen the rule of law; and
- enhance citizens' access to information and participation in governance.

As the need for good governance and development intensifies, the demand for comprehensive, objective, reliable and up-to-date governance statistics increases and becomes more urgent.

While several governance indicators have been developed at the international and country level, often based on perception surveys, there are not enough useful and objective indicators that can be used to guide policymakers and stakeholders at the national and local levels.

This chapter identifies the priority statistical programs and activities in the medium-term, which are geared towards mainstreaming the generation of governance statistics in the PSS to promote social accountability and good governance through more evidenced-based policy and decisionmaking in the country.

### Scope and coverage

As defined by the UN, "governance" refers to the "exercise of the economic, administrative and political authority to manage the country's affairs at all levels." It is a joint responsibility and collective undertaking of citizens and residents of the country, especially the three lead actors in society, namely, the government, private sector, and civil society.

Although there is no prescribed international standard framework on governance, it is widely recognized that good governance should manifest the following qualities or elements: transparency, accountability, effectiveness and efficiency, rule of law, equity, responsiveness, and participation. These set of qualities or elements need to be translated into an operational statistical framework to enable objective measurement of good governance.

A major challenge to the statistical system, therefore, is translating the above qualities of governance into a realistic and measurable framework and set of indicators that will be useful in monitoring and assessing governance performance in the country.

This chapter covers the statistical data and indicators that can provide quantitative measurement of key policy areas in governance as identified in the PDP:

- **Public service delivery.** This covers data and indicators on the adequacy, effectiveness, and efficiency of delivery of public services, *e.g., statistics on the Anti-Red Tape Act (RCS ARTA), local governance performance, administrative good governance index (AGGI) as a component of the good governance index (GGI).*
- **Political processes and systems.** This includes statistics on the effective implementation of democratic processes in the country such as elections statistics, *e.g. voters' turnout rate, number of dominant political parties, and number of contested election results.*
- **Rule of law.** This component covers statistics and indicators pertaining to peace, order, and security, *e.g., law enforcement, prosecution, adjudication of cases, corrections*
- **Citizen participation and responsibility.** This policy area includes statistics and indicators on people's empowerment and direct participation in the community or national decisionmaking, *e.g., number of volunteers and civil society organizations engaged in, but not limited to, monitoring and assessing government*

*disbursement/ budget concerns and citizens' responsibilities and compliance/non-compliance to existing laws, e.g., cases of tax evasion and traffic violations.*

- Integrity. This priority area includes statistics and indicators that measure transparency and honesty in government transactions and absence of graft and corruption, *e.g., graft and corruption cases filed and resolved, preventive measures developed, and compliance to anti-corruption laws and practices.*
- Gender roles in governance structures. This component includes statistics and indicators on GAD in governance policy, structure, and processes, especially gender equity, *e.g., women elected in key government positions, poverty among women, contribution of women in the economy.*

Statistics on governance are also discussed in Chapter 4 – Local statistics development, Chapter 19 – Statistics on children and gender and development, and Chapter 23 – Peace and security statistics.

## Situational analysis

### «Key developments in 2005-2011

While the importance of monitoring and assessing governance has been widely recognized, there have been few initiatives in the PSS to generate data and statistics on governance during the period 2005 to 2011. Some of the pioneering initiatives include the:

» **Development of the GGI for provinces and municipalities.** Although GGI was first introduced in 2004 at the 9<sup>th</sup> NCS, the NSCB upon enhancement of the framework and methodology, released the official GGI for all provinces and municipalities for the years 2005 and 2008 in January 2011. The GGI is a composite index developed by the NSCB to provide an objective, comprehensive and comparable measure of good governance to guide stakeholders including the public in assessing the performance of national and local governments. It aims to promote more evidence-based policymaking and decisionmaking, and in particular, draw attention to good governance outcomes by LGUs in order to encourage and sustain best practices and determine and address specific areas for improvement.

» **Conduct of a rider survey to the 2010 Annual Poverty Indicators Survey (APIS) on actual experience of households on bribery and corruption.** This rider survey to the 2010 APIS is a joint undertaking of the NSO and the Office of the Ombudsman and was administered to all APIS sample households all over the country. The survey aims to generate statistical data on the actual experience of households in bribery and corruption.

