

MEASURING PLAN PERFORMANCE: A BRIEF REPORT
ON THE EPRS EXERCISES TO FORMULATE
SECTORAL PERFORMANCE INDICATORS

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Introduction

Development planning has become a thorough going activity, alongside other governmental functions, designed to optimize the effects of governmental measures for bringing about social development. In recent years, planning functions have expanded in scope and have been decentralized among a greater number of government entities. While these moves have been necessary to strengthen the effectiveness of the planning process, a greater demand has been placed on coordinative aspects to ensure the viability of the planning mechanism. The key to effective coordination in turn lies on achieving unity of planning objectives of each stage of the planning process. At the technical level, this implies also an agreement of the relevant quantifiable measures for these goals at the different branches of the planning machinery. The hierarchical relationship among the different branches of the planning organization can be categorized according to the dispersal of planning functions. The National Economic and Development Authority assumes the central role of coordinating planning at the aggregate level and overall program implementation. The establishment of planning service units and regional offices within each departmental agency and the organization of Regional Development Council from among provincial and local administrators introduced the branches of the planning organization into sectors and geographical regions.

The terms of reference of planning have also increased. Aside from the usual medium (or 4 year) development plan, the recent directive to prepare a perspective plan via LOI 363 will provide for a framework for shorter term plans. Hence, problems that can be solved over a longer period of time can

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be taken into account in planning for a shorter duration. Finally, environmental factors are expected to be more strongly emphasized with the creation of the Human Settlements Commission under PD 933.

This paper offers a brief report on the exercises conducted by the Economic Planning and Research Staff of the NEDA to devise sectoral performance indicators, for monitoring the achievement of objectives of the current Four-Year Development Plan through specified sectoral activities. Our present task is to explain some characteristics of the indicator set as it is presently available, its usefulness and limitations. Some suggestions are also made for further improvements of the performance indicators and in the statistical base for planning.

Performance Indicators in Development Planning

In its broader sense, development can be viewed as the process of realizing the society's goals and objectives. Undoubtedly, the selected measures of development may also have far reaching influence on development planning since targets for future activities are frequently framed along these measures. For instance, until more superior measures can be found to replace the Gross National Product as the general indicator of development, planners tend to focus on targets for GNP growth.

From its viewpoint, performance indicators can be regarded as part of the country search for more adequate measures of development. As such, performance indicators ought to adequately quantify the level of final output accruing to individuals and to the society as a whole, resulting from the pursuit of particular activities. The final output to society refers to the welfare benefits along the more permanent and widely accepted goals of the society. Since planning can also be regarded as a productive process, there is the additional need of being able to identify and explain the behaviour of these welfare indicators. For planning purposes, we therefore need not only goal indicators but also indicators for the effectiveness of policy instruments as well. The latter indicators could be useful for assessing the efficiency of the planning process. Within the context of a medium term plan, along which the EPRS indicators are framed, indicators have also the task of measuring the structural changes in the society. These refer to plan objectives that are not necessarily or universally con-

sidered to be final goals of the society but which are deemed necessary to hasten development. For instance, changes in the employment structure are not necessarily goals in themselves but are conditions for altering other aspects of welfare.

Theoretically, if goals and values are defined, quantitative measures can be framed from them. However, multifaceted problems are encountered in both the conceptual and technical fields. Conceptual problems are associated with the identification of the final welfare goals of the society and the differentiation of structural goals. Then, there are problems related to the correspondence of economic growth and welfare. In this sense, the construction of appropriate indicators depend still on our economists and development strategists. Technical problems are also encountered where the expertise of statisticians and researchers are sought. Variables that are conceived to be good indicators of development can proved in practice to be poor indicators due to inherent technical deficiencies, most of which have to do with the replicability of indicators over time and over subnational areas.

The EPRS Sectoral Performance Indicators

The formulation of performance indicators started only recently following the need to monitor the activities of various government agencies taking to the implementation of development plans and programs. This awareness appears timely not only in a bid to assess the effectiveness of the government as a whole but also to find appropriate measures that can be useful in evaluating gains in the sectors especially in respect of future activities. Obviously, performance indicators should gauge objectively the extent of the attainment of goals and objectives set in the plans.

