

The Role of Data in Local and National Evidenced-Based Policy Making

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OUTLINE

I. PRELIMINARIES

I. EVIDENCE-BASED POLICY MAKING

A. THE PHILIPPINE DEVELOPMENT PLAN

B. THE REGIONAL DEVELOPMENT PLANS

C. TOOLS FOR POLICY ANALYSES



Evidence-Based Policymaking



The method of policy development that consults facts, as well as credible and relevant evidence to make decisions over political opinion or theory. (*Blavatnik School of Government, Oxford University*)



A process whereby multiple sources of information, including statistics, data and the best available research evidence and evaluations, are consulted before making a decision to plan, implement, and (where relevant) alter public policies and programs. (*OECD*)

Importance of Data and Evidenced-Based Policymaking

“Accurate data is the lifeblood of good policy and decision-making.”

- United Nations Secretary-General António Guterres

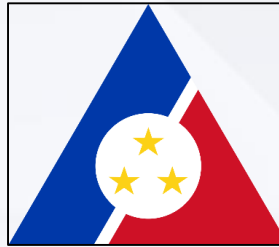


Statistics, numbers, and figures tell the story of our lives. **Having all the needed data is critical to properly evaluate the current state of the world and to determine how best to move forward, improving peoples’ lives.** *(United Nations)*



Data is the foundation of the research that informs the decisions of policymakers and development practitioners. It can spur policy reform efforts by providing benchmarks and examples of best practices. *(World Bank)*

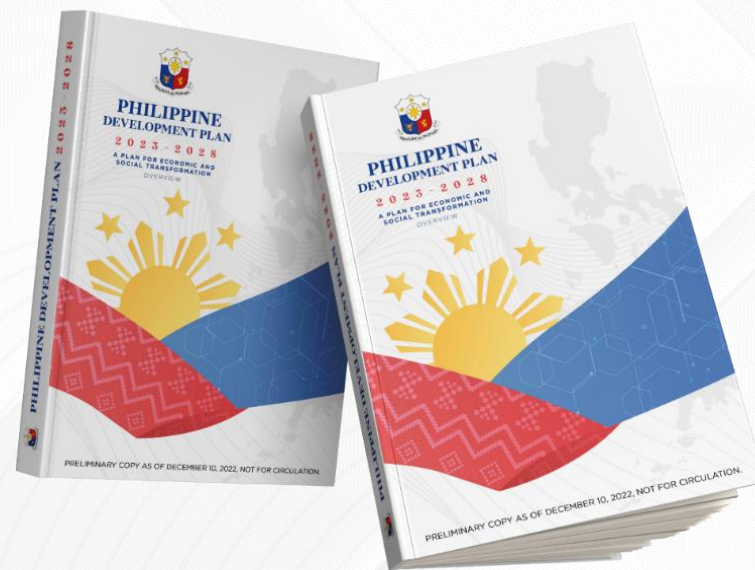
In NEDA, we get data and information from various sources to serve as basis of our policy recommendations.



Evidence-Based Policymaking at Work: **The Philippine Development Plan (PDP)**



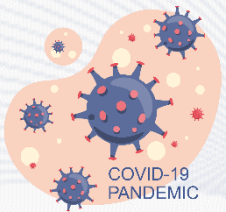
PLANNING PARAMETERS



PDP 2023-2028 Planning Parameters



Experiences and lessons learned from previous PDPs, esp. PDP 2017-2022



Lessons Learned from the Pandemic



Expected global and regional trends



2030 Sustainable Development Goals



AmBisyon Natin 2040 (Long-Term Vision)

8-POINT AGENDA



8-Point Socioeconomic Agenda of PBBM

PDP 2023-2028 Planning Parameters

Experiences and lessons learned from previous PDPs and the Pandemic



Sustained rapid economic growth is necessary to significant poverty reduction.



Resilience-building strategies are just as important as growth-promoting programs.



Governance is more important than government.

