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Philippine Institute for Development Studies Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas

The Role of Indicators in Policy Formulation: The Case of Maternal and Child Health Care Policy in the Philippines

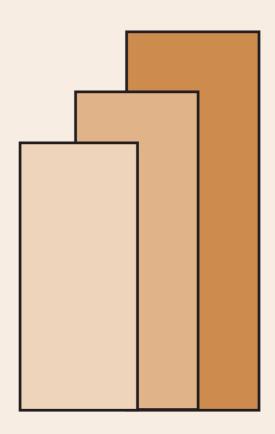
Janet S. Cuenca

DISCUSSION PAPER SERIES NO. 2016-33

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THE ROLE OF INDICATORS IN POLICY FORMULATION: THE CASE OF MATERNAL AND CHILD HEALTH CARE POLICY IN THE PHILIPPINES

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Abstract

The study examines the role of maternal mortality rate (MMR) and infant mortality rate (IMR) in policy formulation in the Philippines, specifically with regard to the controversial legislation that is Republic Act 1034, otherwise known as "The Responsible Parenthood and Reproductive Health Act of 2012." It involved taking stock and analysis of various Congressional Records and Senate Journals, particularly those relating to the House Bill No. 4244 (An Act Providing for a Comprehensive Policy on Responsible Parenthood, Reproductive Health, and Population and Development, and for Other Purposes) and Senate Bill No. 2865 (An Act Providing for a National Policy Reproductive Health and Population and Development), respectively. The findings of the study show that MMR and IMR have political influence on policy formulation.

Keywords: indicators, role of indicators, policy formulation, maternal mortality rate (MMR), infant mortality rate (IMR)

Table of Contents

Abstract	i
I. INTRODUCTION	1
II. CONCEPTUAL/ANALYTICAL FRAMEWORK	4
A. Background of the Lehtonen (2009)'s framework including a brief discussion on how indicators are defined/conceptualized in the framework	
B. Lehtonen (2009)'s analytical framework	5
III. THE CASE OF MATERNAL AND CHILD HEALTH CARE POLICY IN THE PHILIPPINI	
A. Background/history of maternal and child health indicators in the Philippines	13
B. Use of MMR and IMR in planning, implementing and monitoring and evaluating maternal and health care in the Philippines	16
C. The Reproductive Health (RH) Bill	18
D. The role of MMR and IMR in policy formulation	20
IV. CONCLUDING REMARKS	26
REFERENCES	29
List of Figures	
Figure 1. Types of indicator influence	8
Figure 2. Preliminary framework of analysis for the POINT project	9
Figure 3. Preliminary framework of analysis as applied to the Philippine case study	22
Figure 4. PIDS-CPBRD Electronic Resource Base for Legislation	25
List of Annex Tables	
Annex Table 1. Deliberations on the House Bill No. 4244: An Act Providing for a Comprehensive Policy on Responsible Parenthood, Reproductive Health, a Population and Development, and for Other Purposes* (15th Congress)	
Annex Table 2. Deliberations on the Senate Bill No. 2865: An Act Providing for a National Policy on Reproductive Health and Population and Development	33

THE ROLE OF INDICATORS IN POLICY FORMULATION: THE CASE OF MATERNAL AND CHILD HEALTH CARE POLICY IN THE PHILIPPINES Janet S. Cuenca

I. INTRODUCTION

Policy formulation is the second major stage in the policy cycle which involves the process of generating policy options or alternative course of actions to address problems or issues identified at the agenda-setting stage. It is regarded as an important stage in the policy cycle because it involves the critical activity of formulating policy options to deal with problems, not to mention the importance of its outputs in succeeding stages of the policy process. Drawing up policy options is a complex activity because it involves defining and weighing of merits and risks of various options, which is the very essence of the policy formulation stage. As such, it requires "policy analysis," which is a critical component of policy formulation process (Howlett et al. 2009).

Turnpenny et al. (2013) argue that policy appraisal is a very specific type of policy analysis, which involves the use of analytical methods (i.e., either formal or informal) in any part of policymaking particularly from agenda-setting to implementation. More specifically, ex ante policy appraisal relates to policy formulation, which addresses the question: "how policy options are formulated within government?" The process of formulation per se involves activities such as appraising knowledge or evidence, engaging in dialogue about the nature of policy problems and solutions, and identifying and assessing the impacts of different policy options. In this regard, Turnpenny et al. (2013) emphasize the role of knowledge in policymaking and they argue that the terms policy analysis, policy formulation, impact assessment, and policy appraisal used by both academics and non-academics are concerned with "how evidence is collected, marshalled, communicated, digested and used." In particular, they highlight the role of policy appraisal in knowledge collection, review, and utilization processes.

On the other hand, Lehtonen (2009) points out that research from various fields on the role of knowledge in policymaking has shown that knowledge from appraisals, assessments, evaluations, and scientific research is seldom directly used by policymakers in informing their policy decisions. Expert knowledge has more indirect influence on policymakers and other stakeholders by shaping their frameworks of thought, promoting individual and collective learning, and "serving as 'ammunition' in political battles for power and influence." On the contrary, indicators have been demonstrated or assumed to have powerful influence

on policies and societies in general. According to the study, research on the role of social science in policymaking showed that "presenting information in the form of social statistics enhances its use."

In addition to the complexity of the policy formulation process, Corkery et al. (1995) argue that it is not clear what this process really looks like, thus resulting in difficulty in knowing how to enhance such process. On the other hand, Howlett et al. (2009) point out that policy formulation has broad characteristics as follows:

- 1. Formulation need not be limited to one set of actors. Thus, there may well be two or more formulation groups producing competing (or complementary) proposals.
- 2. Formulation may proceed without clear definition of the problem, or without formulators ever having much contact with the affected groups.
- 3. There is no necessary coincidence between formulation and particular institutions, though it is a frequent activity of bureaucratic agencies.
- 4. Formulation and reformulation may occur over a long period of time without ever building sufficient support for any one proposal.
- 5. There are often several appeal points for those who lose in the formulation process at any one level.
- 6. The process itself never has neutral effects. Somebody wins and somebody loses even in the workings of science.

In this regard, policy formulation can be considered as "a highly diffused and disjointed process that varies by case." Unfortunately, there is no theoretical model that is adequate to fully explain such process. It should be noted, however, that Howlett et al. (2009) argue that it is possible to delve into the general nature of the formulation process and the activities involved in it. In addition, "the nuances of policy formulation in particular instances can be fully understood only through empirical case studies."

In this light, the current research aims to conduct a case study on policy formulation in the Philippines, particularly in the area of maternal and child health care. In particular, it looks into the role of indicators such as maternal mortality rate (MMR) and infant mortality rate (IMR) in policy formulation. The research attempts to address the following questions:

- 1. Do MMR and IMR really influence policy formulation?
- 2. How do these indicators influence in policy formulation?
- 3. Under which circumstances these indicators influence policy formulation?

In general, the case study can be viewed as useful first step to establish the theory that MMR and IMR play a role in policy formulation in the Philippines, particularly in the area of maternal and child health care. In particular, it aims to:

- I. document the level and type of actual use of health indicators
- II. assess the relevance of the use and influence of indicators in policy formulation
- III. identify issues surrounding the use of indicators in policy formulation
- IV. draw policy recommendations

However, due to time constraints, the role of MMR and IMR in policy formulation is only analysed in the case of the Reproductive Health Bill, particularly House Bill No. 4244 and Senate Bill No. 2865.

The paper is organized as follows: Section II provides the conceptual/analytical framework adopted in the case study. Section III presents the case study on maternal and child health care policy formulation in the Philippines. The paper ends with the concluding remarks in Section IV.

II. CONCEPTUAL/ANALYTICAL FRAMEWORK¹

For the purpose of the paper, Lehtonen (2009)'s conceptual framework/model is adopted to examine the role of maternal mortality rate (MMR) and infant mortality rate (MMR) in policy formulation in the Philippines. Consequently, some of the preliminary hypotheses on factors conditioning the influence of indicators as identified in Lehtonen (2009) are tested using the Philippine case study, which is presented in Section III. The current section discusses the Lehtonen (2009)'s framework. The first part provides a short background on the framework including a brief discussion on how indicators are defined or conceptualized in the framework. The second part provides the underpinnings and details of the framework.