The indicators discussed here had their beginning during the Mid-term Appraisal of the Plan, an inter-agency sectoral effort which ultimately decided to attempt at spanning the wide spectrum of the planning and implementation cycle including thus the post-implementation period necessary in the next rounds of planning activities. Weaknesses of the indicators are admittedly present due obviously to a series of problems and issues which cannot be resolved at one sitting.

The variety of government activities and the multiplicity of their functions have led to an apparent need to establish a

common set of indicators which shall measure the accomplishment of the economy consequent of these pooled efforts. The coordination link characteristic of sound planning should be an additional feature towards this end. While this hinges on the familiarity of each others' duties and responsibilities, there seems a further need to clarify the aims envisaged.

The Economic Planning and Research Staff of the NEDA, while seeking to institute, for the first time, these indicators, hopes to improve on the methodologies used and assumptions made. Implications may refer to extra-judicious analysis of the different variables or parameters included notwithstanding some thoughts on other indicators which may require specifications which can be of use in the end.

As it stands, the growing complexity of the planning process and subsequent implementation shall inevitably demand rising expectations on the appropriateness of performance indicators. Nevertheless, it might be of interest to choose those whose effects can be relatively discerned and those whose importance takes priority.

The performance indicators reflect to a large extent, the activities in the nine sectors whose delineation patterned after the functional division of EPRS. Thus, these nine sectors are the following:

1. agriculture, fishery and forestry
2. industry
3. foreign trade
4. housing
5. infrastructure/utilities
6. education
7. health and nutrition
8. tourism
9. social welfare and community development

Thus, the general approach of the sectoral groupings corresponds to the statement of development goals and sectoral objectives. An amplification of the strategies and programs supportive of these ends is also discussed and rated. It is observed with interest that government agencies falling within different sectors showed varied stages of development as far as retrieving accomplishment figures is concerned. In addition, some of the statistical systems employed vary considerably from one sector to another. This appears intelligible against the fact

that in some sectors, some amount of discretion is exercised on the choice of indicators reflective of sectoral achievements. This is true in the social sectors where selection is based on an array of indistinctly defined criteria.

Whatever this leads to, the committee, however, buckled down at carefully selecting those measures which best approximate the goals and objectives envisioned. Of course, there are difficulties encountered, thus signalling off a better and clearer understanding of the interrelated economic and social activities.

Nevertheless, the sectoral division as a preliminary version leaves much to be desired. It stands obvious improvement but in the meantime it draws strength from a consciousness of the need to systematically and functionally lay down the performance indicators of the portions building the economy.

Table I
PERFORMANCE INDICATORS IN AGRICULTURE, FISHERY, FORESTRY

<i>Objectives</i>	<i>Performance Indicators</i>	<i>Data Requirements</i>	<i>Availability</i>	<i>Frequency</i>	<i>Source</i>	<i>Remarks</i>
I. Self-sufficiency in food products (supply sufficiency)	1. <i>Food Production</i> Effective food demand	<i>Production Data:</i> — by commodity groups, national, regional	available	semestral	BAEcon	1. The proposed performance indicators 1.1 or 1.2 and 1.3 are actually production sufficiency ratios. If carry over stock (net of imports) is included the ratios become supply sufficiency ratios.
	2. <i>Food Production</i> actual food intake	<i>Effective Food Demand and Actual Food Intake Data</i> — by commodity group, national, regional	available	calendar year	DA FNRC	
	3. <i>Local fish production</i> Total fish requirement	<i>Fish Production Data</i> — national — regional	available available available (weak production estimates for fishponds, municipal and sustenance fishing)	monthly monthly	BFAR BFAR	
		<i>Fish Requirement Data:</i> (human consumption) — national — regional	available available	semestral calendar year	BFAR BFAR	
		<i>Utilization of Fish Data:</i>	not yet not yet available (programmed)	calendar year	BFAR	
	II. Growth and Efficiency 1. accelerate growth productivity of the sector	1.a Net Value Added	<i>by sub-sector</i>	available	semestral	NAS, NEDA
Compound growth of output — compound growth of input		<i>Production Data:</i> — aggregate — disaggregate, by type and quantity of input/crop	available	crop year	BAEcon, NAS	
		<i>Input</i> — disaggregated	programmed			
1.b <i>Fish catch</i> Fishing effort		<i>Fish Catch Data:</i> — national, regional	available	census year	NCSO	
		<i>Fishing Effort Data:</i> (fishing manhours) — national, regional	available (for commercial fishing only)	annual	BFAR	
			partially available (Luzon)	monthly	BFAR	