We **need** to **INVEST** in



Early Warning
Systems



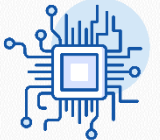
Social
Protection



Resilience-
building



R&D and
Innovation



Technology

There are **limits** to **government resources**; we need **EVERYONE** to help



PDP 2023-2028 Planning Parameters

Expected global and regional trends



Health & Social

- Adjustments to the “new normal” in light of continued COVID cases
- More than half a billion were pushed deeper into poverty due to healthcare costs (WHO, 2021)



Economic

- Global economy is still struggling to recover, with a projected 2.7% growth rate in 2023 (IMF, 2022)
- Total global debt rose by 30 percentage points of GDP in 2020 (Brookings, 2021)
- Despite improvements in GDP growth rate, Southeast Asian economies are still struggling with inflation (ADB, 2022)



Geopolitical

- The Russia-Ukraine conflict poses threats to global commodity markets and supply chains leading to higher food and fuel prices
- Firms and foreign investments are expected to relocate from China to Southeast Asia



Environment

- Threat of “heatflation” due to compromised food supply chains as a result of climate disruptions
- Worsening impact of natural disasters over time



Technology & Regulatory

- At least one-fifth of UN member countries ramped up digitalization in the public sector
- COP26 commits to reducing emissions and capping global average temperature rise to 1.5 degrees

PDP 2023-2028 Planning Parameters

Actions taken to achieve the Sustainable Development Goals (SDGs) should be viewed as complementary, if not concurrent, activity with the implementation of the PDP

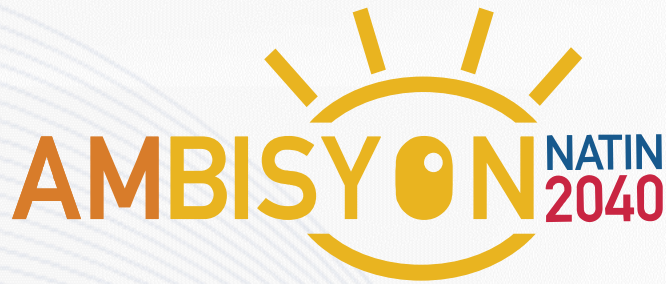
LEAVE NO ONE BEHIND— The guiding principle of world leaders of 193 countries in solving the most pressing problems of today; the Official motto set by the UN for the SDGs every administrative term.



PDP 2023–2028 Planning Parameters

A vision for the country: *AmBisyon Natin 2040*

- EO 5, s.2016 approved and adopted the 25 long-term vision entitled *AmBisyon*



PDP 2023-2028 Planning Parameters

8-Point Socioeconomic Agenda of PBBM *focuses on both near-term issues...*

1. Protect purchasing power of families



Ensure food security



Reduce transport and logistics cost



Reduce energy cost to families

2. Reduce vulnerability and mitigate scarring from the COVID-19 pandemic



Ensure capacity of healthcare in case of surges



Address learning losses



Strengthen social protection

3. Ensure sound macroeconomic fundamentals and government processes



Enhance bureaucratic efficiency and sound fiscal management

Ensure a resilient and innovative financial sector



PDP 2023-2028 Planning Parameters

8-Point Socioeconomic Agenda of PBBM

...and medium-term constraints to economic transformation.

4. Create more jobs



Promote
investments



Improve
infrastructure



Ensure energy
security

5. Create quality jobs



Increase
employability



Advance R&D and
innovation



Enhance the
digital economy

6. Create green jobs



Establish livable and
sustainable communities



Pursue a green and
blue economy

7. Ensure a level playing field



8. Uphold public order and safety, peace and security



PDP 2023-2028: A Plan for Economic and Social Transformation

The overall goal is to

A

reinvigorate job creation and accelerate poverty reduction



B

steer the economy back on the high-growth path



C

effect economic and social transformation for a prosperous, inclusive, and resilient society.



Approved by the NEDA Board on December 16, 2022

PDP Results Matrices (RM)

The PDP results matrices or RM is one of the accompanying documents of the PDP, which contains indicator statements and targets to be achieved for the next six years.