A. Background of the Lehtonen (2009)'s framework including a brief discussion on how indicators are defined/conceptualized in the framework

The Lehtonen (2009)'s analytical framework was developed for the Policy Influence of Indicators (POINT) Project², which started in 2008 to analyse the role of environmental and sustainable development indicators in policymaking. The key questions that the said project aimed to address include (i) are such indicators actually used in policy processes? and (ii) do they have any influence on policy outcomes? (Frederiksen et al. n.d.). In particular, the said project examined "ways in which *indicators are used in practice*, to what extent and in what way indicators *actually influence*, *support*, *or hinder* policy and decision-making processes, and what could be done to *increase the chances* that indicators will play a positive role in such processes." The Project's overarching tasks³ are as follows:

- Design a coherent framework of analysis and generate hypotheses on the use and influence of indicators (i.e., environment and sustainable development indicators) in European policies that are geared towards sustainability.
- ➤ Test the analytical framework and the hypotheses on specific cases of sector integration and sustainability indicators (i.e., indicators of integration of environmental concerns into sectoral policies [e.g., agriculture, energy and transport]; indicators designed to follow up national sustainable development strategies; and composite indicators [indices] of sustainability and well-being).

¹ Draws heavily on Lehtonen (2009)

² A European Union (EU) 7th Framework Programme for Research and Technological Development (FP7) Research Project that aims to explain the role of indicators in policy processes and contexts

³ http://www.point-eufp7.info/objectives/

Lehtonen (2009)'s work can be viewed as an attempt to address these overarching tasks. In his framework, indicators are presented as an assessment technology. As such, they are used in monitoring policy performance and fostering accountability in the context of evidence-based policy and New Public Management and in promoting policy learning as well. Lehtonen (2009) points out that researchers and practitioners have given much attention to the technical details of indicator design and less so on the role of indicators in policymaking. In this regard, he argues that policymakers' direct and instrumental use of indicators is "rather an exception than a rule."

Nevertheless, as mentioned earlier, the analytical framework that he developed (i.e., referred to in the paper as Lehtonen (2009)'s framework) is meant to analyse the role of environmental and sustainable development indicators in policymaking. It is noteworthy that the said framework was designed by drawing on experience from other fields of research on the role of knowledge in policymaking.

B. Lehtonen (2009)'s analytical framework

The Lehtonen (2009)'s framework is anchored on the roles of expert knowledge in decision-making, which are enumerated in Lehtonen (2009) as follows:

- Instrumental role information put to use for specific decisions or requested by decision-makers for specific projects;
- ➤ Conceptual or "enlightenment" role knowledge provides broad information base for decisions, by providing conceptual frameworks and fostering different types of learning; and
- ➤ Political role justifying or legitimizing policies, decisions and actors, or postponing actual decisions.

The author points out that these roles correspond to the three dominant conceptions of policymaking such as:

the rational-positivist model - sees policymaking essentially as a rational and linear process of problem-solving;

- the discursive-interpretative model perceives policymaking as a struggle over the definition, explanation and interpretation of public problems; and
- ➤ the strategic model wherein politics is pure competition between private conflicting interests without any necessary reference to a common good, rationality or similar overarching principle.

In addition, these models are not mutually exclusive but instead can be viewed as different stages of policy process and different ways in which political institutions deal with the problems.

Further, Lehtonen (2009) adopts the use of "influence" as its organizing concept, instead of the term "use," following the approach used by Henry and Mark (2003), whose main argument is that "research on the role of evaluation should adopt 'influence' as its organizing concept, instead of focusing on 'use'." It is noteworthy that Lehtonen (2013) points out that a key lesson from indicator literature is the importance of distinguishing between use and influence. He emphasizes that "more use does not necessarily imply more influence, and more influence does not automatically equal to 'social betterment'."

The focus of the framework is on the following aspects:

- ➤ Which types of influence can indicators have on policy? This aspect concerns identification of ways in which indicators influence policy, including the unintended types of influence and situations of "non-use."
- ➤ How to explain that influence? This aspect involves reference to various factors such as indicator quality, user characteristics, and political and institutional context.

Figure 1 presents the framework for analysing the types of influence that indicators have on policymaking. The framework consists of levels such as:

➤ Level 1: Individual beliefs and perceptions and frameworks of thought concerning indicators shape/influence an individual's behaviour in the processes of interpersonal interaction such as deliberation, negotiation, argumentation and dialogue, wherein evaluations generate their impacts.

⁴ Lehtonen (2009) enumerates a summary of the critiques against the term "use."

The actors in these processes include governmental bodies, industry, academics, media, and NGOs that use evaluations to:

- 1. persuade others to adopt a given line of action;
- 2. *legitimise* their own actions;
- 3. criticise actions of others or the evaluation findings; and
- 4. *defend* themselves against criticism based on the evaluation findings.

In the Lehtonen (2009) framework, these processes are viewed to operate both at the stage of indicator design and at the stage when the indicator becomes part of the public arenas of policymaking.

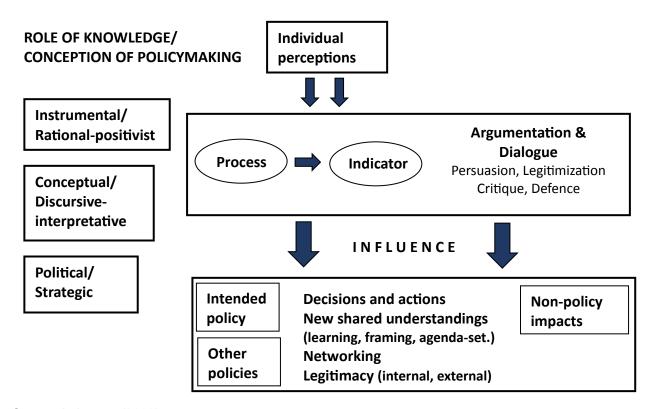
➤ Level 2: Influence at individual or collective level – The focus of the framework is on influence at collective level, rather than at individual level.

Such influence can be influence on the policies in question (i.e., the policies for which the indicators have been designed/intended policies), influence on other policies (e.g. energy indicators' influence on environmental policy), and broader impacts on society at large (e.g. trust, and legitimacy of public authorities, quality of democracy).

In addition, such influence may concern *decisions or actions*, which are referred to as policy change in Lehtonen (2009) study. Also, it may result in "policy-oriented learning" due to the creation of new shared of understandings, which is triggered by the process of indicator design or by the indicators per se. Further, indicators have key role as "framing tools" and "discursive elements" and they can also influence agenda-setting. Moreover, the influence or impact can be on building of professional networks between stakeholders and also, increased or decreased legitimacy (i.e., internal and external) of past and future actions, actors, or organizations. Internal legitimacy is described in the said study as a situation wherein actors' participation in an evaluation process intensifies their commitment to the project, thus motivating them to carry out their activities. On the other hand, external legitimacy is referred to in the said study as "the legitimacy of a policy, an actor, or an organization in the eyes of outsiders."

Lehtonen (2009) points out that these different types of influence can be associated with the three different roles⁵ of knowledge in decision-making and the corresponding conceptions of policymaking discussed above.

Figure 1. Types of indicator influence



Source: Lehtonen (2009)

On the other hand, **Figure 2** presents the framework that explains the different types of influence. In particular, the framework identifies the potential factors that shape/condition indicator influence. Also, it explains the interaction among these factors within the given context, thus resulting in the identified types of influence. Lehtonen (2009) classified these explanatory factors into three categories, namely, technical factors, i.e., relating to the quality and nature of the indicators; political, institutional and contextual factors; and participants (e.g., producer and user) factors, i.e., relating to the characteristics of the participants involved in the processes of indicator design and use.

More specifically, these factors are described in Lehtonen (2009) as follows:

⁵ According to Lehtonen (2013), "more sophisticated understanding of indicator roles seem to be emerging among the research communities employing notions such as "boundary objects," "management by numbers," and "governmentality." Such notions are expected to "provide a more nuanced understanding of the political roles of indicators..."