Objectives	Performance Indicators	Data Requirements	Availability	Frequency	Source	Remarks
2. improve marketing and distribution of food and agricultural products	2.a Available Supply Total Requirement	Production Data: — by commodity — regional — municipal Import, Export Data: — by commodity, national Carry-over Stock Data:	available	semestral	BAEcon	1. 2.a is essentially the same as the self-sufficiency indicated. Rather less satisfactory for objective II.2.
	2.b Index of crop production losses, on and off-farm	— by commodity, regional	available only for rice and corn available for cereals only for on-farm losses not available for off-farm losses	quarterly semestral crop year	NGA, NCSO NFAC BAEcon, NGA	
	2.c Number of marketing facilities available	— by region	available for cereals only	fiscal year	NGA	
	2.d Number and capacity of cold storage plants for fish	— by type	available		FTI	
	2.e Price spread	— by commodity, regional	available for some agricultural products available for livestock and poultry retail and wholesale price for fish	available available available partially for cereals	daily	FTI BFAR NGA
3. Promotion of regional development and industrialization	1. Number of established integrated industries dependent on agricultural production	by region				
4. Conservation and development of natural resources	4.a Rate of Reforestation	Area covered by government reforestation — national — regional Area covered by private sector reforestation	available available partially available	fiscal year fiscal year annually	BFD BFD BFD	
	4.b Rate of utilization of forest waste products	Number, capacity and production of pulp and paper, fiberboard, and lumber products manufacturing and processing plants national regional	available available	annually annually (fiscal year)	BOI PCWID, BOI	

<i>Objectives</i>	<i>Performance Indicators</i>	<i>Data Requirements</i>	<i>Availability</i>	<i>Frequency</i>	<i>Source</i>	<i>Remarks</i>
	4.c Rate of Kaingin Occupancy	— Number of hectares occupied by kaingeros — Population in Kaingin areas (no. of household, no. of members in kaingin households) — national — regional	partially available partially available lack of manpower (forest patrols) to monitor annually available		BFD 1972 Kaingin Census BFD 1972 Kaingin Census	
	4.d Yield	— Area — Productivity	available available	annually annually	BFAR BFAR Stock Assessment	
	4.e Number of bodies of water closed for fishing	Area on open sea and for cultivation	available	every 5 years	BFAR	
	4.f Fingerlings stocked	Number of fingerlings	Available by	annually	BFAR	
III. Equity and Redistribution of Wealth 1. acceleration of implementation of agrarian reform	1.a number of tenant farmers converted owner operator	— national by region	available available	fiscal year fiscal year	DAR Operation Land Transfer	
	1.b number of families resettled/target	number of patents issued — national	available	fiscal year	DAR	
	2.a Utilization of agricultural labor force — degree of unemployment and underemployment					
	2.b Agricultural labor productivity non-agricultural labor productivity	by region, by agricultural subsector	available	census year	DOL BAEcon	

Table 2
SECTORAL PERFORMANCE INDICATORS FOR INDUSTRY

<i>Principal Objectives</i>	<i>Indicators</i>	<i>Data Requirements</i>	<i>Availability/ Frequency/ Source</i>	<i>Remarks</i>
1. Expansion of industrial output	Gross value added, its growth rate and share to GDP		not available but can be worked out/semestral/ NCSO-NAS	Present published data are in net value added
	Production and sales indices, by sector		available/ quarterly/ NCSO-CB-BM	
	Capacity Utilization		available in selected industries/irregular/ ICC-NEDA	
	Investment, both equity and non-equity; BOI and non-BOI; foreign and domestic		available in selected industries/quarterly/ CB-SEC-BOI	
2. Diversification of industrial output	Index of output diversification (defined as unity minus concentration index)	output or value added data by industry	available/ quarterly/ NCSO, BOI, DOL	
	Share of top 3 & top 5 sub-industry output to total in manufacturing & share of copper ore production in mining to total in mining		—do—	
	Output and sales indices classified into heavy, light and medium industries; engineering-based metal-based and non-metallic industries; capital-intensive and labor intensive; consumer, intermediate and capital goods.		—do—	

