

UNIVERSITÉ DU QUÉBEC EN OUTAOUAIS

Département des sciences administratives

Vasyl Lytvynov

**'MANAGEMENT PER-RESULT' APPROACH TO DESIGN OF
INTERNATIONAL DEVELOPMENT PROJECTS**

Thesis

Presented to:

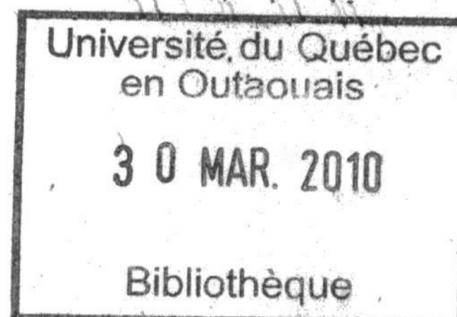
Graduate Studies Office

At the Université du Québec en Outaouais

As a partial requirement for a grade

Master of Science (M. Sc.) in Project Management

Thesis Director: Professor Lavagnon Ika



Gatineau, Québec

3 November, 2009

HD
69
P75
L98
2009

Abstract

This study sets out an approach to designing development projects using the ‘management-per-result’ technique that belongs to the ‘quick and dirty’ group of methods (Hubbard, 2000, pp. 386, 395). Its purpose is to reinforce the project design function of Results Based Management (RBM) through establishing costs and/or benefits of specific results, outlining the linkages between RBM and Results Based Budgeting (RBB). In such way RBM, which is too focused on the old paradigm of demonstrating results, can be better reoriented toward the new paradigm of managing for results. While management of results in RBM has stronger positions in monitoring and evaluation, the project design phase has much weaker positions in it that sets out a lot of projects on an unclear path as to what they exactly are expected to deliver and at what cost. The study adds new features to the logical framework approach by introducing a practically applicable project design tool. Those features are the linkages between RBM and RBB, and attribution of costs and benefits to specific project results.

The paper starts off with outlining deficiencies of international development project management and advocates the need to apply the ‘management per-result’ approach to project design by focusing on the financial management aspect of each of the project results designed. The ‘management-per-result’ approach to project design is introduced as one of the possible performance management solutions at the project design level and applied to the real-life project. The WHO feasibility study of water and sanitation improvements at the global level is used for the verification purposes of the ‘management-per-result’ approach.

The approach adds new features to the logical framework approach by introducing a practically applicable project design tool. Those features are: are the linkages between RBM and RBB, attribution of costs and benefits to specific project results.

As to specific **research results**, the study makes the following contributions to the body of knowledge on RBM and performance management.

Firstly, the need to refocus RBM from an old paradigm of demonstrating results to a new paradigm of managing for results is emphasized. In this regard this research draws on the concepts and existing experience of performance management in public administration ('new public management'). The new public management as the means of improving public service delivery sets a precedent of how public administration, being very close to development administration, uses performance measurement as control and monitoring instruments in pay policies, budgetary allocations etc. Unfortunately, development administration in this regard does not go that far, except for very limited use of RBB. In this research the author advocates the need for integration of some public administration and business management performance management approaches into international development project management domain.

Secondly, to reinforce the management-for-results function of RBM, the study offers the management-per-result approach to project design which adds to RBM the following new features:

- focusing on the strategically important level of results for a specific project depending on the nature of a project (infrastructure development, 'process' or capacity-building type of project etc.) and deciding on if a project is of outputs-, outcomes-, or impact-focused type
- selecting the level of results for which cost and/or benefit estimates are worth being performed
- reinforcing the logframe with more powerful decision-making features such as contemplation of costs and/or benefits of possible options
- multi-iterative process of contemplating costs vis-à-vis benefits and revisiting logframe at each iteration
- providing money-denominated basis for counterweighing project benefits against project costs that provides for comparability of results of different projects (this is especially valuable perspective on expected project results for potential donors for whom the knowledge of return on their investment into a project is of the utmost importance).

Thirdly, the incorporation of the management-per-result approach into project design can be viewed as the programme-oriented mechanism which bridges the gap between desired project results and MDGs under the program approach.

In the fourth place, though the management-per-result approach advocates the need to apply the cost-benefit technique at the project design phase, it is worth noting the following. The approach does not imply the need to embark on full-scale Social Cost-Benefit Analysis (SCBA) at the project design phase or to treat international development projects as business or production type of projects and apply the product management technique. The latter would have been exaggeration. What seems reasonable is to suggest undertaking the ‘do not throw a baby with a bathtub’ approach and incorporate some reasonable elements of existing performance management techniques from business management (product management, new product development, cost accounting) and public administration (RBB, linkages between performance and results) into the the project design context of international development projects.

The research findings, notably the theoretical model, are discussed at the *Global Management Conference* (Rio de Janeiro, Brazil, April 2009) and published in the conference proceedings (Ika and Lytvynov, 2009).

Keywords

Management-per-result; RBM; RBB; project design; international development; logical framework; ‘quick and dirty’ tools.

Acknowledgments

The idea of the study emanates from the author's professional experience with development agencies. The differences in approach as to use of Results Based Management (RBM) provoked some thinking and generated initial interest in the topic which continued in this study.

I would like to thank all my former colleagues with whom I worked in United Nations Development Programme (UNDP) and in International Financial Corporation (IFC) for their insights into the project management practice and challenges. I thank Dr. Roman Zyla and Ms. Sanwaree Sethi from IFC for their insights into the practical aspects of the RBM use within IFC.

My greatest thanks go to my thesis director, Professor Lavagnon Ika, who walked me through the process of this research and from whom I learned not only about the subject matter of this research, but also about the research methodology and research process.

I also want to thank Professor Jan Saint-Macary for his valuable comments, the appreciation of and passion for the project strategy, which I acquired due to his eye-opening course on Project Environment.

I thank Professor Li Yan for his valuable comments and the profound insight into the Research Instruments methodology.

I thank the Program Director, Professor Sébastien Azondékon due to whose support my participation in the GM Conference in Rio (2009) was made possible.

I am thankful to Professor Colin Lindsay for his mastery of strategy application to project design.

I want to thank Dr. Sergey Korablin, the former UNDP advisor and my friend, for the valuable 'brain-storming' discussions we had at the initial stage of the research which sharpened my focus on the problem of the research.

I am thankful to my family for the support they extended to me throughout the research process.

Acronyms

CIDA	Canadian International Development Agency
DAC	Development Assistance Committee of OECD
IDPM	International Development Project Management
IFC	International Financial Corporation
ILO	International Labour Organization
KSC	Key Success Criteria
KSFs	Key Success Factors
Logframe	Logical framework
LFA	Logical Framework Analysis
LFM	Logical Framework Matrix
MDGs	Millennium Development Goals
OECD	Organisation for Economic Co-Operation and Development
ODA	Official Development Assistance
RBB	Results Based Budgeting
RBM	Results Based Management
SCBA	Social Cost-Benefit Analysis
SHD	Sustainable Human Development
UNDP	United Nations Development Programme
WHO	World Health Organization

Table of Contents

Abstract.....	I
Acknowledgments.....	IV
Acronyms.....	VI
List of Tables	IX
List of Figures	IX
List of Boxes.....	IX
1. Introduction.....	1
1.1 Background	1
1.2 Research Problem.....	3
1.3 Research Purpose	3
1.4 Research Objectives	3
1.5 Importance of the Problem.....	4
2. Literature Review.....	8
2.1 Development Aid as the Context of International Development Project Management.....	8
2.2 RBM as Part of New Public Management.....	15
2.3 Functions of RBM in Decision-Making Context	16
2.4 Results Chain in RBM	18
2.5 RBM and Logical Framework	23
2.6 Performance Measurement as the Tool of Performance Management.....	28
2.7 RBM, Financial Performance Management and Cost-Benefit Comparisons	38
2.8 RBM, Key Success Criteria and Key Success Factors	46
2.9 Shifting From Demonstrating Results to Managing for Results.....	48
2.10 Tools for Aligning RBM with Management-For-Results.....	58
3. Preliminary Research Interview and Survey Findings	61
3.1 Interview Questionnaire Development.....	61
3.2 Interview Data Collected	68
3.3 Results Culture: UNDP Program Staff Survey	77
3.4 Interviews and Survey: Conclusions and Findings	81
4. Theoretical Framework	83
4.1 Theoretical Concepts and Theories Drawn Upon	83
4.2 Performance Management Concepts.....	83

4.3 Development Studies	86
5. Research Methodology	88
5.1 Research Purpose and Objectives.....	88
5.2 Methodological Approach	89
5.3 Research Questions	90
5.4 Assumptions.....	90
5.5 Logical Sequence of the Research.....	91
5.6 Data Collection Strategy	92
5.7 Data Collection Methods	93
5.8 Validity of the Results	93
5.9 Reliability of the Results.....	94
6. Results	95
6.1 Management-Per-Result Project Design Model.....	95
6.2 Applying the Model to a Real-Life Project: The WHO Study of Water and Sanitation Improvements at the Global Level	109
7. Conclusions and Implications.....	126
7.1 Conclusions.....	126
7.2 Lessons Learned.....	127
7.3 Potential of the Tool	127
7.3 Limitations of the Approach	128
7.4 Implications from the Research.....	129
7.5 Suggestions for Future Research.....	129
References	131
Annex 1: Consent Form	138