» **Local Governance Performance Management System (LGPMS).** Launched at the national level and in

selected cities in 2004, the LGPMS has been rolled out to all provinces and cities since 2005. The LGPMS is a self-assessment and survey tool that generates data and information about the performance of the local governments and the state of development in the provinces, cities, municipalities, and *barangays*. It is spearheaded by the DILG in partnership with NGAs, local government leagues, civil society organizations, business community, international development partners, and other stakeholders. Coordination between DILG and selected NGAs has been ongoing towards inclusion of important indicators on tourism and health.

### » 2010 ARTA Report Card Survey (ARTA RCS).

Pursuant to Republic Act 9485 - "Anti-Red Tape Act of 2007", the CSC, in coordination with the DAP, has started conducting the annual ARTA RCS in 2010 to enhance the quality of NGAs' frontline services through improved agency compliance with their citizens' charters as well as to generate data that serve as basis for policy recommendations towards curbing inefficiencies and problem areas in the bureaucracy. Clients evaluate agencies' performance in terms of compliance with ARTA provisions, service quality, personal disposition of the frontline service provider, and physical working conditions.

### » Implementation of the Philippine Governance Indicator Survey Tools.

This project was undertaken by the UPNCPAG in collaboration with the NSCB under the UNDP-Oslo funded project "Pro-Poor and Gender Sensitive Democratic Governance Indicators for Policy Reform". The joint project has two components which were implemented in 2005: the conduct of a survey on the governance indicators users in the country and preparation of a user' guide on national governance measurement sources.

### «Issues and challenges

The generation of governance statistics is largely fragmented and uncoordinated. At present, there is little information on what is available and which agencies produce the data. There is no formally established system of data collection nor institutional mechanisms to coordinate, consolidate, and disseminate governance statistics.

The compilation of governance statistics is not yet mainstreamed in the PSS partly due to conceptual and measurement issues. For instance, few scientific studies or surveys have been undertaken to determine and compare the quality of public service delivery against certain standards. Due to unavailability of relevant data inputs, proxy indicators are sometimes used but these indicators tend to reflect only the volume or quantity of services delivered and extent of availment but do not reflect the quality of public services delivered, *e.g., total number of barangay schools, total enrolment in elementary schools and high schools, and number of hospitals.*

Although some data are available at the local levels, there are problems with coverage, timeliness, and reliability, especially those that are generated through devolved functions such as health services.

Some of the priority issues and challenges that need to be addressed in the next program period 2011-2017 are as follows:

►► There are currently no official statistical framework and appropriate statistical standards and policies to guide the development of governance statistics.

►► Data collection is highly fragmented and data sharing is weak.

- There is lack of statistical coordination and weak interagency linkages. There is no officially recognized delineation of responsibilities in generating governance statistics.

►► Dissemination of the few available statistics is poor and utilization of data is very limited both at the national and local levels.

►► There is general perception that appreciation of governance statistics by policymakers, including local chief executives, is weak.

►► Statistical capacity of human resources needs to be strengthened to enable the generation of timely and relevant governance statistics.

- In general, the generation or compilation of governance statistics is but a small part of wider functions and responsibilities of concerned government personnel. These personnel often do not have the appropriate technical knowledge and skills in statistics to be able to incorporate statistical principles in their data collection and dissemination as well as evaluate quality of information.
- Government personnel that have been tasked to compile governance statistics must be equipped with appropriate knowledge and technical skills as well as be oriented on relevant internationally recommended standards, methodologies, and best practices.

►► Many NGAs and LGUs do not have organizational resources, *e.g., statistical units and/or positions and financing*, to carry out data collection, analysis and dissemination.