Over the next six years, the development agenda of the Philippines will be guided by the following headline targets

PDP 2023-2028 Headline Targets

Headline Indicator	Baseline (2022/latest available)	End-of-Plan Targets
GDP (growth rate, %) increased	7.6 (2022)	6.5 – 8.0
Gross National Income per capita increased	USD3,640 (2021)	USD6,044 – USD6,571
Unemployment rate (%) decreased	5.4 (Ave. Jan, Apr, Jul, Oct 2022)	4.0 – 5.0
Percentage of wage and salaried workers in private establishments to total employed workers (%) increased	49.6 (Ave. Jan, Apr, Jul, Oct 2022)	53.0 – 55.0
Food Inflation (%) kept stable	6.1 (2022)	2.0 – 4.0
Headline Inflation (%) kept stable	5.8 (2022)	2.0 – 4.0

Over the next six years, the development agenda of the Philippines will be guided by the following headline targets

PDP 2023-2028 Headline Targets

Headline Indicator	Baseline (2022/latest available)	End-of-Plan Targets
NG Deficit to GDP ratio (%) declined	6.5 (Q1-Q3 2022)	3.0
Outstanding NG Debt Stock to GDP ratio (%) reduced	60.9 (end-2022)	48 - 53
Global Innovation Index improved (GII rank)	59th out of 132 (2022)	43rd
Global Competitiveness Index (GCI) rank and score improved	Top 45% Score: 61.9 (2019)	Top 33% Score: 65.1
Poverty Incidence (% of Population) reduced	18.1 (2021)	8.8 - 9.0

Number of RM Indicators per PDP Chapter with corresponding data sources

PDP Chapter RM	No. of Outcome Indicators	No. of Output Indicators	Total No. of Indicators	Sources
2	91	25	116	Population Projections and Civil Registration and Vital Statistics (CRVS), National Demographic and Health Survey (NDHS), DOH Admin Data, Annual Solid Waste Management Report, Annual Water Quality Report
3	65	4	69	Global Food Security Index Report, Inflation Report, Poverty Statistics Report, Expanded National Nutrition Survey, SSS and GSIS Admin data
4	13	10	23	Labor Force Survey (LFS), TESDA and DOLE admin data
5	54	13	67	Family Income and Expenditure Survey, PSA Macroeconomic Accounts, PSA Trade Statistics, Philippine Crop Insurance Corporation (PCIC) Annual Report
6	24	7	31	National Income Accounts (NIA), Annual Survey of Philippine Business and Industry, PEZA Annual Report

Number of RM Indicators per PDP Chapter with corresponding data sources

PDP Chapter RM	No. of Outcome Indicators	No. of Output Indicators	Total No. of Indicators	Sources
7	21	7	28	National Income Accounts (NIA), Labor Force Survey, Philippine Tourism Satellite Accounts (PTSA), DTI eCommerce Roadmap, Creative Industry Satellite Accounts
8	11	20	31	DOST survey, Global Innovation Index (GII) Annual Report, Licensing agreements, Technology Transfer agreements
9	10	3	13	Balance of Payments report, World Bank World Integrated Trade Solution (WITS) Database, Securities and Exchange Commission (SEC) Sustainable Finance Market Update
10	18	13	31	World Economic Forum (WEF) Global Competitiveness Report (GCR), Philippine Competition Commission Decisions, Department of Justice-Office for Competition Decisions
11	39	7	46	World Bank Remittance Prices World Wide, World Federation of Exchanges, PSE Reports, Credit Rating Agency Reports