<i>Principal Objectives</i>	<i>Indicators</i>	<i>Data Requirements</i>	<i>Availability/ Frequency Source</i>	<i>Remarks</i>
3. Promotion of employment and employment income	Level of employment, by industry, size and region		available/ quarterly/ NCSO, DOL, DEC, BOI —do—	
	Indices of man-hours worked and wage rates		not available in comprehensive form	
4. Regional dispersion of industrial production	Payroll data by industry, region and skills		available in selected industries/semestral/	
	Regional Dispersion index of output		NCSO, TFHS, BOI, DOI BM/DNR, NACIDA —do—	
	Regional distribution (total & BOI-registered firms) of industrial production, investments, credit and assistance (ex. IGLF & MASICAP)			
	Number of small, medium and large scale industries by region and by industry		—do—	
5. Expansion of manufactured exports	Level of manufactured exports and mineral export		available/ monthly/ NCSO	
	Share of manufactured exports to total exports		—do—	
	Level of output and exports of BOI registered firms under RA 6135 and 5186		available/ semestral/ BOI	
			—do—	
6. Minimization of industrial pollution	Index of pollution		—do—	
	Number of effective anti-pollution equipment installed		—do—	

Table 3
SECTORAL PERFORMANCE INDICATORS FOR FOREIGN TRADE

<i>Objectives of the Sector</i>	<i>Indicators</i>	<i>Data Requirement</i>	<i>Availability/ Frequency/ Source</i>	<i>Remarks</i>
1. Expansion of export earnings	1) a) Export volumes, export prices and export values compared over-time and against targets		available, monthly, annually, NCSO	
	b) Ratio between value index of exports and price index of imports to get capacity to import		available, monthly, annually, NCSO	
2. Diversification of commodity exports	2) Percentage shares of the commodity exports according to primary semi-manufactured and manufactured categories		export figures are available but not in the desired classification/form, NCSO	
3. Market diversification for exports and imports	3) a) Market concentration ratios of exports and imports	Shares of trading partners to Philippine exports and imports	available, monthly, quarterly, annually, NCSO	
	b) Hirschman's concentration of trade index:		available, monthly, annually, NCSO	
	$C = \frac{\sum_{k=1}^n a_k^2}{\left(\sum_{k=1}^n a_k\right)^2} \cdot 100$			
	<p>where $A_1, A_2, \dots, A_k, \dots, A_n$ are the absolute values of of the annual exports to (or imports from) various countries and, $\sum_{k=1}^n a_k = A$ is the total</p>			
4. Employment Promotion	4) a) Estimate of the level of employment generated by exports by deducing the export orientation of the different industries from the Annual Survey of Manufactures and the Annual Foreign Trade Statistics, and then matching the employment data from the Quarterly Survey of Labor Force with the industrial and exports data	ratio of volume exported to the volume domestically consumed for each industry e.g. coconut oil, copra, sugar, etc.	not available	
	b) Rate of growth of national employment	ratio of employment to output for each industry e.g., coconut oil, copra, sugar, etc.	not available	
	c) Estimate of export employment by using ratio of labor content to export sales			
	d) Estimate of export employment coefficients to compare wages due to exports			