<u>User and producer factors</u> – include factors that relate to the characteristics/attributes of people involved in processes such as professional and educational background, institutional position, motivations, expectations/belief systems, mental models, and cognitive frames

The said study argues that although indicators have explicit and "official" purposes, they can be viewed differently by various stakeholders because of the differences in belief systems and cognitive frames or repertoires (i.e., stabilized ways of thinking and acting on the individual level or stabilized codes, operations, and technology on other levels).

Policy factors User factors Producer factors Long-term framework Repertoires Repertoires Short-term politics Beliefs Beliefs Interests Indic purpose, political stage Interest Issue characteristics Dynamics of Indicator Dynamics of Indicator use **Factors** indicator LEGITIMACY Argumentation Validity design Dialogue Reliability Argumentation **Timeliness** Dialogue LEGITIMACY Relevance **CREDIBILITY** Other policies **Non-policy impacts** Intended policy **Networking Decisions & New Shared** Legitimacy **Actions** understandings (internal & external) (Policy change) (Learning, framing, Agenda-setting) INFLUENCE

Figure 2. Preliminary framework of analysis for the POINT project

Source: Lehtonen (2009)

Policy factors – refer to wide range of elements relating to political and institutional contexts

Lehtonen (2009) cites three (4) type of policy factors such as:

- long-term "framework conditions" including the national policy style and culture; policymaking structures; socio-economic conditions; level of development of and changes in politico-administrative structures; and the position of the potential change agents in the national policymaking structures;
- short-term changes such as changes in politics and systemic governing coalitions; changes in socio-economic conditions and technology; and policy decisions and impacts from other subsystems like EU harmonization, introduction of New Public Management, or evidence-based policy); and
- 3. intended purpose of indicators and the stage of policy process in which the indicators operate or are expected to operate

He points out that indicators have different functions (or role) depending on the objective (e.g., identify problems, design policies, monitor policy performance, or enhance public awareness of a problem). Also, he mentions that the different role of indicators can be associated with the five stages in the evolution of a social problem such as:

- ✓ the emergence of the problem;
- ✓ the legitimization phase;
- ✓ the mobilization of a public for action;
- ✓ the formation of an official plan of action; and
- ✓ the implementation of the plan.

According to him, the legitimization and mobilization phases can be linked to with the discursive-interpretive stage of the process and so, the role of indicators tends to be conceptual. On the other hand, the formation and implementation of an action plan can be done "in a rational problem-solving way or more 'politically' through bargaining, log-rolling etc." In this regard, the role of indicators tends to be political.

4. issue characteristics, degree of uncertainty and value consensus – relates to the likelihood/chance of being in a rational policymaking mode, thus resulting in direct, instrumental use of indicators when there is a public consensus on the definition of the social problem; and the likely domination of political/strategic mode when the issue is controversial or if powerful interests are present

- Dynamics of indicator design refer to processes of dialogue and argumentation in indicator design; relates to the impact of the breadth and depth of stakeholder participation in the process, and the degree of influence that different parties have on final indicator design
- Indicator factors relate to the quality of the indicators per se

Lehtonen (2009) mentions that these factors refer to outcome of the processes of dialogue and argumentation and they include performance criteria such as validity, reliability, data availability, relevance, comprehensibility, timeliness, etc. Like in the case of dynamics of indicator design, these factors also relate to the breadth and depth of stakeholder participation in the process, and the degree of influence that different parties have on final indicator design. He highlights that the origin of the indicators (i.e., the way in which and by whom they were designed and the way they were introduced to the policy process) is important.

In sum, In **Figure 1**, the influence of indicators or indicator influence can be realized as a result of the argumentative processes by which indicators are designed (i.e., indicator design) or as a result of the processes wherein indicators are used as argumentative tools by various policy advocates/supporters. In **Figure 2**, the processes/dynamics of indicator design and in turn, the shape of the indicators (i.e., indicator factors) and policy influence of these processes are shaped/conditioned by policy factors (i.e., relating to the political context) and producer factors (i.e., relating to the characteristics of the participants). On the other hand, the processes of indicator use are shaped/conditioned by policy factors, user factors (i.e., relating to the characteristics of the participants), and indicator factors (i.e., characteristics of the indicators). The influence of the indicator factors is determined by their salience, credibility, and legitimacy, which are based on the perception of the actors involved in the process.

Based on the framework, Lehtonen (2009) formulates a number of preliminary hypotheses on factors conditioning/shaping the influence of indicators in policymaking. For the purpose of the paper, select hypotheses are categorized into Lehtonen's types of influence and are tested using the Philippine case study based on data and information obtained through document analysis. The select hypotheses include the following:

1. User factors

a. Hypothesis#1 - Educational background of users: Individuals with training in hard sciences (and organizations with a hard science culture) are more likely to make frequent yet critical use of indicators than those with a background in disciplines with less emphasis on quantitative skills.

2. Policy factors

- a. Hypothesis #2 Political style: Indicators more easily gain a political role as compared to "information that is not in the form of statistics (i.e., quantitative data)."
- b. Hypothesis #3 Political style: Indicators are more likely to have a conceptual influence as compared to "information that is not in the form of statistics (i.e., quantitative data)."
- c. Hypothesis #4 Culture and tradition of policymaking based on targets and result-based management ("audit culture"): Indicators are likely to have a greater influence (i.e., relative to "information that is not in the form of statistics or quantitative data) as an elemental part of results-based policymaking.
- d. Hypothesis #5 Impacts from decisions in other policy areas: "Imposed use" and legal commitment behind an indicator enhances its weight in policymaking.
- e. Hypothesis #6 Adoption of NPM and evidence-based policy principles enhance the role of indicators in policymaking.

3. Dynamics of indicator design

a. Hypothesis #7 - Breadth and quality of participation of stakeholder in indicator design: Broad participation of intended users in designing the indicators enhances their influence.

4. Indicator factors

a. Hypothesis #8 - Source of the indicator: Indicators designed by the "user" organization are more influential than those prepared by "outsiders."

III. THE CASE OF MATERNAL AND CHILD HEALTH CARE POLICY IN THE PHILIPPINES

The current section presents the case study that looks into policy formulation in the Philippines, particularly in the area of maternal and child health care in the Philippines. More specifically, it delves into the role of health indicators such as maternal mortality rate (MMR) and infant mortality rate (IMR) in health policy formulation in the country. Due to time constraints, the study examines only the role that these indicators played in the deliberations in the House of Representatives and in the Senate on the Reproductive Health Bill, i.e., House Bill 4244 (House of Representatives' version of the Reproductive Health Bill) and Senate Bill 2865 (Senate's version of the Reproductive Health Bill), respectively.⁶

The first two parts of the section presents the background or history of maternal and child health indicators in the Philippines and a discussion on their use in planning, implementing and monitoring and evaluating maternal and child health care in the country. The third part provides a brief background of the aforementioned bills while the last part analyses the role of MMR and IMR in policy formulation, specifically in the case of the Reproductive Health Bill.

Following the research method adopted in the POINT Project, the case study employs document analysis to have an idea on how MMR and IMR are used and how they influenced policy formulation in the Philippines. In addition, to examine the role (i.e., influence) of MMR and IMR in maternal and child health care policy formulation in the Philippines, the paper adopts Baumgartner and Jones (2009)'s methodology.

A. Background/history of maternal and child health indicators in the Philippines

Maternal mortality rate (MMR) is defined as the ratio between the total number of deaths from maternal causes registered for a given year and the total number of live births registered of the same year. Based on DOH's Philippine Health Statistics (PHS), "it measures the risk of dying from causes related to pregnancy, childbirth, and puerperium. It is an index of the obstetrical care needed and received by women in a community." On the other hand, infant mortality rate (IMR) is the ratio between the total number of deaths under one (1) year of age registered in a given calendar year and total number of registered live

13

⁶ The House of Representatives is the lower chamber while the Senate is the upper chamber of the Congress of the Philippines, i.e., the national legislature of the country.

births of the same calendar year. According to DOH's PHS, "it measures the risk of dying during the first year of life. It is a good index of the general health condition of a community since it reflects the changes in the environmental and medical conditions of a community."