List of Tables

Table 1. Interpretation of Activities, Outputs, Outcomes, and Impact by CIDA and UNDP	23
Table 2. Types of Key Success Criteria Correspondence to Levels of Results	47
Table 3. Project Design vs. Project Execution (Reporting): Outputs and Output Indicators, Outcomes and Outcome Indicators, Impact and Impact Indicators	74
Table 4. Output, Outcome and Impact Indicators: Project Design vs. Reporting.....	75
Table 5. Suggested Logframe Matrix Format	99
Table 6. ‘Potential Impact’ (PI) vs. ‘Management-per-Result’ (MPR) Approaches	109
Table 7. Logical Framework for the WHO Case: Outcome Level	124

List of Figures

Figure 1: Types of Development Aid.....	11
Figure 2. RBM in the Decision-Making Context	17
Figure 3. Theoretical Influences on RBM and RBB	84
Figure 4. The logical sequence of the research.	91
Figure 5. Management-Per-Result Project Design Model.....	98
Figure 6. The WHO Cost-Benefit Approach to Project Design	112

List of Boxes

Box 1. CIDA’s View on Activities and Outputs	20
Box 2. CIDA’s View on Emergence of Outputs from Activities	21
Box 3. UNDP’s View on Relationships between Inputs, Outputs, Outcomes, and Impact.....	22
Box 4. CIDA’s Examples of Activities, Outputs, Outcomes, and Impact.....	23
Box 5. The UNDP Logframe Matrix.....	25
Box 6. The EuropeAid Logframe Matrix	26
Box 7. Dimensions of Results	27
Box 8. Performance Measures and Indicators	29
Box 9. MDGs and Performance Indicators for the Private Sector Development	30
Box 10. Characteristics of Data Collection Efforts (by logframe hierarchy levels).....	32
Box 11. Role of Evaluation in Performance Management	34
Box 12. Progress in Performance Measurement in the OECD Countries	36
Box 13. Cost Management and Performance-Based Budgeting.....	44
Box 14. OECD Definitions of Key Success Criteria.....	46
Box 15. UNDP on Significance of ‘Soft’ Assistance	51
Box 16. Characteristics of ‘Multilateral’ Work by CIDA	51
Box 17. Characteristics of ‘Hard’ Assistance.....	52
Box 18. Meeting Good Practice Standards for Private Sector Evaluation	53
Box 19. Concept of Attribution	54
Box 20. Concept of Deadweight	54
Box 21. Cost of Direct Impact Measurement	55
Box 22. Summary of results from the UNDP staff survey on RBM	78
Box 23. Summary of results from the UNDP staff survey on RBM	80
Box 24. Economic Benefits of the WHO Intervention.....	116
Box 25. The WHO Methodological Approach for Estimation of Benefits	119
Box 26. Cost-Benefit Ratios (globally)	122

1. Introduction

1.1 Background

With advent of ‘new public management’¹ (Minogue, Polidano and Hulme, 1998) as a concept behind the efforts to improve public service delivery since the 1980s the shift from an administrative or compliance culture to a managerial or performance culture gave birth to a number of performance² management instruments, including Results Based Management (RBM) and Results Based Budgeting (RBB) (Hulme, 2007; OECD, 1994). Those instruments reinforced the basic premise of performance culture that adherence to rules and procedures, however important, is no longer sufficient (OECD, 1994, p. 19). Nevertheless, despite noticeable progress made in private and public sectors, the performance management in development administration has been lagging behind on a number of issues. Whereas performance management in business management and public administration of the OECD countries went as far as linking performance measurement to budgetary processes, resource allocation, and pay policies etc. (OECD, 1994; Binnendijk, 2000, p. 7), the progress in that regard in development administration was less noticeable. Namely, performance management in development administration is lacking linkages with specific results; in financial management costs are not accounted for on per-result basis thus hampering the use of RBB (Schick, 2007a, pp. 14 and 16).

RBB as the system of formulating program and project **budgets** driven by a number of desired results which are articulated at the outset of the budgetary process, (JIU, 1999, p. 3) was placed on the ‘back burner’ for the last decade after having been in practical use in the UN system³ since late 1990s. The possible explanation for that is

¹ ‘New Public management’ is a broad and complex term used to describe the wave of public sector reforms throughout the world since the 1980s associated with ‘efforts to improve public service delivery’ (Hulme, 2007, p.2). The main hypothesis in the NPM-reform wave is that more market orientation in the public sector will lead to greater cost-efficiency for governments, without having negative side effects on other objectives and considerations.

² According to OECD, by ‘**performance**’ the degree to which a development intervention or a development partner operates according to specific criteria/standards/guidelines or achieves results in accordance with stated goals or plans is meant (OECD, 2002a, p. 29).

³ For example, Joachim Bilger, the former Controller of the World Intellectual Property Organization (WIPO) had led the way in developing the concept of RBB in the United Nations system, and in making practical application of this concept to WIPO (JIU, 1999, p. 3).

the lack of clearly established interlinks, both theoretical and practical, between RBM and RBB.

One of the reasons explaining slower progress of the performance management in development administration is the fact that management of results does not have its equal presence throughout the project life cycle: at the design phase the results are identified most superficially, and as the project implementation progresses so does the identification of results⁴. Therefore, the project design phase became one of the areas of RBM which, because of the superficial identification of results and their lack of financial estimation, sets out a lot of projects on the unclear path as to what they exactly are expected to deliver and at what cost.

International development project management is focused more on demonstrating results, rather than on managing them which results in inability to assess what exactly the project intends to achieve as its ‘products’ and at what cost. The overemphasis on the RBM function of *accountability-for-results* and diminishing the role of the *management-for-results* function lead to superficial design of project results and to failure to design them like individual products, including basic financial parameters of specific results such as their costs and/or benefits. As the project implementation progresses from design to execution, the specific results are generally identified with more clarity.⁵ As to the financial parameters of specific results, the costs and benefits are not generally linked to specific results, as it is pointed out to in the literature review (**section 2**).

There are different types of results along the ‘results chain’⁶ (ranging from short-term to mid- and long-term ones) which might be of different importance and value for each individual project. As it is pointed out to in **section 6.2**, different project might be either ‘**impact-**’, ‘**outcome-**’, or ‘**output-focused**’ depending on the type of benefits sought. It is rarely when the project inputs are processed for the sake of

⁴ We do not mean the problem with an increase in the number of performance indicators that is a natural expectation as the project progresses along its life cycle stages. We mean rather the fact that some of the results along the ‘results chain’ are not identified at the design phase and emerge later at the execution phase. Though the emergence of unexpected results is to be expected, it should not be an excuse for superficial project design.

⁵ The **interviews** conducted support this statement.

⁶ See the literature review (**section 2.4**).

outputs without targeting the outcome and/or impact levels. Normally the projects tend to be ‘tactical’ (‘outcome-focused’), like the majority of the development projects are, or ‘strategic’ (‘impact-focused’) ones, like the capacity development (the ‘process’) type of projects. More rarely the projects are ‘output-focused’, like the infrastructure development projects, which seek to put outputs in place in the first place. Therefore, from the outset the project designers need to be clear about what kind of project benefits they seek for and at what cost. For that reason the estimation of costs and benefits, being often time- and labour-consuming process, needs to be focused on high-priority results specific for each project.

1.2 Research Problem

The **problem** of this research is to address the need for strengthening the *management-for-results* function of RBM by providing performance management tool as to: (1) targeting those time-frame results (short-, mid- and long-term results) that are of the highest priority for each specific project; (2) estimation of costs of targeted results and their benefits to various stakeholders, including the overall societal benefits as the common ‘denominator’ for various stakeholders.

1.3 Research Purpose

The **purpose** of the research is to identify possible solutions of methodological nature as to reorientation of the RBM system toward management of specific results (like ‘quasi-products’) in order:

- to better align the desired results with MDGs
- to foster the results culture
- to increase projects’ contribution to development effectiveness.

1.4 Research Objectives

The **specific objectives** of the study are as follows.

1. To establish the **extent** to which RBM supports its intended *management-for-results* function and contributes to project’s effectiveness
2. To outline the **drawbacks** within the current RBM design component
3. To reveal the **challenges** and problems facing the RBM design component in order to gain a better understanding of the specific focus of the research

through literature review, preliminary research interviews with development practitioners and secondary-source survey.

4. To introduce **modifications** to design component of RBM aimed at better alignment of results sought with their estimated costs and benefits.
5. To test and verify the **validity, applicability, and relevance** of the methodological modifications suggested by means of study the case of real-life development project.
6. To draw **lessons learned**.
7. To make suggestions for **further research**.

The study **focuses** specifically on the project design component of RBM because most of the challenges facing RBM can be addressed at the project design phase. The study did not focus on how the suggested approach could be used at the project execution phase for the evaluation purposes, for which further research is suggested.

1.5 Importance of the Problem

RBM as the international development project management approach and tool has been around for more than a decade during which the context of development aid changed due to the following trends.

- Greater demand in OECD countries for public sector efficiency and effectiveness, coupled with domestic reforms towards results orientation in management of public entities. If these funds can be used effectively and with credible demonstration of results' that could be seen as 'reversal of trends in aid volume seen during the 1990s' (OECD, 2002b, p. 4).
- Advent of Millennium Development Goals (MDGs) and 'the challenges of linking the MDGs to operational activities at the country level' (OECD, 2002b, p. 5).
- The associated with MDGs shift from project to program approach to align projects managed by the agencies with their strategic goals and, eventually, with MDGs.
- The on-going global financial crisis is pushing more people into the poverty and undermining progress toward the MDGs (ODI, p. 6). According to the British Overseas Development Institute, the lost income in developing countries due to financial crisis by the end of 2009 will reach US \$750 billion and only in sub-Saharan Africa - US \$50 bn; an extra 50 million people will be trapped in absolute

poverty, with the number expected to rise to 90 million; the total number suffering from hunger is nearing a billion people (the notoriously-known 'bottom billion'), something that happened for the first time in two decades (ODI, p. 1).