Number of RM Indicators per PDP Chapter with corresponding data sources

PDP Chapter RM	No. of Outcome Indicators	No. of Output Indicators	Total No. of Indicators	Sources
12	104	5	109	MMDA/DPWH Reports, Vital Statistics Report, Ookla Speedtest Global Index, DOH and DepEd Admin Reports
13	24	15	39	NTF-ELCAC Monitoring Reports, OPAPRU Reports, Crime Incident Reporting and Analysis System (CIRAS), DICT and DOJ Annual Reports, PAO Annual Accomplishment Report,
14	22	16	38	UN E-Government Survey, Open Budget Index Report, Transparency International's Corruption Perception Index Report, DILG and DICT Annual Reports
15	14	25	39	National and Local Climate Change Expenditure Tagging, Seal of Good Local Governance, Comprehensive Water Resource Assessment Report, DENR and DILG Annual Reports
Total	510	170	680	

Evidence-Based Policymaking at Work:

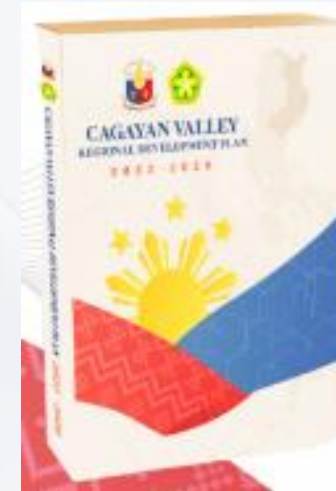
Regional Development Plan (RDP)



Linking National and Local Planning

RDP links national and local plans

- Highlight role of the region in national development
- Serve as framework for local development
- PDP and RDPs adopt uniform outlines
- The following PDP 2023-2028 Headline targets were also harmonized with the RDP:
 - GDP Growth rate
 - Poverty Incidence



Linking National and Local Planning

Provincial Product Accounts (PPA)

It is a mechanism to compile the **Gross Domestic Product (GDP) at the subregional level**. Complementing the GDP at the national level and the Gross Regional Domestic Product at the regional level, the PPA will provide a **suitable measure of economic performance at the provincial/HUC level**. It will also be a **source of indicators that monitor economic development at the local level**.

Davao Region, along with CAR, CALABARZON, Western Visayas, Eastern Visayas and SOCCSKSARGEN, were selected as pilot regions for the compilation of PPA in 2022.

Data gap remains a challenge in local development planning and budgeting, particularly on environmental and institutional indicators.

Data Availability under the Community-Based Monitoring System (CBMS) per Sector of the LGU's Comprehensive Development Plan (CDP)

SECTORS	Number of Indicators in the CDP	Indicators Available in the CBMS	
		Number	%
Social	23	19	82.6
Economic	19	10	52.6
Infrastructure	18	5	27.8
Environment and natural resources	72	5	6.9
Institutional	20	1	5.0
TOTAL	152	40	26.3