Based on Figure 1 of the 1960 Annual Report on the Philippines Vital and Health Statistics,⁷ the earliest data available on MMR (referred to in the report as maternal death rate) and IMR (referred to in the report as infant death rate) at the national level is for the year 1930 and 1926, respectively. It can be gleaned from the Foreword of the said annual report that the Department of Health (DOH)'s collection, compilation and evaluation of vital and health statistical data and epidemiological information⁸ is in support of formulation of disease surveillance, which is in turn essential in planning, implementing, and evaluating health programs that are consistent with the problems of health and disease in the Philippines. In addition, the statistical and epidemiological data are disseminated to public health administrators concerned in the form of the report.

Possibly, as early as the 1920s, the Philippine government, particularly the DOH, was already conscious of the use of statistics in planning, implementing, and evaluating health programs. However, the earliest PHS that is available on the DOH website is that for 1960. Interestingly, the DOH website has uploaded the annual report for the succeeding years until 2009. All these reports basically contain natality statistics (e.g., registered live births, number of births and crude birth rates, number of live births and crude birth rates, etc), morbidity statistics/notifiable diseases⁹ (e.g., ten leading causes of morbidity, reported cases of notifiable diseases, etc), and mortality statistics (e.g., total, infant, maternal, and foetal).

According to the 2009 PHS (i.e., the latest report available online), the PHS is envisioned "to serve as one of the bases of health administrators at various levels for planning, implementation, and assessment of health programs and services. These data can also be utilized to assess costs of health care, identify needed prevention targets for health programs, and these are important tools not only for planning but also for monitoring and evaluation of health programs. Likewise, statistical data in this publication can also be beneficial to the researchers, academicians, and local government executives." It is

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⁷ Called Philippine Health Statistics starting 1961; Prepared annually by the Disease Intelligence Center, i.e., currently called National Epidemiology Center (NEC) of the DOH; NEC also publishes the Field Health Services Information Services.

⁸ Include, inter alia, data on maternal and child health, environmental health science, communicable diseases (e.g., leprosy, TB, rabies, malaria, schistosomiasis, and STD/AIDS) and demographic information (e.g., health status, manpower, and health facilities).

⁹ Based on the various annual reports, the Law on Reporting of Communicable Diseases (Act 3573) requires that any case of communicable disease shall be reported immediately to the nearest Rural Health Unit (or barangay/village health station).

noteworthy that the DOH is an advocate of evidence-based decision-making at all levels of public health systems.

Another source of data on MMR and IMR is the Field Health Services Information System (FHSIS), which is published yearly by the DOH, particularly through the National Epidemiology Center (NEC). Based on the Manual of Operations for FHSIS, the FHSIS is a "major component of the network information sources¹⁰ developed by the DOH to enable it to better manage its nationwide health service delivery activities. It has been designed to provide the basic service data needed to monitor activities in each programs." By virtue of Executive Order (EO) 352, the FHSIS has been included by the National Statistical Coordination Board (NSCB) in the system of designated statistics.

Like the PHS, the FHSIS contains natality statistics, notifiable diseases, and mortality statistics, specifically the MMR, IMR, and under-five (U5) mortality rate or child mortality rate (CMR). In addition, it contains "summary data on health service delivery and selected program accomplishment indicators at the barangay (i.e., village), municipality/city, and district, provincial, regional and national levels." One special feature of the FHSIS is that it is a system that is in place down to the barangay/village level. The data available in FHSIS, combined with data from other sources, are useful in monitoring and evaluating program. Aside from these purposes, the FHSIS statistics, including MMR and IMR, have helped local government to identify public health priorities. In addition, they can be useful basis for planning, budgeting, logistics, and decision-making at all levels of government.

In addition to the PHS and FHSIS,¹² another source of data on MMR and IMR is the National Demographic and Health Survey (NDHS), which is conducted under the MEASURE Demographic and Health Surveys program that is funded by the U.S. Agency for International Development (USAID) and implemented by the Philippine National Statistics Office (NSO) and the ICF Macro, an ICF International Company. The NDHS is meant to collect information on different health–related topics including fertility, family planning, and maternal and child health (NSO and ICF Macro, 2009). The first NDHS was conducted in 1968, which started a series of quinquennial health and demographic survey (DHS) leading

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¹⁰ DOH maintains other information systems such as Hospital Services Information System, Financial Information System, Physical Resources Information System, and Human Resources Information System.

¹¹ It should be noted that the FHSIS is a system that is in place down to the barangay/village level.

¹² The main difference between PHS and FHSIS is the source of data. The former is generated by the DOH in collaboration and coordination with the National Statistics Office (NSO) and partners in the local health units. In particular, NSO provides the statistical data on births, deaths, and population estimates while DOH provides the data on notifiable diseases based on FHSIS. In contrast, the latter is based on administrative data that are collected through the FHSIS that is in place down to the barangay/village level.

to the 2008 NDHS, i.e., the latest survey. 13 Similarly, the 2008 NDHS Report is the latest report available online.14 As mentioned earlier, data on MMR and IMR are available in the NDHS Reports. It should be noted, however, that the 2008 NDHS did not collect data on maternal mortality.

B. Use of MMR and IMR in planning, implementing and monitoring and evaluating maternal and health care in the Philippines

As mentioned in Section I, vital and health statistics including MMR and IMR have been collected, compiled, and evaluated since the 1920s by the DOH in support to the formulation of disease surveillance, which in turn is essential in planning, implementing, and evaluating health programs that are meant to address health issues in the Philippines. In recent years, various Administrative Orders (AO) issued by the DOH concerning maternal and child health care made reference to MMR and IMR. To wit:

- 1. AO 2007-0026: Revitalization of the Mother-Baby Friendly Hospital Initiative in Health Facilities with Maternity and Newborn Care Services – "In 2003, the infant mortality rate (IMR) was 29 per 1000 live births. Improvements in the health and nutrition status of infants and young children through exclusive and extended breastfeeding as well as proper complementary feeding will significantly contribute to the achievement of the MDG of reducing infant mortality by two-thirds by the year 2015."
- 2. AO 2007-0039: Regulation of Birthing Homes "One of the challenges that the Department of Health (DOH) currently faces is the achievement of the Millennium Development Health Goals (Health MDGs) by 2015. One of the health MDGs is to improve maternal health, specifically to reduce maternal mortality ratio by two-thirds. To achieve the goal of maternal mortality reduction, a new strategy has been adopted by the DOH for implementation under the FOURmula One for Health (F1) reform initiatives. This strategy is based on a new world view that considers all pregnant women to be at risk for complications and therefore needing easy access to both basic and comprehensive emergency obstetric care. This strategy calls for deliveries that are conducted in primary-level facilities (i.e., health centers), to be backed up by access to referral-level facilities. Part of this strategy is ensuring that these health facilities are compliant with DOH licensure and Philippine Health Insurance Corporation (PHIC) accreditation standards."

http://www.measuredhs.com/data/available-datasets.cfm
 http://www.measuredhs.com/pubs/pdf/SR175/SR175.pdf

3. AO 2008-0029: Implementing Health Reforms for Rapid Reduction of Maternal and Neonatal Mortality – "Despite previous efforts and improvement in general health status indicators, the rates of decline in maternal and neonatal mortality have decelerated in the past decade to a point where Philippine commitments to the MDGs of lowering maternal mortality ratio (MMR) and infant mortality rate (IMR) may not be achieved. ... This order applies the Fourmula One for Health (F1) approach for the local implementation of an integrated Maternal, Neonatal and Child Health and Nutrition (MNCHN) Strategy. It outlines specific policies and actions for local health systems to systematically address health risks that lead to maternal and, especially neonatal deaths, which comprise half of reported infant mortalities."

Further, MMR and IMR are used by the National Economic and Development Authority (NEDA)¹⁵ in setting targets and priorities for improving the health status of the Filipinos. In terms of enhancing health care, the 2001-2004 Medium-Term Philippine Development Plan (MTPDP) aimed to break vicious cycle of poverty, thus widening access to health and medical care. One strategy to achieve this objective was to direct government's financial support, in the form of grant or matching grant, towards empowerment of local governments to enable them to carry out devolved basic health services effectively. This strategy along with the other strategies mentioned in the said MTPDP¹⁶ was formulated to reduce MMR from from 0.6 per 1,000 live births in 1998 to 0.4 per 1,000 live births in 2004 and reduce IMR from 48.9 per 1,000 livebirths in 1998 to 35.0 per 1,000 live births in 2004.