## Statistical programs

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. Enhancement of governance information systems and production of better quality statistics, including local-level data
  - Improvement of the GGI
  - Review and compilation of data/statistics from the LGPMS
  - Enhancement of the Government Integrated Financial Management Information System (GIFMIS) to be consistent with the GFS Manual

- Generation of data from national and local administrative monitoring and information systems such as tax mapping/collection systems

## 2. Development and compilation of relevant governance statistics/indicators

- Development of indicators on labor market governance, citizens' participation and responsibility in good governance, *e.g., tax compliance/evasion, and volunteerism*
- Estimation/valuation of costs and benefits of good governance
- Collection of statistics on bribery, graft and corruption through monitoring systems and relevant household/establishment surveys
- Identification of indicators and collection of data on government business processes and services, including client transaction and user services, *e.g., Citizen's Charter monitoring and client satisfaction surveys*

## 3. Development and adoption of ICT applications and solutions in the collection and compilation of governance statistics and indicators

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

## 4. Development of a governance statistics web portal

- Strengthening of information exchange and data sharing among all government agencies

## 5. Development and implementation of IEC strategies and tools for the dissemination and utilization of governance statistics among stakeholders

- Conduct of statistics appreciation seminars/advocacy among stakeholders at the national and local levels on the rational use of governance statistics,
- Preparation of policy-oriented publications
- Use of social networking to disseminate data
- Adoption of innovative approaches to communicate data to users, *e.g., partnerships between data producers and stakeholders (private-public, national-local governments, public-academe, public-media)*

## 6. Development of ICT applications/ solutions, including GIS/GIM, in the dissemination of governance statistics

## 7. Archiving of governance data

*To enhance statistical capacities of data producers and providers*

## 8. Conduct of methodological studies to develop governance indicators

- Study to develop indicators on labor market governance, human/indigenous people's rights, such as the Metagora Project of PARIS 21, gender in governance, costs of governance (including corruption), citizens' participation and responsibility in good governance, such as tax compliance/evasion and traffic violation, and national citizen satisfaction index

9. Conduct of statistical training and other capacity building programs on governance statistics for data producers, including LGUs

- Strengthening of statistical capacity of LGUs through technical training and partnerships between the NGAs and LGUs

10. Participation in and hosting of inter-national conferences, training, workshops, and expert group meetings on governance organized by international organizations

*To improve coherence, effectiveness, and efficiency of the statistical system*

11. Development and adoption of an official statistical framework on governance

- Comprehensive assessment of existing information systems on governance (methodologies, data and capacity gaps, and policy uses)
- Identification of relevant and critical governance indicators

12. Formulation and implementation of standards, policies and mechanisms for coordination, generation, and dissemination of governance statistics

- Development of standard concepts and definitions
- Delineation/designation of statistical responsibilities
- Formulation of data dissemination and disclosure policies including those on highly sensitive information, etc.

13. Creation of an interagency committee on governance statistics to coordinate the development of governance statistics and to resolve related statistical issues

*To increase and sustain resources for statistics*

14. Creation of statistical units and/or statistical positions in NGAs and LGUs to ensure regular generation and dissemination of regular, timely, objective, and reliable governance statistics

15. Advocacy for sustained provision of financial resources for the generation of governance statistics and integration of statistical activities in the regular budgets of concerned agencies

## Chapter 23

# Peace and security statistics

### Introduction

Peace and security are important requisites to ensuring the political, social, and economic growth and stability of the country and form a major pillar of good governance. The state of peace and security in the homes, neighborhoods, and communities affects all individuals and institutions in the society.

The **PDP 2011-2016** recognizes that a stable national security environment is crucial in achieving the country's development, human security, and general welfare goals. The Plan also emphasizes the national goal to achieve national stability through an appropriate and adequate response to internal conflicts and external threats, and for the Philippines to become a responsible partner in promoting peace and good relations among other nations within a framework of national sovereignty and territorial integrity.

Specifically, the PDP seeks to attain by the end of the Plan period:

- Internal stability promoted and sustained;
- Full sovereignty and territorial integrity of the state protected;
- Highest standard of capability and preparedness against natural and man-made calamities and disasters achieved;
- Security sector reform (SSR) and modernization initiatives carried out; and
- National development programs supported.

The Philippines is signatory to various international conventions and declarations to promote and maintain peace and security within its territory and across nations. These include the 1985 UN Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power, UN Convention Against Transnational Organized Crime, Universal Declaration of Human Rights, Convention on the Rights of Children, Beijing Platform of Action, Millennium Declaration, as well as other bilateral and regional peace agreements such as the 1976 Tripoli Agreement and ASEAN Nuclear-Free Zone Treaty, respectively.