The **MDGs** represent 'the world's biggest promise [...] to reduce poverty and human deprivation at historically unprecedented rates through collaborative multilateral action.' (Hulme, 2007, p. 2). Though MDGs have been around for almost a decade, the MDG targets and indicators have not been translated into the 'grass-root' project operational activities. Several donors are trying to make the MDGs more operational. Donors have endorsed the multi-faceted definition of poverty, and many partner countries are pursuing development strategies that are aligned with the MDGs. Nonetheless, it is still a challenge to internalise the concept, and to devise appropriate sub-strategies. Donors still face challenges in clearly defining their own comparative advantages and added value of their efforts in achieving collective MDG targets by attributing impact to their efforts (OECD, 2002b, p. 15).

That is why the MDG targets need to be 'operationalized' through their alignment with the development project and program objectives, by disaggregating MDGs to the level of day-to-day operational activities of development aid agencies. The challenge for development management is 'in reaching the highest level outcomes associated with aid effectiveness or the Millennium Development Goals' (OECD, 2002b, p. 9). For that reason donors are making increasing efforts to ensure that: the logic **chain** reaches as far as the MDGs; evaluate the linkages in the logic chain; set out clear indicators for inputs, processes, outputs and outcomes throughout the system (*ibid*).

'A less discussed angle of the MDGs is that they are also the measures of performance' (Easterly, 2009, p. 26). MDGs, being based on specific measurable and time-bound indicators and targets, goals formulated in a quantifiable format, are fit to become the contextual basis for development project overall goals. Nevertheless, it is more of a challenge for RBM rather than the current practice.

RBM was applied to the MDGs in a very direct fashion. (Hulme, 2007, p. 17). But once produced, MDGs were staying operationally distanced from the RBM and the logical framework. 'Human development and results-based management are strange

bedfellows coming out of two very different intellectual traditions. Yet [...] both played leading ideational roles in the complex and sprawling processes that produced the MDGs.’ (*ibid*, p. 17).

The shift from **project to program approach** is what is required with an advent of MDGs to bring MDGs closer to RBM and ‘operationalize’ them. Since MDGs represent the long-term targets, there is a need for an on-going umbrella program under which individual projects can work toward making an incremental step-by-step progress on the way to achieving the MDG targets. That is why the project approach needs to be aligned with the program approach and the role of project approach under these circumstances needs to be reexamined. Project should share its role of ‘an instrument of development’ (Morgan, 1983, p. 329) with program. The ‘project orthodoxy in development management’ (*ibid*, p. 329), which was around for twenty five years, needs to be critically reviewed with advent of MDGs ‘to distinguish between those kinds of activities in which the project mode is most useful, and those for which its basic features and attendant trappings have great limitations. The argument concludes with a reassertion of the need for better linkages with programme management’ (*ibid*, p. 329).

The **global financial crisis**, which started in developed countries, starts to have an impact on the developing world. By the end of 2009, ‘developing countries are expected to lose incomes of at least US \$750 billion. In sub-Saharan Africa, the figure is over US \$50bn. The consequence is likely to be rising unemployment, poverty and hunger: an extra 50 million people trapped in absolute poverty, with the number expected to rise to 90 million; and the total number suffering from hunger already up by 75 million to nearly a billion people, rising for the first time in nearly two decades’ (ODI, 2009, p. 1). ‘The UK Department for International Development (DFID) estimates that by December 2010, the number of people living on less than \$1.25 a day will be about 90 million higher in a result of the financial crisis. The International Labour Organization (ILO) anticipates an increase of between 24 million and 52 million people unemployed worldwide, a large majority in developing countries’ (ODI, p. 6). The global financial crisis is pushing more people into the poverty and undermining progress toward the MDGs (ODI, p. 6). That calls for more effective and

results-targeted development aid response to detrimental negative impact of global financial crisis.

The high incidence of failure of development aid projects also makes more urgent the need to have a closer and critical look at how methodologically to maximize the **contribution** that RBM can make to the overall development aid projects' **success**.

To avoid the potential failure of projects at the design phase, the design of international development projects needs to be better aligned with changing development context, such as MDGs and program approach to maximize the potential contribution that RBM, as an instrument, can make to projects' success.

2. Literature Review

2.1 Development Aid as the Context of International Development Project Management

2.1.1 Development Aid: Concept, Definition, Types

Development aid also known as ‘development assistance, ‘development cooperation’, ‘international aid’, ‘international development aid or assistance’ ‘overseas aid’, ‘foreign aid’, or ‘technical assistance’ is aid given by governmental and economic agencies to support the economic, social and political advancement of developing countries’⁷. Historically the term used for the donation of expertise has been known as ‘technical assistance’⁸.

Though any of the above terms can be used interchangeably, the author prefers to use the term ‘international development’.

Apart from those above-mentioned terms there is also such institutionally and legally established term as ‘**Official Development Assistance**’ (ODA) which is provided by the Organisation for Economic Co-operation and Development (OECD) member states. OECD is an organization of the developed nations of the world. There is the formal body of OECD, the Development Assistance Committee (DAC), that is mandated to ‘mobilise more ODA financing for development, ... increase the effectiveness of aid, assist poor-performing, conflict-prone countries’ (OECD, 2007, p. 108). DAC was formed in 1960 (in those days it bore the name ‘Development Assistance Group’, DAG) ‘as a forum for consultations among aid donors on assistance to less-developed countries’ (Führer, 1996, p. 8). The mandate of DAC does not extend to any enforcement responsibilities.

ODA represents the development aid provided by the DAC member states to those countries that constitute the List of Aid Recipients of DAC. OECD defines ODA in the following manner: ‘Grants or Loans to countries and territories on Part I of the

⁷ Wikipedia. *Development Aid*. Accessed on April 29, 2009 and available at http://en.wikipedia.org/wiki/Development_aid

⁸ *Ibid.*

DAC List of Aid Recipients (developing countries) which are: (a) undertaken by the official sector; (b) with promotion of economic development and welfare as the main objective; (c) at concessional financial terms [if a loan, having a Grant Element [...] of at least 25 per cent]. In addition to financial flows, Technical Co-operation [...] is included in aid. Grants, Loans and credits for military purposes are excluded. ... Transfer payments to private individuals (e.g., pensions, reparations or insurance payouts) are in general not counted' (OECD, 2002a).

The definition of ODA is quite technical. But unlike development aid, ODA is at the same time broader and narrower than development aid:

- (1) ODA is broader than development aid because it includes debt relief, humanitarian aid, technical cooperation, and other categories (OECD, 2007, p. 15). Therefore, ODA, despite the presence of 'development' in its name, includes some non-development components, such as humanitarian aid.
- (2) ODA is narrower than development aid because it is provided by the DAC member states only whereas there is also a flow of aid (of all types) coming from non-DAC OECD countries (there are currently 30 OECD members out of which 23 are the DAC members). There is also relatively small flow of aid coming from the non-OECD countries (OECD, 2007, p. 110).

Development aid coming from international donors can be categorized as **bilateral** or **multilateral**. The **bilateral donors** are typically governments of donor (developed) countries. The **multilateral donors** are international organizations. The bilateral development aid can be channeled to the recipient countries either directly or through multilateral development aid organizations.

Development aid can take the form of grants and loans to developing countries undertaken with promotion of economic development and wellbeing as the main objective (OECD, 2002a).

The **grants** (also known as 'technical cooperation' or 'technical development') are provided by the donor countries to the recipient country on a non-reimbursable basis. The **loans** are provided by so called International Financial Institutions (IFIs): the Bretton-Woods institutions such as the International Bank for Reconstruction and

Development (The World Bank), the International Monetary Fund (IMF), International Finance Corporation (IFC), as well as the regional development banks (Inter-American Development Bank, the Asian Development Bank, the African Development Bank, and the European Bank for Reconstruction and Development). Normally the loans are not referred to in the context of development aid, but rather are referred to as '**financial assistance**'. But from the development perspective both grants and loans fit the concept of development aid.

What is key to the concept of development aid is that both grant and financial aid are **conditional** (in a sense that they are provided for the purpose of development) unlike **humanitarian aid** that represents the form of poverty alleviation and **unconditional** relief given to people in distress situations⁹.

To visualize the different types of development aid and the relationship among them, please refer to **figure 1**.