On the other hand, MMR and IMR were also used by the NEDA in health situational analysis. For instance, the 2004-2010 MTPDP highlights the general improvement in the health conditions of the Filipinos as indicated by the reduction in IMR from 48.9 per 1,000 live births in 1998 to 29 per 1,000 live births in 2003. However, due to lack of latest data for MMR at the time when the said MTPDP was formulated, there is no way to know whether there had been improvement in MMR since 1998, when it was estimated to be 172 per 100,000 live births.

Likewise, NEDA's 2011-2016 Philippine Development Plan (PDP) emphasizes that "the country's health status is best summarized in the progress towards the MDGs." To date,

¹⁵ Philippine's central planning agency

¹⁶ http://www.neda.gov.ph/ads/mtpdp/chapters 10-15/ch11.htm

¹⁷ In 2000, the Philippines was among the 189 member states of the United Nations which adopted the UN Millennium Declaration, thus affirming their commitment to the Millennium Development Goals (MDGs). Two of the MDGs relate to maternal and child health. To wit, MDG 4 is concerned about reducing child mortality while MDG 5 is concerned about improving maternal health.

the country is on track/on target for most of its MDGs including those related to child health. On the contrary, it lags behind in terms of reducing the maternal mortality ratio (MMR). It should be noted, however, that the decline in neonatal mortality (i.e., comprising majority of infant deaths) has also been very slow. Based on the PDP, the MMR was placed at 95 to 163 maternal deaths per 100,000 live births in 2010 while IMR was estimated to be 25 infant deaths per 1,000 live births in 2008. In this sense, the country is far from hitting the MDG5 target of 52 per 100,000 live births by 2015. In contrast, it is likely to achieve the MDG4 target of 19 deaths per 1,000 live births by 2015.

It is noteworthy that due to Philippine's commitment to the MDGs, MMR and IMR have gained more attention and importance over the years. As MDG indicator for MDG5 and MDG4, MMR and IMR have been heavily used in monitoring and assessing progress in achieving MDG5 and MDG4, respectively, both at the national and subnational levels. Since 2000, the Philippine Government, through the NEDA, has come up with four (4) MDG Progress Reports and these reports have tracked all the MDG indicators including MMR and IMR across the years. Based on the latest report, i.e., 2010 MDG Progress Report, there has been significant reduction in IMR, i.e., from 57 deaths per 1,000 live births in 1999 (i.e., base year) to 25 deaths per 1,000 live births in 2008. On the contrary, there has been slow reduction in MMR, i.e., from 209 maternal deaths per 100,000 live births in 1990 (i.e., base year) to 162 maternal death per 100,000 live births in 2006. Thus, the country is unlikely to meet the 2015 MDG5 target.

C. The Reproductive Health (RH) Bill

House Bill (HB) 4244, otherwise known as "An Act Providing for a Comprehensive Policy on Responsible Parenthood, Reproductive Health, and Population and Development, and for Other Purposes, was sponsored/introduced by Congressman Edcel Lagman. It is the consolidation of various House Bills such as HBs 96, 101, 513, 1160, 1520 and 3387 which was filed in the 15th Congress, particularly on February 21, 2011, thus substituting the said bills.

Dubbed as RH Bill, HB 4244 is one of the most controversial bills ever filed in the Congress because it promotes the use of contraceptives, which is strongly opposed by the Roman Catholic Church. The said bill aims to "provide stable universal access to medically safe, legal, affordable, effective, and quality reproductive health care services, methods, devices, supplies, and relevant information and education, with priority on the needs of women and

¹⁸ http://www.neda.gov.ph/econreports dbs/MDGs/

couples, among other underprivileged sectors... The bill proposes programs, mechanisms, and systems that will improve universal access to family planning and maternal, newborn and child health services from the national level down to local governments and communities."¹⁹

Based on the explanatory note²⁰ for the RH Bill prepared by Hon. Lagman, one of the six (6) primary objectives that the bill aims to achieve is improvement in maternal, newborn and child health and nutrition and reduction in maternal, infant and child mortality. According to the note, 11 mothers die daily in the Philippines. In this regard, the RH Bill is supportive of the country's commitment to the MDGs, i.e., "on reduction of infant mortality, improvement of maternal health and universal access to family planning." After thorough deliberations on the bill, it was approved by the House of Representatives on third reading on December 17, 2012 and was transmitted to the Senate on December 18, 2012 for amendments and with a request to form a conference committee to reconcile disagreeing provisions of HB 4244 and SB 2865.

On the other hand, the Senate's version of the Reproductive Health Bill, i.e., Senate Bill (SB) 2865, otherwise known as "An Act Providing for a National Policy on Reproductive Health and Population and Development," was sponsored/introduced by Sen. Miriam-Defensor Santiago, Sen. Pia Cayetano, and Sen. Panfilo Lacson. It was filed on June 6, 2011 by the said Senators, thus substituting similar Senate Bills such as HBs 2378 and 2768. Based on the sponsorship speech of Sen. Cayetano on June 7,2011, the bill is aimed at addressing the number of mothers losing life while giving birth and the high infant mortality rate, which according to her, is related with maternal health.

She emphasized that the Philippines is one of the countries with highest maternal mortality rates in Southeast Asian, thus making the country off-track in terms of achieving the Millennium Development Goal No. 5. She pointed out that the objective of the bill is "to enable all pregnant women to have access to pre-natal care, to be attended to by a skilled health professional while giving birth, and to be given post-natal care for her and her newborn." After thorough deliberations in the Senate, the bill was approved on third reading on December 17, 2012. The bill was sent to the House of Representatives requesting for concurrence and also approving the House of Representatives' request for conference committee to reconcile disagreeing provisions of SB 2865 and HB 4244.

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¹⁹ http://www.plcpd.com/wp-content/uploads/2011/06/RH-primer-English.pdf

²⁰ Same explanatory note for House Bill 96, which was also introduced by Hon. Edcel Lagman in the 15th Congress

On December 19, 2012, the Conference Committee Report was submitted to the Senate, recommending that consolidation of SB 2865 and HB 4244 be approved as reconciled. The final title of the RH Bill is "An Act Providing for a National Policy on Responsible Parenthood and Reproductive Health." The consolidated RH Bill was approved and signed into law by Pres. Benigno S. Aquino III on December 21, 2012 and became Republic Act No. 10354.

D. The role of MMR and IMR in policy formulation

To examine the role of MMR and IMR in policy formulation in the Philippines, specifically with regard to the controversial legislation, i.e., Republic Act 1034, otherwise known as "The Responsible Parenthood and Reproductive Health Act of 2012," the paper adopts Baumgartner and Jones (2009)'s methodology. The methodology involved taking stock and analysis of various Congressional Records and Senate Journals, specifically those relating to the House Bill No. 4244 and Senate Bill No. 2865, respectively.

In particular, it entailed downloading and review/analysis of the following documents:

Congressional Records

- ✓ First regular session 29 Congressional Records (i.e., starting from February 21, 2011, i.e., when the Bill was filed and was referred to the Committee on Rules)
- ✓ Second regular session 103 Congressional Records
- ✓ Third regular session 53 Congressional Records (i.e., until the Reproductive Health Bill was approved by the House of Representatives on third reading on December 17, 2012)

Senate Journals – 44 Journals

Based on document analysis, in 32 days (i.e., out of 185) of Congressional deliberations and amendments on HB 4244, MMR was mentioned about 55 times while IMR was mentioned about 40 times. The ratio of the number of times MMR was mentioned in the deliberations to the number of interventions (i.e., 32) is about 172 percent, which is very high. On the other hand, the ratio of the number of times IMR was mentioned in the same deliberations to the number of interventions (i.e., 32) is about 125 percent, which is also very high. Albeit crude measure, these ratios indicate the significant influence of these indicators in the policy formulation in the case of the reproductive health in the House of Representatives (**Annex Table 1**).