Monitoring compliance to these international commitments and agreements require a comprehensive database of timely, reliable and accurate information. It is imperative that the statistical system provides quality statistics to help monitor and evaluate peace and security situation and assess the impact of reforms towards the achievement of the above goals.

This chapter outlines the major statistical programs and activities needed to develop and generate peace and security statistics in aid of evidence-based policy and decisions.

### Scope and coverage

While peace and security statistics form a major component of the statistical framework of governance, a separate, dedicated chapter in the PSDP is deemed appropriate in recognition of the strategic and expansive role of peace and security in national development.

This chapter covers data and indicators on:

- Justice and crime/law and order
  - Law enforcement
  - Prosecution
  - Courts/adjudication
  - Corrections
- Conflict/crisis management and prevention
  - Peace process/armed conflict management
  - Humanitarian assistance
  - Terrorism and counter-terrorism
  - Disaster risk reduction and management
  - Public/community safety
- Territorial security
  - Upholding territorial integrity which includes data on compliance or intrusions on Philippine waters/Philippine Exclusive Economic Zone
- International relations
  - Transnational crimes, *e.g. human, arms, and drug trafficking, smuggling, money-laundering.*

Related statistics on transport safety are discussed in Chapter 10 – Transport statistics.

### Situational analysis

Most peace and security statistics are produced from the regulatory and administrative reporting and information systems of the PNP under the supervision of the NAPOLCOM and the DILG, the DOJ, the Supreme Court, the DND including the AFP and other relevant agencies. Some surveys to generate peace and security statistics were also conducted by the NAPOLCOM in selected provinces in the country during the period



2005 to 2011. Statistics on disaster incidents are regularly compiled by the National Disaster Risk Reduction and Management Council (NDRRMC) through the Office of the Civil Defence (OCD).

## «Key developments in 2005-2011

The significant statistical developments in the previous plan period are:

» **Establishment of the National Crime Reporting System (NCRS).** The NCRS is a new system implemented by the PNP starting in 2009 to generate timely and accurate crime statistics. Crime incidents are reported by all PNP field units to the national headquarters for centralized recording through the use of the Unit Crime Periodic Report (UCPER). The UCPER replaces the old Police Regional Office Periodic Report (PROPER) and prescribes a uniform procedure for the PNP in reporting and collecting crime data including cases reported by other law enforcement agencies that compose the Criminal Justice System. It is designed to promote consistency in recording crime incidents to serve as an effective tool in deriving accurate assessment of the prevailing crime situation.

The NCRS was formulated in preparation for the ultimate adoption of a computer-based Crime Information System to generate more accurate crime statistics and promote efficiency in arresting suspects.

» **2008 Crime Victimization Survey (CVS).** The survey implemented by the NAPOLCOM in 2008, covered experiences of victimization during the years 2005-2007. The objective of the survey is to present the nature and extent of crime victimization in the provinces although the survey instruments were administered at the regional offices. It also determined the rate and the reasons for reporting and non-reporting of crime victimization and the types of crimes, which are usually reported and not reported to the police. This was undertaken in aid of policy formulation related to improving crime prevention measures, victims' protection and police services. The survey, however, covered selected provinces only due to budget constraints.

» **The Nationwide Survey on the Public Perception on Community Safety.** Conducted by NAPOLCOM in 36 areas/cities nationwide, the survey aims to determine the level of safety in selected cities in the country and assess the crime prevention programs in the community and its effect in the maintenance of peace and order. The survey likewise solicited the views of the public on how to improve safety in the community.

» **Establishment of a Research Databank on Crime Prevention and Criminal Justice.** The project attempted to compile and collate existing local research studies/theses in relation to crime prevention and criminal justice by the different government agencies, non-government organizations, and different colleges and universities in Metro Manila. This databank on crime prevention and criminal justice policies, practices and programs shall provide the much-needed guidance to researchers and policymakers on crime prevention and criminal justice. The research team gathered a total of 214 abstracts and information from different schools and government agencies and also concentrated on maintaining and

updating the nationwide crime statistics from the different police stations/units.

During the period, 10,289 monthly crime statistics reports were received, of which 10,267 were encoded. Likewise, in the maintenance of Complaints Standard Reporting Format (CSRF), a total of 4,057 accomplished CSRF was received. Through the cooperation of the different heads of educational institutions and *barangay* officials, the Napolcom Regional Offices were able to monitor various activities of 354 Student Crime Prevention Committees (SCPCs) and Barangay Peace and Order Committees (BPOCs).