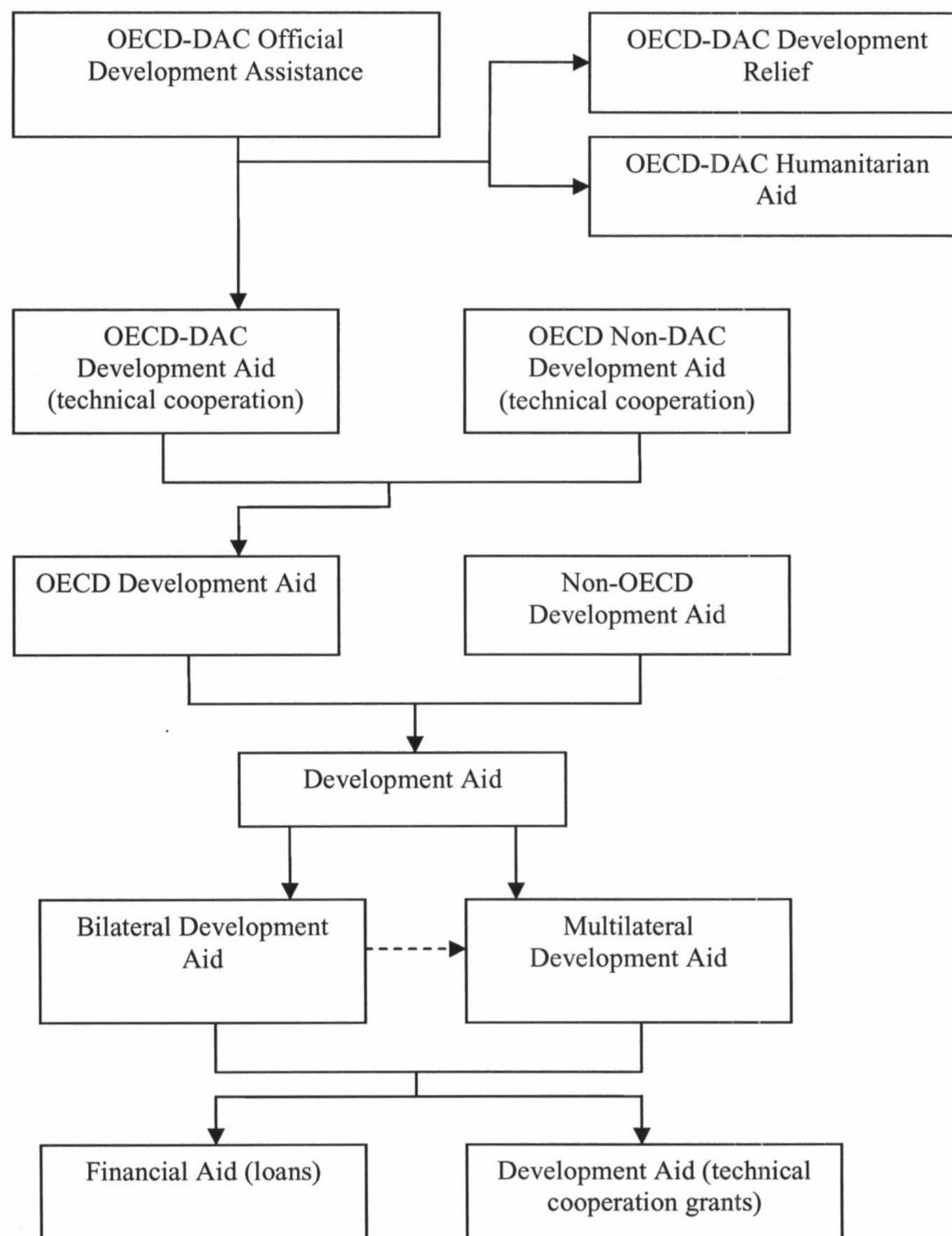
2.1.2 Sustainable Human Development as a Concept

The '**development**' as a linguistic term reflects 'the growth or improvement of something' (Longman, 1991, p. 197). Placing this definition into the 'human development' context would logically bring us to understanding that human development is about improvement of living conditions of human beings.

Sustainable Human Development (SHD) adds to the concept of human development the dimension of sustainability that reflects the environmental concerns about depletion of natural resources, polluting environment etc., that deprives the forthcoming generations of the opportunities the previous ones enjoyed having.

⁹ Wikipedia. *Humanitarian Assistance*. Accessed on April 29, 2009 and available at http://en.wikipedia.org/wiki/Humanitarian_assistance

Figure 1: Types of Development Aid



ODA – Official Development assistance (provided by the DAC member states of OECD)

----> possible linkage

Based on: OECD, 2007.

The concept of SHD was introduced more than a decade ago and is defined by United Nations Development Programme (UNDP) as ‘protection of the life opportunities of future generations...and...the natural systems on which all life depends’ (UNDP, 1997). Though this definition is not exhaustive, it gives the right understanding of the SHD concept based on combination of two pillars of SHD: (1) improving the living

conditions of people and (2) sustaining livelihoods by keeping the ‘share’ of future generations intact.

SHD is now in the core of the UNDP’s mission statement: ‘UNDP's mission is to help countries in their efforts to achieve sustainable human development by assisting them to build their capacity to design and carry out development programmes...’ (UNDP, Mission Statement). SHD also became the official UNDP motto.

The way the SHD is understood can be viewed as the purpose of development. So SHD is about better quality of life. The living conditions is a multidimensional concept represented statistically by Human Development Index (HDI) and used by UNDP in its annual Human Development Reports. The HDI mostly reflects:

1. living standard measured by the GDP per capita in purchasing power parity (PPP) terms
2. health dimension based on the life expectancy at birth
3. educational level measured by the adult literacy rate.

Since SHD reflects various dimensions of quality of life, it is clear that the measurement of SHD is subject to change. Economic growth is one of the main pillars of SHD, but not the only goal of development. More and more aspects get included into SHD reflecting level of democracy and transparency, gender empowerment, vulnerability of visible minorities in a society etc.

There are two conclusions that can be drawn from above about what SHD emphasizes:

1. SHD is about development through improvement in quality of life
2. SHD is about sustainability of livelihoods and peoples’ habitat.

Therefore, keeping in mind what the concept of SHD covers, it would be logical to conclude that the **development aid** can support anything that falls under the concept of SHD and that for that reason SHD should be considered to be an underpinning concept behind the concept of development aid.

2.1.3 Barriers to Development: Institutions, Geography, Policies

The root causes of underdevelopment and poverty is the key theoretical underpinning behind the practical work that development agencies do on the ground in developing world. Without addressing this issue it is difficult to understand what those agencies are called upon to do. The root causes of poverty are reflected in the UN-adopted Millennium Development Goals (MDGs).

Therefore, the root causes of poverty, along with MDGs, constitute the strategic context of a project and along the lines of which project overall objectives are to be formulated.

There are two concepts and two types of explanations in economic development literature of what makes some countries poor. Those are:

- (1) the geography hypothesis and
- (2) the institutions hypothesis.

The **geography** hypothesis ‘maintains that the geography, climate, and ecology of a society shape both its technology and the incentives of its inhabitants, emphasizes forces of nature as a primary factor in the poverty of nations’ (Acemoglu, 2003, p. 27).

The **institutions** hypothesis, strongly associated with Nobel Prize laureate Douglass North, explains the difference in economic development through the human influence perspective, namely, property rights, rule of law, good governance and good policies that encourage investment in machinery and technologies, human capital, and, consequently, these countries achieve economic prosperity’ (Acemoglu, p. 27; Rodrik and Subramanian, 2003, p. 31). According to Rodrik and Subramanian, ‘the quality of institutions overrides everything else’ (Rodrik and Subramanian, 2003, p. 31).

There is also the third perspective, expressed by Jeffrey Sachs, which stands close to the geography hypothesis, but nevertheless is distinct from it. It attributes poverty to both institutions and geography because ‘a single-factor explanation of something as important as economic development’ is oversimplification of reality and the concept of institutions has become ‘the immediate target for all efforts to improve the

economy' (Sachs, 2003, p. 38). According to Sachs, 'institutions may matter, but they don't matter exclusively. The barriers to economic development in the poorest countries today are far more complex than institutional shortcomings. ... Fighting AIDS, tuberculosis, and malaria; addressing the depletion of soil nutrients; and building more roads to connect remote populations to regional markets and coastal ports ... require direct interventions, backed by expanded donor assistance' (Sachs, 2003, p. 38).

The comparison made by Sachs (Sachs, 2003, p. 40) of two equally poor regions, the coastal one and the landlocked one, makes geography (location, resource and climate endowments, disease burden, transportation costs, and access to international trade, regional markets etc.) as the factor of development very vivid. 'A poor coastal region near a natural harbor may be able to initiate long-term growth precisely because few financial resources are needed to build roads and port facilities to get started. An equally poor landlocked region, however, may be stuck in poverty in the absence of outside help. A major project to construct roads and a port would most likely exceed local financing possibilities ... In the short term, only three alternatives may exist for an isolated region: continued impoverishment of its population; migration of the population from the interior to the coast; or sufficient foreign assistance to build the infra-structure needed to link the region profitably with world markets' (Sachs, 2003, p. 40).

Therefore, some 'countries can be too poor to find their own way out of poverty' (Sachs, p. 41). To help some geographically disadvantaged countries and regions to get out of poverty trap, Sachs suggests a new development management modality based on identification 'for each country and in much greater detail than in the recent past, those obstacles— whether institutional, geographical, or other (including barriers to trade in the rich countries) — that are truly impeding economic development. For each of the Millennium Development Goals, detailed interventions — including their costs, organization, delivery mechanisms, and monitoring — can be assessed and agreed upon by stakeholders and donors' (Sachs, 2003, p. 41).

Nevertheless, whatever the root causes of poverty are in case of each country, the development interventions need to be programmed considering them and the MDGs

to make the development interventions target-, goal-, and objective-focused. This is in the core of **program approach** of international development project management.

2.2 RBM as Part of New Public Management

RBM represents a sub-field of a wider and more theorised body of knowledge, **new public management**¹⁰ (Minogue, Polidano and Hulme, 1998). RBM 'has been central to efforts to improve public service delivery since the 1980s and was highlighted in Osborne and Gaebler's (1992) influential book *Reinventing Government*.' (Hulme, 2007, p. 2). However, formal systems of performance management have to be **backed up** by an appropriate management **culture** and **instruments** without which in place making results and performance a priority in agencies rigidly governed by rules and regulations would be a great challenge (OECD, 1994, p. 21).

Among the instruments of performance management 'Planning, Programming and Budgeting System (PPBS), linking budgets with performance', 'Zero Base Budgeting (ZBB) and policy evaluation' (OECD, 1994, p. 22), RBM and Results Based Budgeting (RBB) can be mentioned. Performance measurement should not be treated as an alternative to performance management and to be viewed as part of the latter because measurement is an integral part of management.