On the other hand, in 34 days (i.e., out of 44) of Senate deliberations and amendments on SB 2865, MMR was mentioned 166 times while IMR was mentioned 10 times only. Relative to the number of interventions (i.e., 37), MMR dominated in the Senate deliberations. The ratio of the number of times MMR was mentioned in the deliberation to the number of interventions was estimated to be 449 percent, which is huge. On the contrary, IMR did not figure out much in the deliberations, having a ratio of only 27 percent. These findings suggest the significant influence of MMR in policy formulation related to responsible parenthood and reproductive health. On the contrary, IMR's role in policy formulation is not remarkable (Annex Tables 2).

To identify the explanatory factors which condition/shape the influence of MMR and IMR in maternal and child health care policy formulation in the Philippines, select hypotheses discussed in Section II of the paper are tested using information based on document analysis. In addition, these hypotheses are situated in the Lehtonen (2009)'s framework to better understand the interaction of the conditioning factors in the given context (**Figure 3**).

The results of the hypothesis testing are as follows:

1. User factors

Hypothesis #1 - Educational background of users: Individuals with training in hard sciences (and organizations with a hard science culture) are more likely to make frequent yet critical use of indicators than those with a background in disciplines with less emphasis on quantitative skills.

Majority of the policymakers who used MMR or IMR in the deliberations in the Congress of the Philippines²¹ do not have training in hard sciences as shown in **Annex Table 1** and **Annex Table 2**. Apparently, most of them are lawyers and thus, Hypothesis #1 does not hold true in the chosen case study.

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²¹ The national legislature of the country which is a bicameral body composed of the Senate (upper chamber) and the House of Representatives (lower chamber); However, Congress is commonly used to refer to the latter.

Policy factors User factors **Producer factors** Long-term framework Repertoires Repertoires Short-term politics **Beliefs Beliefs** Indic purpose, political stage Interest Hypothesis #1 Interests Issue characteristics Hypothesis #2, Hypothesis #3 #4, #5, #6 Dynamics of Indicator **Dynamics of** Hypothesis #7 SALIENCE Indicator use **Factors** indicator **EGITIMACY** Argumentation Validity design Dialogue Reliability Argumentation **Timeliness** Dialogue LEGITIMACY Relevance Hypothesis #8 **CREDIBILITY** Other policies Non-policy impacts **Intended policy Decisions & New Shared** Networking Legitimacy **Actions** understandings (internal & external) (Policy change) (Learning, framing, Agenda-setting) INFLUENCE

Figure 3. Preliminary framework of analysis as applied to the Philippine case study

2. Policy factors

Hypothesis #2 - Political style: Indicators more easily gain a political role as compared to "information that is not in the form of statistics/quantitative data."²² It should be noted that indicators are quantifiable measures. As such, they can raise awareness of a problem, which in turn indicates the need for prioritization.

As mentioned in Section II,²³ the role of indicators can be associated with the five stages in the evolution of a social problem. In particular, indicators gain a political role in the formation and implementation of an action plan, specifically in bargaining and log-rolling. The same

²² Lehtonen (2009) mentions that research on the role of social science in policymaking showed that "presenting information in the form of social statistics enhances its use."

²³ In the discussion on policy factors, specifically on the intended purpose of indicators and the stage of policy process in which the indicators operate or are expected operate

holds true in formulating policy options to address public problems or issues. In the deliberations concerning the RH Bill, both in the Congress and the Senate, MMR and IMR have been used as argumentative tools by various advocates/supporters of the RH Bill as shown in **Annex Table 1** and **Annex Table 2**, thus, these indicators played a political role. Hence, Hypothesis #2 holds true in the case study.

Hypothesis #3 - Political Style: Indicators are more likely to have a conceptual influence as compared to "information that is not in the form of statistics/quantitative data." Based on Lehtonen (2009), indicators have a key role as "framing tools" and "discursive elements." This also relates to Lehtonen (2009)'s discussion on the link between the role of indicators and the stage in the evolution of a social problem. To wit, the role of indicators tends to be conceptual in the legitimization and mobilization phases. It is also the case in the processes/dynamics of indicator design, wherein MMR and IMR serve as "framing tools" or "discursive elements."

Nevertheless, indicator design is outside the mandate of the policymakers. Thus, the conceptual influence of MMR and IMR can never be examined within the context of the current case study.

Hypothesis #4 - Culture and tradition of policymaking based on targets and result-based management ("audit culture"): Indicators are likely to have greater influence (i.e., relative to "information that is not in the form of statistics") as an elemental part of results-based policymaking.

The Philippine government adopts a unique model of performance-based budgeting, i.e., the Organizational Performance Indicators Framework (OPIF). Expectedly, this model heavily uses performance indicators (i.e., including MMR and IMR) for monitoring and budgeting purposes. Thus, Hypothesis #4 holds true in the chosen case study.

Hypothesis #5 - Impacts from decisions in other policy areas: "Imposed use" and legal commitment behind an indicator enhances its weight in policymaking.

It can be gleaned from **Annex Table 1** and **Annex Table 2** that there were only few mentions on the MDGs in the deliberations, both at the House of Representatives and the Senate. Thus, Philippine's commitment to MDGs has no bearing on the policy influence of MMR and IMR. Hence, Hypothesis #5 does not hold true.

Hypothesis #6 - Adoption of NPM and evidence-based policy principles enhance the role of indicators in policymaking.

The Philippine government adopts evidence-based policymaking. In particular, the Congressional Policy and Budget Research Department (CPBRD) and the Philippine Institute for Development Studies, a government think tank attached to the National Economic and Development Authority (NEDA) (i.e., the central planning agency of the country) have a collaborative project called Electronic Resource Base for Legislation (ERBL) [Figure 4]. The said project aims to be a major source of information for legislators and the public by linking legislative information with research resources. It encourages more discussion and debate on pending bills by making ERBL accessible to the public and by providing inputs from results of studies. In this light, Hypothesis #6 holds true in the chosen case study.

3. Dynamics of indicator design

Hypothesis #7 - Breadth and quality of participation of stakeholder in indicator design: Broad participation of intended users (i.e., policymakers in the current case study thus, making them part of the producers in the Lehtonen (2009)'s framework) in designing the indicators enhances their influence.

As mentioned earlier, indicator design is outside the mandate of policymakers and so, they do not have participation in indicator design. It should be noted, however, that policymakers are usually invited in dissemination seminars/workshops on the results of various government surveys including the NDHS. Nevertheless, in the various deliberations, the policymakers referred to the data on MMR and IMR based on the NDHS, which is conducted under the MEASURE DHS project that is funded by the U.S. Agency for International Development (USAID) and implemented by ICF Macro, ICF International company, albeit with NSO participation.

Hence, non-participation of policymakers in indicator design did not prevent them from using the NDHS data. Nevertheless, there are a few policymakers who doubted the reliability of data because they thought the international organizations have vested interest and agenda but in general, Hypothesis #7 does not hold true in the chosen case study.

Figure 4. PIDS-CPBRD Electronic Resource Base for Legislation



4. Indicator factors

Hypothesis #8 - Source of the indicator: Indicators designed by the "user" organization (i.e., the policymakers in this case,) are more influential than those prepared by "outsiders."

It should be noted that as shown in **Figure 3** the shape of indicators (i.e., indicator factors) is conditioned by policy factors (i.e., relating to the political context) and processes/dynamics of indicator design, which are shaped/conditioned by producer factors (i.e., relating to the characteristics of the participants). Like in Hypothesis #7, it can be gleaned from Hypothesis #8 that "users" can form part of the producers if they are involved in the indicator design. Apparently, in the Lehtonen (2009)'s framework, there is no marked distinction between producers and users possibly because users (and other stakeholders) can actually participate in the indicator design, thus making them producers. It is noteworthy that in the Philippines some government agencies such as the DOH produce their own indicators and statistics for their use in planning, implementation and monitoring and evaluation of programs.

Nevertheless, based on document analysis, majority of the policymakers used data on MMR and IMR sourced from NDHS, which is conducted under the MEASURE DHS project that is

funded by the U.S. Agency for International Development (USAID) and implemented by ICF International. Although the National Statistics Office is involved in carrying out the NDHS, the methodology adopted is that of the said international organizations. On the contrary, policymakers do not use the data on MMR and IMR which are generated by the DOH through the FHSIS because they are prone to recording errors and often underreported. In this regard, there is no evidence that Hypothesis #8 holds true.