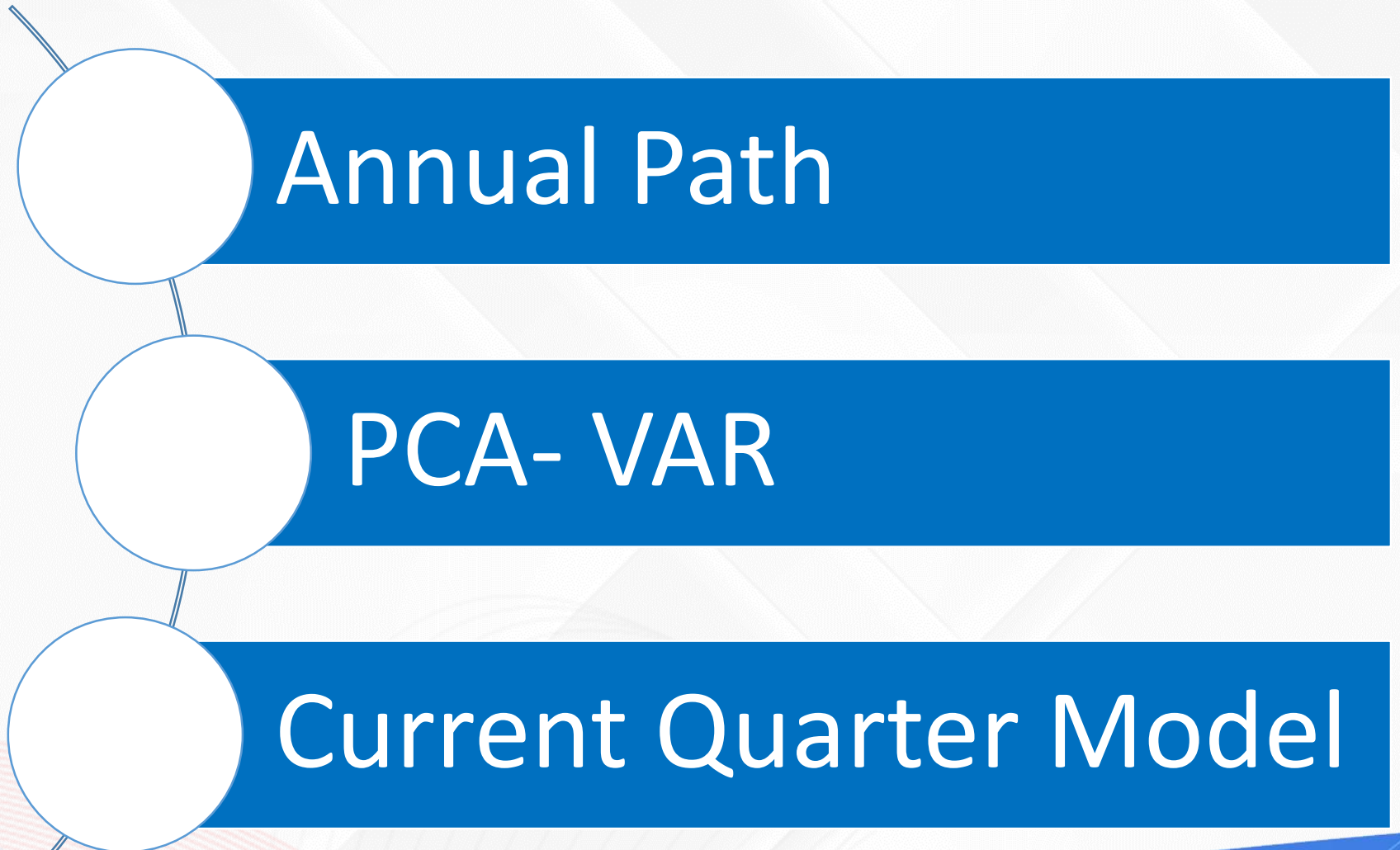
Source: Reyes, C., Vargas, A., and Arboneda, A. (2020). Evidence-Based Local Planning and Budgeting using CBMS. *Philippine Institute of Development Studies – Discussion Paper Series No. 2020-50*. Retrieved from <https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps2050.pdf>

Evidence-Based Policymaking at Work:

NPPS Tools for Policy Analysis



NEDA's Forecasting Models



Annual Path

Uses: Provides medium-term growth projections which is used as basis for estimating public spending and revenues

Data: Over 50 variables from real, monetary, fiscal, and external sectors are used, such as:

Real Sector	Monetary Sector	Fiscal Sector	External Sector
Private consumption	Foreign Exchange	Government Revenues	Balance of payments
Investments	T-bill rates (364 days)	Government Expenditures	Dubai crude oil price
Manufacturing	Consumer price index	Allocations to local government units	Remittances
Construction	Total liquidity aggregates	Maintenance and other operating expenses	US Federal Funds rate

Principal Component Analysis-Vector Autoregressive (PCA-VAR) Model

Uses: Provides nowcasts of quarterly real GDP growth using latest monthly indicators for internal reference/monitoring.