» **Creation of the Interagency Committee on the Security Sector Statistics (IACSSS) in 2009.** The IACSSS was created through NSCB Memorandum Order No. 009, series of 2009, on July 6, 2009 to serve as a forum for the discussion and resolution of statistical concerns and issues, develop the conceptual and statistical frameworks and standard concepts and definitions, review current techniques and methodologies in the production of relevant data, and recommend measures to enhance the dissemination of security statistics including accessibility of metadata. It was also created to recommend efficient workable schemes for the allocation of agency responsibilities in the production of security sector statistics.

» **Improvement in case docketing and reporting system for the National Prosecution Service of the DOJ.**

Undertaken by the DOJ through its National Prosecution Service in 2006, the initiative standardized and corrected the counting of cases filed and convictions and improved the analysis of resulting data.

» **Enactment of Republic Act No. 10121, "An Act Strengthening the Philippine Disaster Risk Reduction and Management System, Providing for the National Disaster Risk Reduction and Management Framework and Institutionalizing the National Disaster Risk Reduction and Management Plan, Appropriating Funds Therefor and for other Purposes."** RA 1021, approved in 2010, reorganized the National Disaster Coordinating Council into the NDRRMC with the task of timely provision of status of disaster preparedness, prevention, mitigation, response and rehabilitation operations being undertaken by the government, civil society organizations, private sector, and volunteers. The NDRRMC reports include statistics on destructive typhoons, affected areas/families/persons, casualties, damaged houses/properties, as well as information on armed conflict, traffic/vehicular accidents, flooding incidents, among others, in all areas of the country, and corresponding actions taken.

## «Issues and challenges

Similar to other countries, the official statistics on peace and security in the Philippines represent only the documented cases which are brought to the attention of the police and other peace and security agencies and may not reflect the true picture of the peace and security situation in the country.

Several factors contribute to the lack of accurate picture of the peace and order situation in the country, especially on crime incidence. One is the fragmented system of crime reporting or the absence of a



centralized repository of records of crime incidents and other peace and security violations. Victims of crime may report to the *barangay* (village) officials, the NBI, the PDEA, and other law enforcement agencies, depending on the type and gravity of crimes. The victims may also choose not to report the violation due to personal reasons such as fear for his or her own or family member's life or lack of trust in the police and the criminal justice system and other factors which can be attributed to the offender and the type of crime victimization. In this regard, victimization surveys provide supplemental information on the actual crime incidents and other peace and security offenses.

On the other hand, the global economy and rapidly changing technologies resulted in the emergence of non-traditional security concerns such as international terrorism, human and drug trafficking, transport and vital utilities security risks, international humanitarian assistance, money laundering, and other incidents. Hence, there is a growing demand for more peace and security information amidst the declining manpower resources in government agencies arising from the ongoing rationalization program.

Given these developments, the key challenges in the development of the peace and security statistics that need to be addressed in the program period 2011 to 2017 are as follows:

►► Despite institutional mechanisms and linkages in place, data collection has remained fragmented and data sharing is still weak.

- The proposed National Crime Information System that sought to connect the databases and promote data sharing among the key peace and security agencies was not implemented.

►► There is no comprehensive set of relevant indicators to monitor peace and security at the national and local levels.

- The lack of official statistical framework and unclear delineation of statistical responsibilities among concerned agencies and stakeholders have hindered the development and generation of relevant peace and security indicators.
- Meanwhile, demand for new statistics on emerging or non-traditional peace and security concerns as well as statistics on disaster preparedness has been increasing.

►► There is need to improve the timeliness, coverage, and accuracy of peace and security statistics being generated from administrative reporting systems and household surveys.

►► Improvements are needed to better package and disseminate peace and security statistics through advanced technology.

►► Agencies mandated to collect peace and security statistics do not have statistical units and/or statistical positions to undertake necessary statistical activities.

►► There is need to strengthen advocacy for greater appreciation and use of statistics in evidence-based policy and decisionmaking at the national and local levels.