For some authors (Hulme, 2007, p. 2) **RBM** and **performance management** are identical concepts, for others (Binnendijk, 2000, p.12) performance management is part of RBM. Not surprisingly, the definitions of RBM of different agencies differ.

For example, the CIDA RBM guidance¹¹ provides different definitions of RBM produced throughout the years.

¹⁰ 'New Public management' is a broad and complex term used to describe the wave of public sector reforms throughout the world since the 1980s associated with 'efforts to improve public service delivery' (Hulme, 2007, p.2). The main hypothesis in the NPM-reform wave is that more market orientation in the public sector will lead to greater cost-efficiency for governments, without having negative side effects on other objectives and considerations.

¹¹ Canadian International Development Agency (2000). *RBM Handbook on Developing Results Chain: The Basics of RBM as Applied to 100 Project Examples*. CIDA: Results-Based Management Division, December 2000.

Canadian International Development Agency (2009). *Results-based Management in CIDA: An Introductory Guide to the Concepts and Principle*. Accessed on Jan.31, 2009 and available on the CIDA web-site at <http://www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/EMA-218132656-PPK>

1. 'RBM is a management philosophy and approach that **emphasizes** development **results** in planning, implementation, learning and reporting' (CIDA. *RBM Handbook*, 2000, p. 5).
2. 'RBM is a philosophy, an approach, to help individuals plan and **manage for changes** in the short-term, medium-term and long-term. ... RBM seeks to capture changes that occur in the short, medium and long-term'. (CIDA. *RBM Handbook*, 2000, p. 10).
3. 'RBM is a **means** to improve management effectiveness and accountability by involving key stakeholders in defining realistic expected results, assessing risk, monitoring progress toward the achievement of expected results, integrating lessons learned into management decisions and reporting on performance' (CIDA. *Introductory Guide on RBM*, 2009).
4. 'RBM is comprised of **six** distinct **components**: stakeholder participation; defining expected results; identifying assumptions and risks; selecting performance indicators; collecting performance information, and performance reporting'(CIDA. *Introductory Guide on RBM*, 2009).

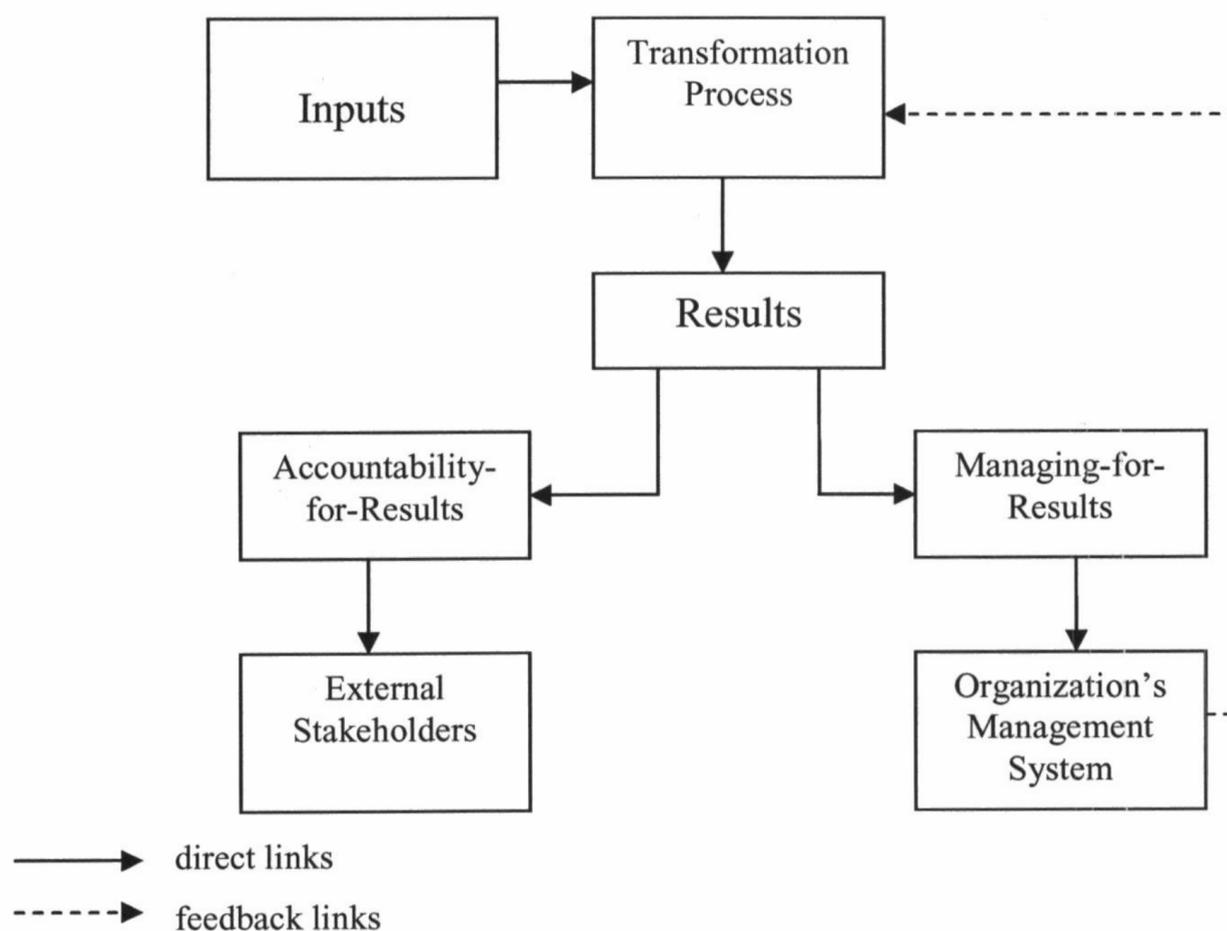
The **World Bank** (Operations Evaluation Department) definition of RBM (1997) captures two important functions of RBM – accountability-for-results and managing-for-results¹²: 'Results based management [...] is first a management system and second, a performance reporting system.' (Binnendijk, p. 9).

2.3 Functions of RBM in Decision-Making Context

RBM has two intended functions in the decision-making context (**Figure 2**):

¹² The accountability-for-results and the management-for-results concepts will be touched upon later.

Figure 2. RBM in the Decision-Making Context



1. internal use 'when performance information is used in internal management processes with the aim of improving performance and achieving better results, this is often referred to as *managing-for-results*. Such actual use of performance information has often been a weakness of performance management in the OECD countries. Too often, government agencies have emphasized performance measurement for external reporting only, with little attention given to putting the performance information to use in internal management decision-making processes.' (Binnendijk, 2000, p. 7).
2. external use 'when performance information is used for reporting to external stakeholder audiences, this is sometimes referred to as *accountability-for-results*. Government-wide legislation or executive orders often mandate such reporting. Moreover, such reporting can be useful in the competition for funds by convincing a sceptical public or legislature that an agency's programs produce significant results and provide "value for money". Annual performance reports may be directed to many stakeholders, for example, to ministers, parliament, auditors or other oversight agencies, customers, and the general public.' (*ibid*).

‘However, these various uses of performance information may not be completely compatible with one another, or may require different types or levels of result data to satisfy their different needs and interests. Balancing these different needs and uses without over-burdening the performance management system remains a challenge.’ (*ibid*).

As **Figure 2** demonstrates, in order for RBM system to be effective, information on results needs to be channelled back into the Transformation Process.

2.4 Results Chain in RBM

Peter Drucker (Drucker, 1964) was the one who placed the category of **results** into context of broader categories, such as:

- opportunities and problems
- effectiveness and efficiency
- resources and costs.

By looking at results from the point of view of different related and overlapping categories, Drucker gained holistic perspective on results (Drucker, 1964, pp. 5-11), which can be summarized as follows.

1. Results exist outside the business and thus depend on somebody outside (a ‘client’ or a beneficiary). In other words, results do not exist by themselves and reflect the client’s needs and wants.
2. Cost and efforts are inside the business and do not necessarily contribute to results.
3. Results are obtained by exploiting opportunities (resources which produce results must be allocated to opportunities rather than to problems).
4. ‘Maximization of opportunities’ implies that ‘effectiveness rather than efficiency is essential in business’ (Drucker, 1964) because finding the right things to do and concentrating resources on them is more important than doing things right.
5. In a social situation a very small number of events (10 – 20 per cent at most) account for 90 per cent of all results, whereas the great majority of events account for 10 per cent or so of the results (Drucker, 1964, pp. 5-11). The implications of that are: (a) that 90 per cent of costs incurred are linked to

resultless 90 per cent of events, and (b) that resources and efforts are normally allocate themselves to the 90 per cent of events that produce practically no results.

The implications of the Drucker's perspective on results for the project management practitioners, as the ones on the inside, can be the following.

1. Since the results are external to a project, the stakeholder management (including client's satisfaction) is of high priority for the realization of project results by turning costs, efforts and opportunities into results.
2. It is up to the project managers 'to eliminate a restriction on capacity of the business to obtain results' (Drucker, 1964, pp. 5-6).
3. Organizational effectiveness ('finding the right things to do') is more essential concept for organizational development than efficiency ('doing things right'), though it is desirable to do the right things in an efficient way.

Therefore, rephrasing Drucker, it would be logical to conclude that the challenge for project managers as to obtaining results must be in: (1) doing the right things, (2) in an efficient manner (3) in the direction where opportunities lie (4) eliminating the restrictions on capacity of organization to obtain results and (5) trying to foresee the events that have the maximum potential to produce results.