Data: Uses the 2018-based national accounts and utilizes data on government revenues and expenditures, key interest rates and financial data, prices, and trade. Some of these include:

Exchange Rates	Imports	Remittances	Money Supply
Wholesale price index	Terms of Trade	Interbank Call Loan Rate	Business Expectations Survey
Dubai crude oil prices	Government Expenditures	Singapore Interbank Offered Rate (SIBOR)	Core CPI
Treasury Bills	Public Construction Spending	Sterling overnight index average (SONIA)	Philippine stock exchange index (PSEi)
Exports	Government Spending	Real Effective Exchange Rate	Visitor Arrivals

Current Quarter Model (CQM)

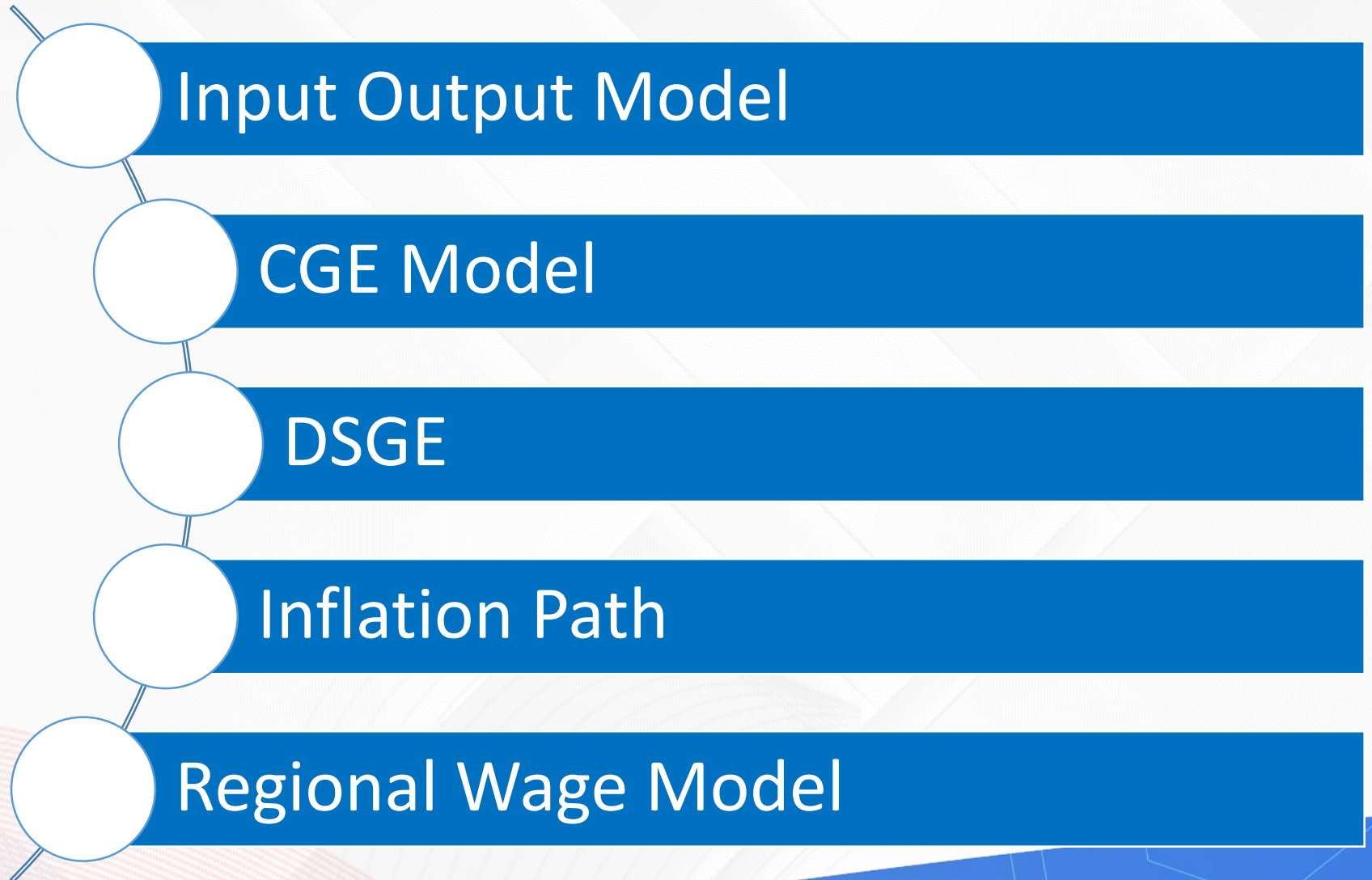
Uses: Provides forecasts quarterly GDP growth for internal reference/monitoring.