IV. CONCLUDING REMARKS

Taking the case of maternal and child health care policy in the Philippines, particularly looking at the case of the Reproductive Health Bill, findings of the study show that MMR and IMR has influence (i.e., political) on policy formulation. Such influence is conditioned/shaped by policy factors that include the following:

- 1. Political style: Indicators more easily gain a political role as compared to "information that is not in the form of statistics/quantitative data."
- Culture and tradition of policymaking based on targets and result-based management ("audit culture"): Indicators are likely to have greater influence (i.e., relative to "information that is not in the form of statistics") as an elemental part of results-based policymaking.
- 3. Adoption of NPM and evidence-based policy principles enhance the role of indicators in policymaking.

On the contrary, user factors, dynamics of indicator design, and indicator factors have not been found to condition/shape the influence of MMR and IMR in policy formulation in the case of the Reproductive Health Bill. In particular, the study shows that the tendency of policymakers to make critical use of indicators is not determined by their educational background (i.e., training in hard sciences). The culture and tradition of results-based policymaking and also, the adoption of evidence-based policymaking must have been so deep-rooted that many of the country's policymakers, albeit without training in hard sciences, have good understanding of these indicators and their importance in policymaking. Thus, testing the hypothesis on user factors (i.e., Hypothesis #1) in the case of other sectors (e.g., education, social services, housing, etc.) is expected to yield the same results.

On the other hand, indicator design is not part of the functions and responsibilities of policymakers and thus, they will never be involved in the processes and dynamics along this area. There are government agencies (e.g., National Statistical Coordination Board (NSCB),

National Statistics Office (NSO), etc.) mandated to do the task of indicator design and data generation. Hence, there is no way that indicator factors (i.e., in terms of Hypothesis #8) and dynamics of interior design (i.e., in terms of Hypothesis #7) can condition/shape the influence of MMR and IMR, not even other sectoral indicators, in policy formulation. In this regard, it is also expected that same results will be obtained using other case study on other sectors such as education, social services, housing, and others.

In sum, sector difference cannot explain why hypotheses on the user factors, dynamics of indicator design, and indicator factors do not hold true in the current case study. Neither country difference (i.e., big country vis-à-vis small country; developed country vis-à-vis developing country) can explain these findings because in the final analysis, the institutional, political, and cultural context and dynamics in the Philippines, which are not necessarily associated with the size of the country or level of development in the country, drive the results.

To elucidate, take for instance the case study on UK (i.e., a big and developed country) energy sector indicators that is presented in Lehtonen (2009). The study points out the low level of awareness of the existence of indicator set even within the energy administration. In addition, there is lack of "numerical literacy" among energy sector civil servants although the sector is expected to be strongly dominated by individuals with background in hard sciences or economics and so, indicator use is almost a routine. Moreover, the gap in the ability to use quantitative information between statisticians and economists, on the other hand and people responsible for energy policy and strategy, on the one hand, is a stumbling block to the effective use and influence of indicator.

In this regard, one can surmise that the size of the country or level of development of the country do not necessarily determine the level of awareness on indicators of stakeholders and the impact of their educational background on the use and influence of the indicators. There must be institutional, political, and cultural factors that explain the cited findings of the case study on UK energy sector indicators. The same is true with the findings of the current case study.

While the findings of the current exercise indicate the influence of MMR and IMR in policy formulation, specifically with respect to the Reproductive Health Bill, the case study is not exhaustive and it can be viewed as useful first step towards establishing the theory that links the role of indicators (i.e., MMR and IMR) and policy formulation in the area of maternal and child health care policy in the Philippines. It argues that MMR and IMR can also play a role in

policymaking, particularly policy formulation. Such argument springs from the observation that most theoretical studies on the role of indicators in policymaking focus on environment and sustainable development indicators, which do not often include health indicators such as MMR and IMR. In addition, the study can be viewed as a contribution to that limited body of literature that looks into the role of indicators in policymaking.

Further, the findings of the study bring to fore the importance of having accurate, reliable, and timely data/statistics on MMR and IMR not only for policy formulation but also for other stages of the policy process. The Field Health Service Information System (FHSIS) and Philippine Health Statistics of the Department of Health (DOH) could have been good sources of timely (i.e., annual) data for policymaking. However, just like other sources of (health) data, the quality of data is questionable. The government has recognized this issue, which led to the creation of the Interagency Committee on Health Statistics (IACHS) in 2002.²⁴

Further, the Philippine Statistical Development Program (PSDP) 2005-2010²⁵ recognizes such issue as one of the issues that need to be resolved along with the issues on completeness, timeliness, accuracy, and relevance of health and nutrition statistics especially those monitored in the Medium-Term Philippine Development Plan (MTPDP) and Philippines Progress Report on the Millennium Development Goals (MDGs) [PHIN 2007]. To address such issues, the PSDP 2005-2010 enumerates various programs that include "generation and improvement of the timeliness, accuracy, and reliability of statistics, especially those that address the requirements of the MTPDP, MDG especially on the estimation of Maternal Mortality Rate (MMR) and improvement of Infant Mortality Rate (IMR), Under Five Mortality Rate (U5MR)..." Nevertheless, assessment of such program has yet to be done to find out what has been accomplished, particularly whether it has improved the accuracy and reliability of data on MMR and IMR based on FHSIS and PHS.

²⁴ By virtue of the National Statistical Coordination Board (NSCB) Memorandum Order No. 1, Series of 2002; The AICHS aims to "resolve issues, review current techniques/methodologies, and recommend policies and workable schemes towards the improvement of health and other related statistics."

²⁵ The blueprint of all statistical activities geared towards generating data requirements for all international and national development plans and programs (PHIN 2007)

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Annex Table 1. Deliberations on the House Bill No. 4244: An Act Providing for a Comprehensive Policy on Responsible Parenthood, Reproductive Health, and Population and Development, and for Other Purposes* (15th Congress)

Date	Policymakers	Number of Interventions	Remarks	Positive		Neutral or Uncodeable	Mentioned at	Mention about Mi Yes No		Mention about MDGs Yes No	Education Background/Profession
First Regular Sessio	n						10001 01100				
1 March 8, 2011	Rep. Edcel Lagman	1	Sponsor	1			1	3	3	2	Human Rights Lawyer
	Rep. Luzviminda Ilagan	1	Co-author	1				2	1		Teacher
2 March 15, 2011	Rep. Janette Garin	1	Co-author	1			1	9	4	2	Medical Doctor
3 March 23, 2011											
4 May 17, 2011	Rep. Edcel Lagman	1	Sponsor	1			1	3	2	2	Human Rights Lawyer
5 May 18, 2011	Rep. Edcel Lagman	1	Sponsor	1			1	1		1	Human Rights Lawyer
6 May 24, 2011	Rep. Edcel Lagman	1	Sponsor	1			1	2	1		Human Rights Lawyer
7 May 25, 2011	Rep. Janette Garin	1	Co-author	1			1	1	2		Medical Doctor
8 May 31, 2011											
9 June 1, 2011	Rep. Karlo Nograles ^{∖a}	1		1			1	1	1		Lawyer
10 June 7, 2011	Rep. Antonio Tinio	1	Co-author	1			1	1			Teacher
	Rep. Milagros Magsaysay	1			1			1			BS Business Administration
Second Regular Ses	ssion										
11 August 23, 2011											
12 August 24, 2011	Rep. Sergio Apostol	1				1	1	2			Lawyer
	Rep. Milagros Magsaysay\b	1			1			1			BS Business Administration
13 September 28, 2011	Rep. Emmeline Aglipay	1	Co-author	1			1	1	1		Lawyer
	Rep. Kimi Cojuangco	1	Co-author	1				3			???
14 October 5, 2011	Rep. Warden Bello	1	Co-author	1			1	1			Academician/Political Analyst
15 October 11, 2011											
16 October 12, 2011											
17 November 15, 2011	Rep. Erico Aumentado\c	1			1		1	2			Writer/Newspaperman
	Rep. Edcel Lagman	1	Sponsor	1				1	2	1	Human Rights Lawyer
18 November 16, 2011											
19 November 22, 2011											
20 November 23, 2011	Rep. Pedro Romualdo\d	1			1		1	1	1		Lawyer
	Rep. Rodante Marcoleta	1	Co-author	1				1			Lawyer