In RBM results are grouped into short-term, medium-term and long-term categories and are placed in a logical hierarchical 'results chain' that demonstrates how short-term results 'generate' medium-term results and how the latter, over time, contribute to achievement of long-term results. That is called the 'results chain' or 'the causal sequence for a development intervention that stipulates the necessary sequence to achieve desired objectives beginning with inputs, moving through activities and outputs, and culminating in outcomes, impacts, and feedback. In some agencies, reach is part of the results chain' (OECD, 2002a, p. 33).

Short-term, medium-term and long-term results are also known as outputs, outcomes and impact correspondingly.

The definitions of outputs, outcomes and impact for some development aid agencies (for example, for CIDA and UNDP) conceptually are not entirely identical. The latter causes some confusion.

Definition of Outputs

The confusion starts from the definition of output and the relationship of outputs to activities.

CIDA acknowledges that ‘activities and outputs are often confused ...’ ‘Completed activities are not outputs. Outputs are actually the short-term effects of completed activities’ (CIDA, 2000, p. 13). As an illustration, the example below with training is provided: training is an activity whereas output is ‘the new skill or ability resulted from the training’ (CIDA, 2000, p. 13).

This view is illustrated in **box 1** (CIDA, 2000, p. 14).

Box 1. CIDA’s View on Activities and Outputs

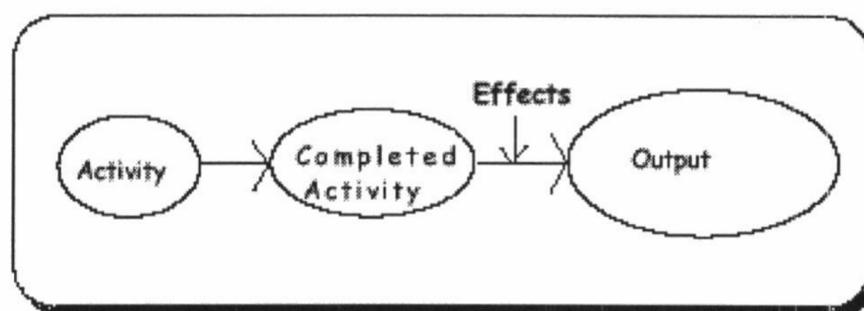
Activity	Completed Activity	Output
Development of Curriculum Public Awareness of Literacy	Literacy programs designed and adapted to the needs of the clientele. Public awareness campaigns organized and delivered to the members of the community.	Increased buy-in of local leaders, parents and children to the advantages of basic numeracy and literacy. Increased participation of girls and boys in basic literacy sessions.

Source: CIDA, 2000, p. 14.

So, CIDA makes a distinction between completed activities and output: output, according to CIDA, is the derivative of completed activity, which takes time to emerge. Thus there is an extra link ‘Effects’ between ‘Completed Activity’ and ‘Output’ (CIDA, 2000). **Box 2** illustrates this point.

UNDP treats differently the ‘activity – output’ relationship: ‘**Outputs** are specific products and services which **emerge from processing inputs through** programme and non-programme **activities**. Outputs, therefore, relate to the completion (rather than conduct) of activities ...’ (UNDP, 2000a, p.2).

Box 2. CIDA's View on Emergence of Outputs from Activities



Source: CIDA, 2000, p. 14.

The comparison between the CIDA and the UNDP approaches to definition of the 'activity – output' link is shown below.

CIDA's view on output: Completed activities **lead to** outputs (*through extra link*)

UNDP's view on output: Outputs **emerge from** processing inputs and are related to the completion of activities (*directly*)

The UNDP approach seems to be more in line with a general project management approach when output (be it material or intellectual product) is treated in a 'production terms' as processing of inputs.

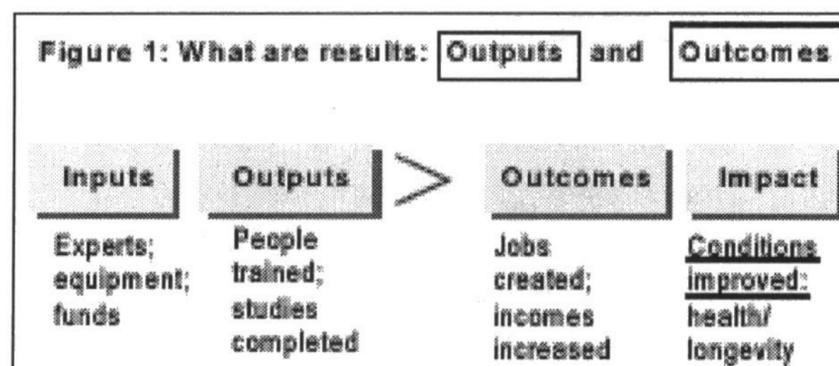
In any process to obtain an output one needs to procure and use inputs (materials, labour, and capital). As a result, product (or output) is expected to be produced.

The PMBOK Guide (PMBOK, 2008) supports the 'production process' type of definition of output as a 'product, result or service generated by process' (PMBOK, 2008, p. 431).

As it seems, the UNDP definition of outputs (UNDP, 2000a) is closer to the 'production process' type of treatment of outputs: UNDP refers to outputs as 'people trained', 'studies completed' (**box 3**).

In the material product production process the outputs, obviously, can only be successfully completed activities: buildings erected, products produced.

Box 3. UNDP's View on Relationships between Inputs, Outputs, Outcomes, and Impact



Source: UNDP, 2000a, p. 3

According to CIDA, outputs are the development results generated by completed activities: 'increased buy-in' and 'increased participation' which are not generated by the completed activities such as 'literacy programs designed' and 'public awareness campaigns organized', but emerge over time as a result of completed activities.

The difference between the UNDP and the CIDA approaches seems to be subtle and inconsequential if not the conclusion that in the CIDA case certain **conditions** need to be applied for emergence of outputs after the activities are finalized. This 'conditional' link is 'Effects' (**box 2**).

Thus, the definitions of output as a cumulative result to which completed activities contribute (rather than the result that directly emerges from completing activities) seems to be in contradiction with the mainstream project management practice, including the PMBOK approach.

Definition of Outcome and Impact

Outcomes, according to UNDP, 'are actual or intended changes in development conditions... They describe a change in development conditions between the completion of outputs and the achievement of impact' (UNDP, 2000a, p.3).

Box 3 taken from UNDP Results-Based Management provides examples of the of 'outputs – outcomes - impact' relationship: people trained (output) leads to more jobs created (outcome) that leads to conditions improved (impact).

The logic behind the CIDA relationship between activities, outputs, outcomes and impact is different (**box 4**).

Box 4. CIDA's Examples of Activities, Outputs, Outcomes, and Impact

Examples and Categories of Analysis	Outputs or Short-term Results	Outcomes or Medium-term Results	Impact or Long-term Results
<p>Activities: Designing and delivery of curriculum on human rights and potential gender biases in hearing cases and interpreting evidence.</p> <p>Workshops bringing judges and lawyers into discussion with human rights and gender equality advocates.</p>	<p>Judges and lawyers more knowledgeable about human rights and gender equality standards and how to apply them.</p>	<p>More considered interpretation of gender equality issues.</p> <p>Increase in new legal decisions that reflect greater gender equality.</p>	<p>Women and men have equal treatment under the law.</p> <p>Improved quality of justice.</p>

Source: CIDA, 2000, p. 14.

The comparative logic of how activities, outputs, outcomes, and impact are treated by UNDP and CIDA is presented in **table 1**.

Table 1. Interpretation of Activities, Outputs, Outcomes, and Impact by CIDA and UNDP

	UNDP's view	CIDA's view
Activities	Processing of inputs	Processing of inputs
Output	Direct result of completing activities	Cumulative short-term development result to which completed activities contribute
Outcome	Cumulative mid-term development result to which completed activities contribute	Cumulative mid-term development result to which outputs contribute
Impact	Strategic long-term development result to which outcomes contribute	Strategic long-term development result to which outputs and outcomes contribute

Based on: CIDA, 2000, p. 14; UNDP, 2000a, p. 3.

Therefore, based on the comparative analysis of the activities - outputs - outcomes - impact relationship it is reasonable to conclude that a common and shared among development agencies terminology and understanding of what activities, outputs, outcomes, and impact are do not exist. That makes the coverage of results across the agencies incomparable and makes the management of results, especially the design and planning of results more difficult than it would have been with a common understanding of terminology in place.

2.5 RBM and Logical Framework

The **Logical Framework Approach/Analysis (LFA)** is one of the approaches for evaluating project performance based on target setting. Among the others the Social

Cost Benefit Analysis (SCBA) can be mentioned, that is based on comparing costs and benefits (will be discussed later). Both approaches represent different ways of assessing project's effectiveness. LFA compared to SCBA is gaining more ground in performance measurement because: (1) 'targets are set for indicators relevant to the purpose of the project and performance is rated against them'; (2) 'technical targets are the most widely used measures of performance, particularly in public investment projects'; (3) LFA provides for more flexibility compared to SCBA that is especially emphasised in the institutional development projects (Hubbard, 2000, p. 386).

The potential problem with target setting, though, is that targets carry 'the risk that the project will be judged successful provided the set targets are achieved, even where the targets are inappropriate.' (*ibid*). Or, conversely, that the project will be deemed a failure even if a greater and better target is achieved (e.g., Columbus discovering America instead of finding the shorter route to India). That is why the evaluators need to be sure that 'the targets represent the objectives of the project (i.e., that the right outputs are targeted)' and that the target level set is not too high or too low (*ibid*).

The **logical framework** 'is an analytical tool (logic model) for graphically conceptualizing the hypothesized cause-and-effect relationships of how project resources and activities will contribute to achievement of objectives or results.'¹³ (Binnendijk, 2000, p. 17). The logframe tool is built on the assumption of cause-and-effect relationship among project inputs, activities, outputs, purpose and goal, with those at the lower level of the hierarchy contributing to the attainment of those above. The achievement of each level is also dependent upon fulfilment of certain assumptions in the project's external environment or context that may affect its success. (Binnendijk, 2000, pp. 19-20).