Data: Uses the 2018-based national accounts, monthly economic variables from PSA, BSP, and other institutions, and 20 key economic indicators from PSA. Some of these include:

Monthly indicators from CEIC Data		Key economic indicators	
Price indices such as CPI, PPI, RPI, and WPI	Exports and imports (FOB and volume)	Coal production	Personal services (PS),
MISSI	Private building construction permits	Meralco sales	Maintenance & Other Operating Expenses (MOOE)
Exchange rate	Broad money (M3)	LRT2 and MRT 3 Train Ridership	Value-added tax
Cash remittance	Balance of payments	Malampaya Condensate Production	
Visitor arrivals	Government expenditure (total and infrastructure & other capital outlays)	NGCP Gross Generation	



NEDA's
Models in the
Conduct of
Economic
Impact
Analyses



Input-Output (IO) Model

Uses:

- Estimates the direct and indirect effects of a possible change in final demand on production, value added, employment, income, and gross domestic product.
- Estimates the direct and indirect effects of a possible change in price or wage in particular industry/ies (sector/s) on other sectors.

Data: 70 sector input-output table estimated by the PSA (latest: 2018)

Computable General Equilibrium Model (CGE)

Description: A 40-sector model composed of several building blocks: sectoral production and demand, land allocation, income and consumption of households and enterprises, government income and expenditure, and external balance.

(e.g. changes in corporate and personal income tax; changes in infrastructure program) (e.g. increase in foreign investments; higher world import prices of petroleum) on the Philippine economy over a specified period of time

Computable General Equilibrium Model (CGE)

Uses: To estimate the impact of **policies** and **external shocks**

Data: uses the following variables:

Production	HH & Investment	Government	External	Capital & Labor
Sectoral Output, Value Added	Sectoral household consumption	Gov't consumption, revenues, & savings	Sectoral exports & imports, & their prices	Aggregate, skilled, unskilled labor
Sectoral Intermediate Inputs	HH income & savings	Transfers from CCT	Import quota level and rent	Aggregate capital/ land
Sectoral intermediate demand	HH budget constraint for consumption	Gov't deficit and its ratio to GDP	Tariff rates and tariff revenues	Wage rates & return to capital
Gross Domestic Product	Sectoral Investment, price of investment, & Interest rates	Income tax rates to HH & firms, Indirect taxes	Current account balance & exchange rate	Supply & price of crop & Non-crop lands
Price index and prices of sectoral output & value added	Firm's income and savings		Foreign remittances, transfers to gov't, & dividend & gov't payments to ROW	Labor & capital factor income

Inflation Path

Uses:

Provides forecasts on inflation as a function of domestic fuel prices, foreign exchange, and other exogenous variables or shocks.

Analysis of the inflationary impact of increases in commodity prices such as oil and rice, and policy changes such as wage and fare hikes.

Data: More than 7 indicators updated monthly, including:

CPI and inflation rate	Foreign exchange rate (PHP=USD)	Dubai oil prices (actual and futures)	Domestic petroleum prices (gasoline, diesel kerosene, LPG)
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Regional Wage Model (RWM)

Use: Estimate the regional impact of wage hike across major sectors (i.e., agriculture, manufacturing, non-manufacturing, and services).

Data: The data used in the model are the: (a) Official regional gross domestic product; and (b) Labor Force Survey. The model was calibrated using the 2013-2015 averages of data from these two sources.

Variables: With over 23 variables, including:

unemployment	supply of labor (for labor types 1 and 2)	wage rate (for labor types 1 and 2)
demand for commodities	aggregate demand	minimum wage in type 2
demand price of commodities	regional production price of commodities	demand for labor

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