Table 4
PERFORMANCE INDICATORS FOR TOURISM

<i>Objectives</i>	<i>Performance Indicators</i>	<i>Availability</i>	<i>Frequency</i>	<i>Source</i>	<i>Remarks</i>
I. To maximize the FX exchange earnings from Tourism	1. Level of gross FX exchange inflow from tourism	available	a. Monthly (estimated) b. Quarterly	a. DOT whose data are estimated based on our annual sample survey b. CB whose data are based on actual reports of authorized foreign exchange dealers	
	2. Rate of increase of FX exchange earned from tourism relative to rate of increase of tourist arrivals	available	Quarterly	Central Bank of the Philippines	
	3. Percentage contribution of FX exchange earned from tourism to the economy's balance of payments	available	Quarterly	Central Bank of the Philippines	
	4. FX exchange cost of tourism projects	available but not accessible		a. CB b. NCSO	
II. To maximize the income and employment generated by the industry	1. Level and rate of increase of value added from the industry	available	annually	National Accounts Staff, NEDA	
	2. Level and rate of increase of employment in tourism-related sectors.	available	annually	NCSO	
	Other possible (indirect) indicators are:	not readily available		FTA	
	a. pattern of expenditures of tourists	available	annually	DOT	
	b. occupancy rates of hotels	available	upon request	DOT	
III. To disperse tourism benefits to other regions	1. Regional distribution of tourists arrivals (Level and rate of increase)	available	annually	DOT (Regional Offices)	
	2. Regional distribution of tourism investments	available	upon request	Philippine Tourism Authority Regional Offices of the DOT	
IV. To increase cultural and historical awareness among the Filipino people	1. Volume of domestic tourists	not available			

Table 5
SECTORAL PERFORMANCE INDICATORS FOR INFRASTRUCTURE

<i>Objectives</i>	<i>Performance Indicators</i>	<i>Data Requirements</i>	<i>Availability/ Frequency Source</i>	<i>Remarks</i>										
1. Maximum Feasible Economic Growth	<ul style="list-style-type: none"> — Share of Infrastructure/Utilities/investment to total Investment Ratio of Transportation Capacity to transportation Demand — Utilization Factor in Communication — Ratio of Installed Capacity to Demand in Power — Effectiveness Ratio of irrigation 	<ul style="list-style-type: none"> — Programs/Project investment, Operation maint./expenses for transportation and power — Fares/tariffs, profits — Generating capacity/type of prime mover, total energy sold for power — No. of telephones, GDP of country and economic sector for communication — No. of irrigation, crop production — No. of water supply facilities — Fares/tariffs, profits — Number of families affected by the project — Median income of various income groups; national median income by income group — Number of accident Accessibility travel time for selected areas — Kilometers of roads/railroads per 1000 population; kilometers of roads/railroads per hectare of viable area; — Vehicles per 1000 population person-trips per 1000 population; vehicle capacity, per 1000 population — Per capita consumption — Population per municipalities served or not served with electricity and water — Length of transmission and sub-station capacity 	<ul style="list-style-type: none"> available annually DPH, PPDO, BOT, NPC, NEA not available, NPC, NEA * These require periodic post-completion benefit-cost evaluation of projects * These require periodic . . . available annually DPH, PNR Available annually LTC, BOT electricity — available annually — NEA water — not available LWUA, MWSS not available, NPC, NEA (desired quarterly) 											
					2. More equitable Distribution of Income and Wealth/Social Development	<ul style="list-style-type: none"> — Number of families under "poverty line" moved upwards due to project — Number of families in various income groups affected by project — Accident Rate Local Service Area coverage — Regional distribution of infrastructure/utilities expenses — Employment Generated 	<ul style="list-style-type: none"> — Man days employed during pre-investment phase and operation/maintenance phase 	<ul style="list-style-type: none"> not available desired quarterly DPH 						
										3. Maximum Labor Utilization				