The LFA is often thought of as an 'aid to thinking' since 'it allows information to be analysed and organized in a structured way, so that important questions can be asked, weaknesses identified and decision makers can make informed decisions based on their improved understanding of the project rationale, its intended objectives and the means by which objectives will be achieved.' (European Commission, 2004, p. 57).

¹³ The term **results** applies to outputs, purpose, and goal. The lowest levels (i.e., inputs and activities) are not objectives or results, so much as they are means for achieving them. (Binnendijk, 2000, p. 20).

LFA has been adopted by most donor agencies as a project planning and monitoring tool ‘used to improve the design of interventions, most often at the project level’ (OECD, 2002a, p. 27).

‘It is useful to distinguish between the LFA, which is an analytical *process* (involving stakeholder analysis, problem analysis, objective setting and strategy selection), and the Logical Framework Matrix (LFM) which, while requiring further analysis of objectives, how they will be achieved and the potential risks, also provides the documented *product* of the analytical process.’ (European Commission, 2004, p. 57).

The LFM ‘is often presented in a matrix format (see the UNDP and the EuropeAid LFMs format as an example below in **boxes 5 and 6**), for (a) displaying the project design **logic** (statements the inputs, activities, outputs, purpose and goal), (b) identifying the **indicators** (and sometimes targets) that will be used to measure progress, (c) identifying **data sources** or means of verifying progress, and (d) assessing **risks** or **assumptions** about external factors beyond project management's control that may affect achievement of results.’ (Binnendijk, 2000, p. 17).

Box 5. The UNDP Logframe Matrix

	(1) Programme or project summary Description	(2) Indicators	(3) Means of verification	(4) External factors (assumptions and risks)
Outcomes				
Outputs				
Activities				
Inputs				

Source: UNDP, 2000b, Chapter 4, p.13.

Box 6. The EuropeAid Logframe Matrix

Project Description	Indicators	Source of Verification	Assumptions
Overall Objective – The project's contribution to policy or programme objectives (Impact)	How the OO is to be measured including Quantity, Quality, Time?	How will the information be collected, when and by whom?	
Purpose – Direct benefits to the target group(s)	How the Purpose is to be measured including Quantity, Quality, Time	As above	If the Purpose is achieved, what assumptions must hold true to achieve the OO?
Results – Tangible products or services delivered by the project	How the results are to be measured including Quantity, Quality, Time	As above	If Results are achieved, what assumptions must hold true to achieve the Purpose?
Activities – Tasks that have to be undertaken to deliver the desired results			If Activities are completed, what assumptions must hold true to deliver the results?

Source: European Commission, 2004, p. 58.

The LFA as a tool can be used at different **stages** of project management: (1) during the identification (*or design*) stage; (2) formulation stage; (3) implementation stage; (4) evaluation and audition stage (European Commission, 2004, p. 57).

It might worth thinking about a ‘continuum of results within LFM, with outputs at one extreme and goals/impacts at the other extreme. Results along the continuum can be conceptualized as varying along three dimensions -- time, level, and coverage.’ (Binnendijk, 2000, p. 21) (**box 7**).

The way impacts, outcomes and outputs are defined depends on the agency itself: the more resources an agency has for a development problem, ‘the more influence it can exert and the higher and broader it might aim’. For example, the World Bank, as a financially powerful player, ‘might legitimately define its project's goal (impact) in terms of society- or economy-wide improvements, whereas smaller donor agencies might more appropriately aim at district-level or even community-level measures of change.’ (Binnendijk, 2000, p. 21).

The central issue in logframe, that is critical to the ultimate project success, is the assumption of cause-and-effect relationship works, when project’s direct efforts, such as inputs and activities, lead to higher level results, such as outcomes and impact that

are not project's direct efforts *per se*. If this relationship fails, then the project efforts are in vain.

Box 7. Dimensions of Results

Timeframe: Results range along a continuum from immediate to medium-term to long-term. Outputs are the most **immediate** of results, while goals (impacts) are the longest-range, with purpose (outcomes) in the middle or intermediate range.

Level: Results also vary along a continuum of cause-effect levels logically related one to the next in a causal chain fashion. Outputs represent the lowest level in the chain, whereas goals (impacts) represent the highest level, while purpose (outcomes) once again fall somewhere in the middle range. Outputs are physical products or services; outcomes are often described in terms of client preferences, responses or behaviors; impacts are generally defined in terms of the ultimate socio-economic development or welfare conditions being sought.

Coverage: A final dimension deals with the breadth of coverage, or who (what target groups) are **affected** by the change. At one end of the continuum, results may be described narrowly as effects on intermediary organizations or groups, followed by effects on direct beneficiaries or clients. At the other extreme, the results (impacts) usually are defined as more widespread effects on society. Goals tend to be defined more broadly as impacts on a larger target population -- e.g., on a region or even a whole nation, whereas purposes (outcomes) usually refer to narrower effects on project clients only.

Source: Binnendijk (2000), p. 21.

The use of **cause-effect relationship** has some 'pitfalls in assessing project performance management on the basis of technical targets alone' because 'the further away from the output is the effect to be measured (e.g., 'Purpose' and 'Goal' - the higher levels of the log frame) the greater is the error likely to be, because the causal link between the project's activities and the effects becomes weaker as the number and contribution of other determining factors becomes greater. So 'Purpose' and 'Goal' target levels are more likely to be arbitrary' (Hubbard, 2000, p. 386-387). That is why LFA as a method is very subjective and targets might not represent the objectives of the project (i.e., they might be set too high or too low) (Hubbard, p. 386-387).

Logframe, though theoretically well established, in practice was often reduced to the level of unimportant activity, especially at the project design phase. For example, the UNDP Programming Manual recognizes logframe as 'valuable in the design stage', but places it outside the project design document context thus granting it the 'optional' status: 'The logframe is not part of the project document. It can, however,

be valuable in the design stage and as a reference at the implementation stage.’ (UNDP, 2000b, p. 13).

2.6 Performance Measurement as the Tool of Performance Management

Performance measurement and performance management sometimes not clearly distinguished or thought of as antagonistic project management instruments. Or that reason it would be helpful to clarify the issue of relationship between the two and outline some implications of that for RBM.

As it was earlier mentioned, **performance** is the degree to which development intervention achieves results in accordance with stated goals or plans (OECD, 2002a, p. 29). That is the broad definition which states that any combination of tools aimed at achieving stated goals and objectives can be considered as a part of **performance management** system.

Performance measurement is the process to objectively measure how well objectives stated by an organization are being met (Binnendijk, 2000, p. 6). Performance measurement is based on performance instruments and measures.

2.6.1 RBM and Performance Indicators

Performance measures and indicators are two terms that might be used interchangeably to denote measurement of results. Measures are referred to direct means of results measurement whereas the use of indicators implies less direct measurement. **Box 8** provides more information on differences between the two.

Performance indicators and measures answer the question what needs to be measured. MDGs could help out in answering this question. One of the ultimate goals of development aid is poverty alleviation poverty. The economic growth and consequent employment generation are the only sustainable means of poverty alleviation and, therefore, the economic growth- and employment-related indicators should be in focus. Despite the general consensus on the need to focus on poverty-related indicators, there is a split between the agencies on what to measure – either poverty alleviation directly (number of people lifted out of poverty in relation to the

Millennium Development Goals) or economic development (private-sector savings, or the volume of investment etc). (Tanburn, 2008, p. 20).

Box 8. Performance Measures and Indicators

It is possible to make a distinction between measures and indicators, although the terms are frequently used interchangeably. Both are quantified descriptions of results related to objectives:

a) **Measures** correspond to expected direct programme results at any particular performance level, such as the number of clients served (output), level of weapon accuracy (outcome) or decreases in infant mortality (outcome), the actual additional revenue recovered by government inspectors on visits to traders compared to the targeted objective, number of kilometres of road constructed, etc.

b) **Indicators**, on the other hand, are less direct measures. They are used if direct measures are difficult or costly to obtain. They correspond less precisely to the performance being measured, e.g., fewer insurance claims as a measure of safer car design, the "street" price of illegal drugs as a measure of the effectiveness of an anti-drug programme. One major museum, for example, measures "tile wear" to gauge the success or popularity of its exhibits. While indicators may involve greater complexity and difficulties in obtaining, they are no less useful than performance measures.

Source: OECD, 1994, p. 36.

It needs to be kept in mind that whatever indicators are chosen to measure impacts or outcomes, the indicators, being only the proxies of results, will only to some limited extent represent the results they measure. Therefore, the role of performance indicators, as proxies for results, should be carefully thought through at the project design phase in order to get realistic comparisons of actual *versus* desired results in a course of project execution and upon project completion.

The 'menu' of performance indicators was made available by some agencies for its projects. For example, the World Bank produced 18 volumes of sector-specific indicators; USAID produced indicators for each of its programming area; Danida also produced its own set of indicators (Binnendijk, 2000, p. 30). In some agencies performance indicators menus are mandatory 'to enable aggregation of results to the agency level' (Binnendijk, p. 31). The performance indicators menus demonstrate a trend toward standardization of performance indicators to make them comparable at least within agencies.

For the sake of more objective-focused project design, the linkages with strategically important indicators and targets, such as MDGs, seem to be intrinsic to setting the project at achieving strategically important targets from an outset.

The higher the level of results is, the closer, as it seems, the indicators should be linked to MDGs. In this sense the impact indicators should be built to reflect a project's direct contribution to at least one of the MDGs, whereas the outcome indicators should reflect a project's indirect contribution to the MDGs (via project objectives).