►► Statistical capacity of data producing agencies in the implementation of statistical standards, development of methodologies, and ensuring data quality needs improvement.

- The concerned peace and security agencies have inadequate statistical capacity to generate and disseminate quality statistics.

## Statistical programs

The following statistical programs are intended to establish a well-coordinated data system for the regular production and dissemination of peace and security statistics:

*To deliver more timely, accessible, coherent, comparable, comprehensive, and relevant statistics*

1. **Enhancement of existing administrative reporting systems that generate data and indicators on peace and security and development of new ones**
  - Development of data and indicators on non-traditional security concerns such as disaster risk reduction and management, vulnerability, transnational crimes including human and drug trafficking, terrorism and counter-terrorism
  - Improvement of the compilation of administrative-based data on violence against women and children (VAWC)
  - Establishment of the National Crime Information System and Philippine Security Information System (PSIS)
2. **Strengthening of existing surveys generating peace and security statistics and conduct of new surveys**
  - Conduct of crime victimization survey and other international surveys with Philippine participation
  - Survey on violence against women and children
3. **Enhancement of local-level data collection systems and databases on peace and security**
  - Review and standardization of administrative reporting forms
  - Generation of local-level and sectoral statistics on disaster and vulnerability
  - Generation of community-level data in support of the peace process, *e.g., data on NPA-infested areas, conflict cleared-barangays, etc.*
  - Generation of peace and security data by congressional district
  - Generation and dissemination of local-level peace and security statistics from national information and monitoring systems
4. **Improvement of peace and security data collection, processing, and compilation systems through ICT applications/ solutions**

*To increase user understanding, capacity, and trust in statistics for wider and rational use of statistics*

5. Development and improvement of a peace and security statistics portal to integrate all available relevant statistics and to institutionalize networking and data sharing
6. Development and implementation of IEC strategies and tools for the dissemination and utilization of peace and security statistics among stakeholders at national and local levels
  - Conduct of statistics appreciation seminars and user-producer forums
  - Publication of peace and security statistics in print and online
  - Preparation of statistics-based policy papers
  - Promotion of peace and security statistics and development of feedback mechanism through social networking
  - Conduct of statistics appreciation seminars and user-producer forums
  - Publication of peace and security statistics in print and online
7. Application of ICT, including GIS/GIM in the dissemination of peace and security statistics, especially in the generation of geohazard/vulnerability maps

*To enhance statistical capacities of data producers and providers*

8. Conduct of methodological studies to develop peace and security indicators including those on emerging and non-traditional forms, specifically on
  - Crisis management/prevention, disaster risk reduction and management, transnational crimes
  - Valuation approach on costs of armed conflict to economy
  - Measurement approaches for non-traditional security concerns such as human rights, gender, indigenous peoples, transport and infrastructure security, etc.
9. Conduct of statistical training and other capacity building programs for concerned agencies
10. Strengthening the capacity of LGUs through training and technical partnerships between the national and local governments to generate and disseminate peace and security statistics

*To improve coherence, effectiveness, and efficiency of the statistical system*

11. Development and adoption of an official statistical framework on peace and security
  - Comprehensive data assessment of existing information systems on peace and security (methodology, data gaps, and policy uses)
12. Strengthening of statistical linkages and collaboration through the existing IACSSS

13. Formulation and implementation of standards, policies and mechanisms for the coordination, generation and dissemination of peace and security statistics
  - Delineation of statistical responsibilities
  - Strengthening of institutional coordination through memoranda of agreement
  - Development of data dissemination policies including those on treatment of sensitive security information
  - Formulation of standard concepts and definitions for statistical purposes
14. Participation in international cooperation and capacity building programs and projects, and standards and methodological development activities on peace and security statistics
  - Philippines participation in international crime surveys
  - Partnerships on transnational crime data
15. Implementation of the data quality assurance framework for peace and security statistics