Table 6
SECTORAL PERFORMANCE INDICATORS FOR HOUSING

<i>Principal Objectives</i>	<i>Indicators</i>	<i>Data Requirements</i>	<i>Availability/Frequency Source</i>	<i>Remarks</i>
1. Provision of social, low- and open market housing	a. Housing Investments	Housing investments of the government and private sectors on these categories: a. social b. low-cost c. open-market	Available annually, available semestraly available annually available monthly NHA, SSS, GSIS, DBP, NHA, NCSO	Private sector data are taken from the number of building permits issued out while government sector data are taken from the different government agencies.
	b. Families benefitted	Data on number of families served by government and private agencies undertaking a. construction and financing of housing b. resettlement and improvement projects	available annually SSS, GSIS, DBP, NHA, NCSO available annually NHA, DAR	
	c. Availability of housing funds vs. required housing funds		available monthly CB	
	d. Cost of financing	These are costs covering interest rates and contingent charges.	available monthly, annually, (CB) GSIS, DBP, SSS, NHA, Commercial banks or financial intermediaries	
	e. Land availability and cost	These would require data on the supply of land for housing purposes	available Commission on Lands Human Settlement Commission	
	f. Construction cost	These are composed of material and labor costs	available monthly CB, NCSO	
2. Slum/quatter resettlement and relocation, sites and services and urban renewal	a. Number of slum/squatter families relocated or resettled		available annually NHA, NCSO	Data on these costs are expressed in indexes
	b. Number of slum/squatter served in Urban Renewal Schemes		available annually NHA	
3. Provision of adequate types of housing and facilities	Different housing types: 1. single 2. duplex 3. apartment/accessoria 4. barong-barong 5. commercial and industrial with corresponding facilities such as: a. type of water supply b. electricity c. toilet facilities	Census data on the classification of houses and facilities	available census year NCSO	The different classifications being used in the two census provide some problems in determining trends and improvements. — There is a need to shorten the time span between census years and the processing of data. — Informations on the housing types and facilities by income group are not available.
4. Price and Balance of Payments Stability	— Rates and Fares — Index of unit operational costs	— Standard rates for land transportation services — Vehicle operating costs	available/annually/BOT available/annually/DPH, PPDO, BOT	
5. Preservation of Environmental Stability	— Increase in the number of anti-pollution devices installed in vehicles	— Number of anti-pollution devices installed in vehicles		

Table 7
PERFORMANCE INDICATORS FOR EDUCATION

<i>Objective</i>	<i>Indicators</i>	<i>Data Requirements</i>	<i>Availability</i>	<i>Source</i>	<i>Remarks</i>
I. To provide Broad General Education	1. A. <i>Formal Education</i>				
	1. Enrolment relative to school going population	Population by single year of age from age "O" and over by province, sex, educational level and number of hours worked	Available by single year of age and by sex actual data — every census year projections — annually	Available annually	NCSO DEC
	2. Enrolment by age-group or by representative age in three educational level	Enrolment by age and educational level			
	B. <i>Non-formal Education</i>	Kind of Training	Available		
			1. Statistics on Training — quarterly		NMYC
			2. Statistics on in-service training conducted in government agencies — monthly		CSC
			3. Statistics on number of apprenticeship programs — annually		Bureau of Apprenticeship Dept. of Labor
			Statistics on learners program — annually		
			4. Statistics on Vocational Training — annually		DEC DEC
	2. Pupil Years	Pupil Years	Raw data available		
	3. Average Ages for entering and leaving the elementary level	By sex and province for public education	Available — Statistics for annual enrolment by grade, sex and age — annually with 2 or 3 years time lag		DEC
	4. Average Ages for entering and leaving the secondary level	By sex	Available — Statistics on annual enrolment by year level, age and sex — annually with 2 or 3 years time lag		DEC
5. Drop out rate within the year	For public education by province, sex, grade and educational level	Available — Statistics on drop out in public schools in primary and secondary level — annually with 2 or 3 years time lag Not Available — Tabulated data from private schools		DEC	
6. Average Ratios					
a) Student-Teacher	By province, educational level	Available — Statistics number of teachers by level of education by province — Statistics on enrolment by level province — annually with 2 to 3 years time lag		DEC	
b) Student-Textbook	For private and public school	Available		DEC, EDPITAF	