Annex Table 1 (con't)

								Mention a		Mention al		Mention al		Education
Date	Policymakers	Number of Interventions	Remarks	Positive	Negative	Neutral or Uncodeable	Mentioned at least once	Yes	No	Yes	No	Yes	No	Background/Profession
21 December 6, 2011	Rep. Pedro Romualdo\e	1			1		1	1		1				Lawyer
22 December 7, 2011														
23 January 24, 2012	Rep. Luzviminda Ilagan	1	Co-author	1			1	1		1				Teacher
	Rep. Gabriel Quisumbing	1				1		1						???
Third Regular Session	on													
24 July 30, 2012	Rep. Edcel Lagman	1	Sponsor	1			1	1		1				Human Rights Lawyer
25 July 31, 2012	Rep. Edcel Lagman	1	Sponsor	1			1	2		3		1		Human Rights Lawyer
	Rep. Rufus Rodriguez ^{∖f}	1			1					6				Lawyer
26 November 26, 2012														
27 December 3, 2012														
28 December 4, 2012														
29 December 5, 2012														
30 December 10, 2012														
31 December 11, 2012	Rep. Rufus Rodriguez	1				1	1	2		2				Lawyer
	Rep. Roilo Golez	1				1		5		5				US Navy
	Rep. Edcel Lagman	1	Sponsor	1						1				Human Rights Lawyer
32 December 12, 2012	Rep. Evelyn Mellana	1			1		1	1		1				???
	Rep. Karlo Nograles	1			1			1		1				Lawyer
	Rep. Angelo Palmones	1		1				1						BS Economics/Law
	Rep. Milagros Magsaysay	1			1			2						BS Business Administration
Total count		32		19	9	4	19	55	0	40	0	9	0	0
				Relative to the number of interventions			59.375	172	0	125	0	28	0	0

^{*} Otherwise known as "The Responsible Parenthood, Reproductive Health and Population and Development Act of 2011; In short, RH Bill

Notes:

- 1. Filed on February 21, 2011 by HB 4244 Sponsor, Congressman Edcel C. Lagman
- 2. Period of sponsorship and debates terminated on August 6, 2012; followed by period of individual amendments, i.e., from November 26, 2012 to December 12, 2012
- 3. Includes counting of maternal mortality/maternal deaths and infant mortality/maternal deaths (assumed to refer to the indicators) when combined with "reduction," "lessen," and the like
- 4. December 12, 2012 includes occurences in the explanation of votes.

[\]a Supported only the provisions of RH Bill on building more health facilities, improving existing health facilities, hiring and training more skilled health attendants

[\]b Questioned the need for RH Bill when the Magna Carta for Women has provisions for maternal and child health

[\]c Recommended the use of multivitamins to promote maternal and child health and prevent mortality rather than contraceptives

[\]d Questioned the need for RH Bill when the Magna Carta for Women has provisions for maternal and child health

[\]e Opined that contraceptive is not the solution to maternal and infant mortality but rather employment of health personnel such as nurses and midwives in remote areas

[\]f Cited the book by Dr. Amartya Sen on population control which points out that China's "one-child" policy resulted in abortion of female fetuses and that its adverse effect is heightened infant mortality rate

Annex Table 2. Deliberations on the Senate Bill No. 2865: An Act Providing for a National Policy on Reproductive Health and Population and Development

Date	Policymakers	Number of Interventions	Remarks	Positive	Negative	Neutral or Uncodeable	Mention about MMR Yes No	Mention about IMR Yes No	Mention about MDGs Yes No	Education Background
First Regular Sess	ion									
1 June 7, 2011	Sen. Pia Cayetano	1	Sponsor	1			6	2	1	Lawyer
2 August 1, 2011										
3 August 17, 2011	Sen. Miriam Defensor-Santiago	1	Sponsor	1			15	3	1	Lawyer
4 August 22, 2011	Sen. Vicente Sotto	1			1		2			AB English/actor
	Sen. Miriam Defensor-Santiago	1	Sponsor	1			5		1	Lawyer
	Sen. Pia Cayetano	1	Sponsor	1			7			Lawyer
	Sen. Ralph Recto ^{∖a}	1			1		2			
5 August 23, 2011										
6 September 5, 2011	Sen. Vicente Sotto	1			1		3			AB English/actor
	Sen. Pia Cayetano	1	Sponsor	1			2			Lawyer
7 September 6, 2011	Sen. Juan Ponce-Enrile	1			1		13			Lawyer
	Sen. Pia Cayetano	1	Sponsor	1			5			Lawyer
	Sen. Miriam Defensor-Santiago	1	Sponsor	1			36		1	Lawyer
8 September 13, 2011	Sen. Pia Cayetano	1	Sponsor	1			1			Lawyer
	Sen. Miriam Defensor-Santiago	1	Sponsor	1			2	1		Lawyer
9 September 14, 2011	Sen. Miriam Defensor-Santiago	1	Sponsor	1			3		1	Lawyer
	Sen. Pia Cayetano	1	Sponsor	1			2		2	Lawyer
10 September 20, 2011	Sen. Vicente Sotto ^{∖b}	1			1		1		2	AB English/actor
11 September 21, 2011										
12 September 26, 2011	Sen. Pia Cayetano	1	Sponsor	1			3			Lawyer
13 September 28, 2011	Sen. Pia Cayetano	1	Sponsor	1			1			Lawyer
14 October 4, 2011										
15 October 5, 2011	Sen. Pia Cayetano	1	Sponsor	1			1			Lawyer
16 November 28, 2011										
17 December 5, 2011										
18 December 7, 2011										
19 December 13, 2011	Sen. Loren Legarda	1		1			2		1	Journalist
	Sen. Pia Cayetano	1	Sponsor	1			2			Lawyer

Annex Table 2 (con't)

							Mention about		Mention ab		Mention about		Education
Date	Policymakers	Number of Interventions	Remarks	Positive	Negative	Neutral or Uncodeable	Yes	No	Yes	No	Yes	No	Background
20 January 31,2012	Sen. Pia Cayetano	1	Sponsor	1			1						Lawyer
21 February 8, 2012													
22 February 21, 2012	Sen. Loren Legarda	1		1			1						Journalist
23 March 6, 2012	Sen. Miriam Defensor-Santiago	1	Sponsor	1			1		1				Lawyer
24 May 9, 2012	Sen. Pia Cayetano	1	Sponsor	1			2		2		1		Lawyer
25 June 4, 2012	Sen. Pia Cayetano	1	Sponsor	1			1						Lawyer
26 August 13, 2012													
27 August 15, 2012	Sen. Vicente Sotto	1			1		19				1		AB English/actor
28 September 5, 2012	Sen. Vicente Sotto	1			1		2						AB English/actor
29 October 8, 2012	Sen. Pia Cayetano	1	Sponsor	1			2						Lawyer
30 October 9, 2012	Sen. Loren Legarda	1		1			2				1		Journalist
31 October 15, 2012													
32 December 4, 2012													
33 December 12, 2012													
34 December 17, 2012	Sen. Eduardo Angara	1		1			1						Lawyer
	Sen. Allan Cayetano	1		1			3						Lawyer
	Sen. Miriam Defensor-Santiago	1	Sponsor	1			4						Lawyer
	Sen. Loren Legarda	1		1			1						Journalist
	Sen. Aquilino Pimentel III	1			1		5						Lawyer
	Sen. Vicente Sotto	1			1		6						AB English/actor
	Sen. Antonio Trillanes	1			1		1		1				PMAer/Navy Lieutenant
Total		37		27	10	0	166	0	10	o	13	0	0
				Relative to the number of interventions			449		27				

[\]a Opined that the issue is on access and affordability

Notes:

[\]b Concerned that the the Bill was crafted to conform to the demands of intenational community

[\]c Questioned accuracy of data

^{1.} Senate Journals for November 19 and 20 are not available online.

^{2.} Includes counting of maternal mortality/maternal deaths and infant mortality/maternal deaths (assumed to refer to the indicators) when combined with "reduction," "lessen," and the like

^{3.} December 17, 2012 includes occurrences in the explanation of votes.