*To increase and sustain resources for statistics*

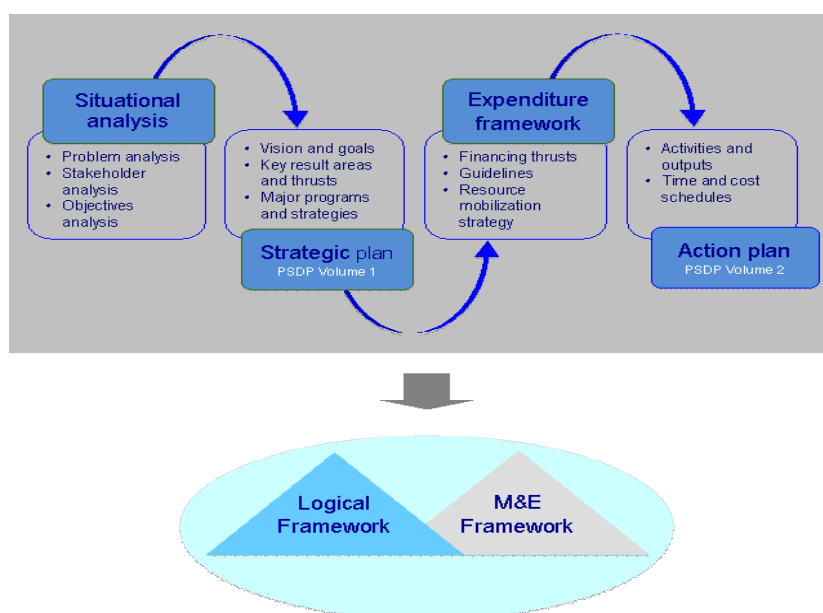
16. Strengthening of institutional coordination within the PSS and between PSS and the DBM, legislative bodies, and development partners to ensure funding of the continuous improvement and production of critical peace and security statistics
17. Institutionalization of sustainable financing for peace and security statistics
  - Creation of statistical units and positions in concerned agencies
  - Integration of statistical activities in the related agencies' and LGU budgets



## Appendix 1

# PSDP formulation process

The formulation of the PSDP 2011-2017 adopts a strategic planning approach which follows a four-stage process: (1) situational analysis; (2) strategic planning; (3) resource analysis and planning; and (4) action planning. This is in general consistent with the principles, process and essential elements for the preparation of national strategies for the development of statistics recommended by the Partnership in Statistics for Development in the 21<sup>st</sup> century (PARIS21). Below is an illustration of the PSDP formulation process adopted.



The situational analysis involves the assessment of the current state of the PSS in relation to the demand for quality statistics (problem analysis), understanding of statistical institutions and their capacities to participate in addressing issues (stakeholder analysis), and identification of key result areas and outcomes (objectives analysis).

In problem analysis, issues and challenges are identified based on an evaluation of all aspects and levels of the statistical process with respect to current practices and previous PSDP, user needs such as those defined in the Philippine Development Plan 2011-2016, and universal or internationally-recognized principles, standards, and practices.

- Statistical outputs are assessed in terms of the basic data quality framework, namely, relevance, accuracy and reliability, timeliness and punctuality, accessibility and clarity, comparability and coherence.
- Statistical infrastructure meanwhile is analyzed in terms of effectiveness and efficiency of the statistical policies, activities, and practices, including management, coordination and research.

In stakeholder analysis, focus is given to the assessment of institutional capacities and organizational development of data producers and analysis of data users, their needs and capacities.

Based on the above analyses, the key result areas and broad outcomes to be achieved are identified.

The strategic framework states the general directions of the PSS. It defines more specifically the vision for the PSS by 2017 and the goals or broad outcomes that characterize the attainment of the vision. It likewise identifies the thrusts in each of the critical aspects of statistical development.

Unlike past PSDPs, the PSDP 2011-2017 shall have as integral part a resource framework containing the human resource and medium-term expenditure frameworks that will define sustainable strategies to ensure provision of appropriate human resource and financing for the implementation of statistical programs and activities.

The strategic and resource frameworks together shall form the strategic plan component of the PSDP, which is the PSDP Volume 1.

The action plan component of the PSDP, to be contained in PSDP Volume 2, shall define the specific programs, projects and activities and their outputs, as well as the time and cost schedules over the plan period.

A monitoring and evaluation (M&E) framework and program shall also be developed to track progress of implementation of the PSDP and the attainment of the vision and goals.

## Appendix 2

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**PHILIPPINE STATISTICAL  
DEVELOPMENT PROGRAM  
2011-2017 Strategic Plan**

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