<i>Objective</i>	<i>Indicators</i>	<i>Data Requirements</i>	<i>Availability</i>	<i>Source</i>	<i>Remarks</i>
	7. Utilization of Facilities	Percentage use of classroom	Available — one sheet survey	PCSPE	
	8. Teacher-proportion of qualified elementary and secondary teachers of the total	No. of qualified teachers as a proportion of total teaching force	Available 1) one time survey with 2 to 3 years time lag 2) survey for public schools	PCSPE NMYC, CSC	
	9. Expenditure per pupil at different levels	For public schools only, by level of education and by region	Available 1) financial statements provide raw data — annually with 2 or 3 years time lag 2) report on expenditures on public schools	DEC DEC	
	10. Enrolment ratio of ethnic groups	Enrolment by sex, educational level by ethnic group	Available 1) one year data on enrolment 2) population count of minorities	EDPITAF PANAMIN	
	11. Enrolment ratio by family income level	Enrolment by income level	Available — raw data from NCEE application forms — annually	NETC, DEC	
	12. Ratio of urban/rural a) School Attendance	By province, age and sex	Available — Census of Population and Housing every 5 years with 4 to 5 years time lag	NCSO	
	b) Proportion of literates to total population	For urban and rural areas, by age and sex, by province	Available — Census of Population and Housing every census year with 4 to 5 year time lag	NCSO	
	13. Highest Grade completed of population 25 years old and over	By sex, location and province	Available — Population Census every census year	NCSO	
	14. Percentage of Gov't Expenditure for Education	By object of expenditure a) national government b) local government	Available — annual report to the President with 1 to 2 years time lag	Commission on Audit	
	15. Value Added in private educational services	National and regional	Available annually for regional and semestral for national	NEDA-NAS Staff	
II. To Train the Nation's Manpower in Middle-Level Skills	1. Underemployment	By age, sex, group, location and economic sector	Available — Labor Force survey every mid quarter with 6 months time lag	NCSO	
	2. Employment	By age, sex, group, location and economic sector	Available — Labor Force survey every mid quarter with 6 months time lag	NCSO	
	3. Unemployment	By age, sex, group, location and economic sector and by occupational level	Available — Report on the number of college graduates by major field of study — annually	DEC	
III. To Develop the High Level Profession	1. Number of graduates by field of study	By sex and province	Available — Population Census every census year	NCSO	
	2. Stock of Professionals	By age group, province sex and degree	Available — Population Census every census year	NCSO	

Table 8
SUMMARY TABLE FOR RECOMMENDED PERFORMANCE INDICATORS
FOR HEALTH AND NUTRITION

<i>Sectoral Objective</i>	<i>Indicators</i>	<i>Availability/Frequency Source</i>	<i>Remarks</i>
1. Prolongation of Life	1.1 Life expectancy at birth, by sex, by region (urban/rural) by occupation	available/ quinguennial/ DIC	<ul style="list-style-type: none"> — Time series data traces the general improvement of health conditions in the society. Caution should be exercised in using them for inter-regional and intercountry comparisons in view of demographic variations among areas. — This refers to probabilities only and therefore holds only as long as historical trends continue — They are also useful when the population structure does not change drastically — Data collection, which relies chiefly on census data and projections is easier at the national than at the local levels
	1.2 Proportion of deaths over 50; deaths associated with old age	available/annual/DIC	<ul style="list-style-type: none"> — This reflects the degree to which society has controlled common causes of deaths especially communicable diseases of the young — Good for either low or high mortality rates but more useful for the former — Data collection is easy due to high rates of reporting for order groups
	1.3 Mortality rates by sex, region, rural/urban, leading causes	available/biennially/ DIC	<ul style="list-style-type: none"> — This is a reflection of pre-mature deaths and suggests the extent to which deaths can be reduced as well as identifies the vulnerable population groups — There is a fairly accurate reporting and classifying of causes of death — This is useful when leading causes of death are those vulnerable to medical technology — Data collection which is hampered by a certain degree of under-reporting is easier at the local than at the national level
2. Optional nutritional status	2.1 Infant mortality rates	available/biennially/ DIC	<ul style="list-style-type: none"> — This reflects foetal and maternal malnutrition — Shows a higher probability of death rates for infants aged 2-5 months — This is useful when death incidence is high

<i>Sectoral Objective</i>	<i>Indicators</i>	<i>Availability/Frequency Source</i>	<i>Remarks</i>
			<ul style="list-style-type: none"> — Data collection is easier at the local than at the national level — Data reflects poor registration of infants' death
2.2	Age specific mortality rates; first, second, third and fourth years	available/biennially/ DIC	<ul style="list-style-type: none"> — This is a reflection of severe PCM in children, where a high probability is observed for those at age 1-2 years than those at 1-4 years. The mortality rates of the 1-4 age groups do not measure the severity of malnutrition in the community. — This is useful when rates are high but ineffective when rates are low
2.3	Weight at age 7 (or school entry age)	Programmed/NCC, DEC	<ul style="list-style-type: none"> — Data collection is easier at the national and at the local levels; for these age groups recording causes of death is difficult — This is a reflection of chronic malnutrition is persistent during these years — This is useful when tracing incidence to conditions within the child's household — Shows a need for adopting realistic weight/height standards — This is good on the basis of secular trends within the same genetic population — Data collection is easy since schools may be tapped as recording units, however, for accuracy, a recording system should be institutionalized
2.4	Proportion of children under 6 who are underweight, by degree of malnutrition	available soon/ regularly/NNC	<ul style="list-style-type: none"> — This reflects current, acute and short duration malnutrition — Important in identifying children who are nutritionally at risk — Thru proper weighing scales, data collection is relatively easy. Proxy variables may be used like arm circumference
2.5	a) Available supply of calories per capita, per day	available/biennially/ NEDA	<ul style="list-style-type: none"> — This require logistics for new equipment and recording system
	b) Available supply of protein per capita by origin (animal or vegetables)		<ul style="list-style-type: none"> — This reflects aggregate availability of food and suggests trends in food supply available to the population as a whole. However, this indicator does not capture the distribution of food among the population

<i>Sectoral Objective</i>	<i>Indicators</i>	<i>Availability/Frequency Source</i>	<i>Remarks</i>
			<ul style="list-style-type: none"> — This is useful where per capita supply is low relative to recommended dietary allowance — Data collection is easy as it relies primarily on population census data and projection
	2.6 Actual food-intake by nutrient groups, deficiencies by occupational groups, by rural-urban by sex	programmed/FNRI	<ul style="list-style-type: none"> — This is a reflection of nutritional deficiencies and directly measures the nutritional status of the population — This poses some limitations due to sampling methods — Relatively useful and efficient when compared to proper standards — Data collection is limited by problems related to food recall and relatively costly since this require periodic surveys
3. Minimization of disability	no indicator recommended so far		
4. Provision of a healthy environment	4.1 Proportion of population with safe and adequate drinking water supply	available/annual/ RCS Survey of Household	<ul style="list-style-type: none"> — This reflects existing health hazards and the magnitude of population at risk — Sensitivity is good due to currently high prevalence of communicable and water borned diseases — Data collection is easier in the urban areas but difficult at the national level
	4.2 Proportion of household with toilet facilities	available/annual/ DOH Regional Offices	<ul style="list-style-type: none"> — Also reflects health hazards and measures those who are at risk — limitations hinge on the assumptions made on sanitary standards.
	4.3 a) Air pollution index b) Level of pollution in river beds	available/annual/ air pollution control council	<ul style="list-style-type: none"> — These two indicators are also reflective of health hazards — They measure level of risk due to pollution — Data collection is inhibited by periodic surveys and need for special equipment aside from its high seasonality
5. Control of diseases and disorders	5.1 Incidence of notifiable diseases	available/regularly/ Bureau of Medical Services	<ul style="list-style-type: none"> — This is a reflections of prevalence of illness; useful in assessing the level and magnitude of illness but covers only notifiable diseases
	5.2 Incidence of selected diseases in government and private hospitals (in-patient and out-patient)	available/regularly/ Bureau of Medical Services	<ul style="list-style-type: none"> — This also reflects prevalence of illness; useful in assessing the level and magnitude of illness and the demand gap

<i>Sectoral Objective</i>	<i>Indicators</i>	<i>Availability/Frequency Source</i>	<i>Remarks</i>
			<ul style="list-style-type: none"> — Covers only a part of the universe — Useful when rates are high and good for illness requiring hospital treatment
5.3	Proportion of persons with dental caries, per dental diseases and neoplasms	available/regularly/ Bureau of Medical Services	<ul style="list-style-type: none"> — This reflects the dental health of the population
5.4	Suicide rates; Suicidal attempts	Programmed/NCSO, POLICE DEPARTMENTS	<ul style="list-style-type: none"> — This is a reflection of the state of mental health of the population and an indicator of psychological well-being — This covers only a small part of the universe, those who suffer from extreme disorders
5.5	Incidence of Drug Addiction	Programmed/NCSO, POLICE DEPARTMENTS	<ul style="list-style-type: none"> — Both suicide rates and incidence of drug addiction are useful indicators when rates are high. Data collection is easier at the national level and in the urban areas but hampered by fluctuations in reporting — Both require the institution of a coordinated reporting system