The example of how impact indicators can be linked to MDG 1 to “reduce by half the proportion of people living on less than a dollar a day” is presented in **box 9**.

Box 9. MDGs and Performance Indicators for the Private Sector Development

Many donors are increasingly feeling that they will need to have a response to the Millennium Development Goals as the deadline of 2015 approaches. Since PSD potentially cuts across many MDGs, they are discussed in more detail, below.

The most important MDG for PSD practitioners is probably **MDG 1**, to “reduce by half the proportion of people living on less than a dollar a day”. Importantly, few agencies are currently measuring this indicator in their PSD programmes, for a range of reasons. One is that it is difficult for practitioners in the field to implement the 1993 level of purchasing power parity (PPP) concept of the dollar in the MDG. ...

Some therefore prefer to measure those living on less than \$2 per day, using a dollar measurement that can be taken from field measurements (rather than PPP calculations). ...

USAID has been mandated by the US Congress to ensure that at least 50% of all USAID micro-enterprise funds benefit the very poor. To provide a check on whether this mandate is being met, Congress has more recently instructed USAID micro-enterprise programs use these methods to assess how many of their beneficiaries are very poor.¹⁴ ...

Similarly, CGAP, Grameen and Ford are proposing a tool called the Progress out of Poverty Index (PPI), to be used over time to determine improvements in client economic levels and their ultimate graduation out of poverty. These would be country-specific; in the example of the Philippines, they would include the materials used in house construction, the type of toilet, ownership of a gas stove, children in school and number of televisions owned. The aim is that such baskets of indicators can be used as proxies for income levels in the household¹⁵.

¹⁴ See www.povertytools.org for more information.

¹⁵ CGAP Focus Note number 41, May 2007. Beyond Good Intentions: Measuring the Social Performance of Microfinance Institutions. www.cgap.org/portal/binary/com.epicentric.contentmanagement.servlet.ContentDeliveryServlet/Documents/FocusNote_41.pdf

The Performance Measurement Framework (PMF) was included in the Donor Committee's Guiding Principles on Business Development Services, primarily in the form of a list of indicators¹⁶. These indicators were essentially proxies for ultimate impact; in other words, they were based on an assumption that increased purchase of business services (for example) was positively correlated with business growth, increases in incomes and/or employment etc. In practice, validation of these proxies would require substantial investment, one which was never actually made.

Source: Tanburn (2008), p. 22.

Performance Indicators and Time Factor

Linkages of project performance indicators to MDGs places a project in a strategic context of MDGs. The time factor might be an obstacle on the way since development practitioners typically have 2-3 years in which to prove their programmes. Yet many worthwhile changes take longer than that. Effects may appear negative in the short term, but positive in the long term (Tanburn, 2008, p. 24).

For that reason the time frame for project assessment presents a major challenge, especially for those practitioners who are involved in project design. The only way to 'square the circle' is to invest time in projecting the anticipated impacts in the coming years, well beyond the life of the programme.' (*ibid*).

Performance Indicators: Approximate Measures

The difficulty with estimation outcomes and impacts was always in their **complexity** given the uncertainty, lack of information and financial resources for the rigorous measurement. The paralysis 'in the face of such daunting challenges' (Tanburn, 2008, p. 28) needs to be avoided. That is why following the principle 'better is the enemy of good' seems a reasonable compromise between getting work done and avoiding spending too much efforts on something uncertain that does not require a lot of rigour at the design phase. 'Approximate measures are therefore better than no measures at all' because 'the cost and effort to achieve rigour seem so daunting that practitioners finally measure nothing' (Tanburn, 2008, p. 32).

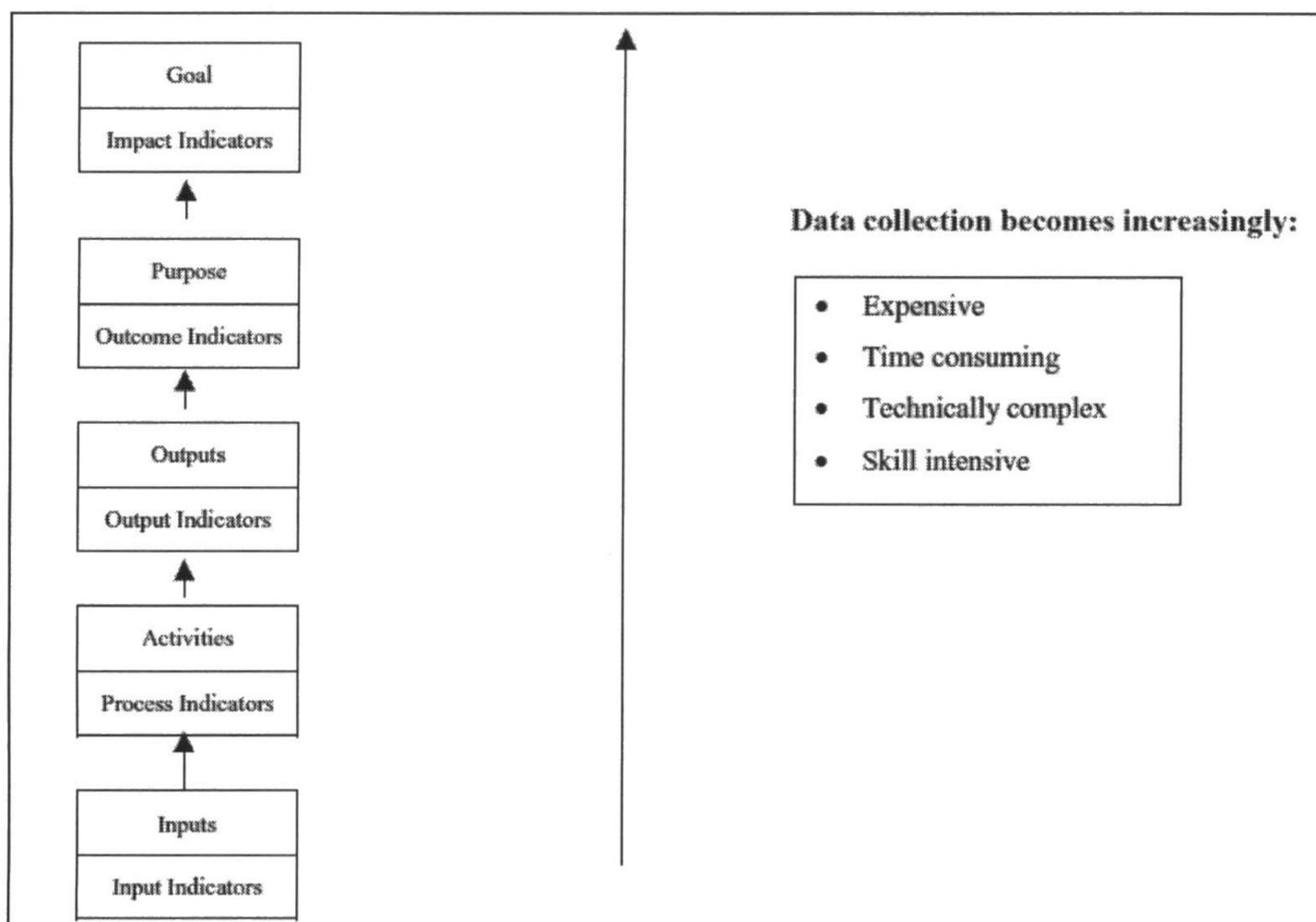
The time factor is also a consideration when opting for approximation and simplicity at the project design phase. As **box 10** illustrates, the more distant in time the results

¹⁶ <http://www.enterprise-development.org/groups/group.asp?groupid=3>

are and the higher the level of results is, the more expensive, time-consuming, complex, and skill intensive the data collection for them is (Binnendijk, p. 37). This is another reason for opting for simple and limited number of outcome and impact indicators at the design phase.

This is an illustration of the **bounded rationality** concept application demonstrating that it is the case when it is reasonable to ‘**settle for satisfying solutions**’ because ‘information gathering is costly, and gathering full information would be prohibitively costly’ (Langley et. al., 1995).

Box 10. Characteristics of Data Collection Efforts (by logframe hierarchy levels)



Source: Binnendijk, 2000, p. 38.

Therefore, the performance indicators, to be effective at the project design phase, need to be built around the following **principles**:

- **simplicity**: settling for simple solutions unless complexity is required
- **standardization and comparability**: the indicators to the extent possible need to be comparable across projects and countries, so that they can be added up within project, programs, countries

- the **higher** the **level of indicator** is, the higher degree of standardization and comparability they should have: ideally, the impact indicators should be easily comparable in terms of their contribution to MDGs; the outcome indicators are expected to have lesser standardization level; the output indicators are expected to be the least comparable
- **employment of qualitative methods** to arrive at quantitative or qualitative indicators, (perception measurement etc.) if the use of qualitative methods is unlikely to yield any results due to lack of statistical information etc.

2.6.2 Performance Management and Performance Evaluation

As it was mentioned, RBM coexists in tight relationship with its ‘cousins’, such as **Performance Management**¹⁷ and **Evaluation**. There is no consensus on the issue of correspondence between RBM and performance management, though.

Box 11 below provides an interesting view on not always clearly defined boundaries separating performance management and performance evaluation. Performance management techniques were developed partly in response to failures of evaluation that lead to some competition between evaluation and performance management and to duplication of efforts. There is a growing perception that ‘performance measurement may be replacing evaluation – the approach that ‘is gaining momentum now’ because OECD recommends making evaluation ‘part of a wider performance management framework’. (Binnendijk, 2000, pp. 7-8).

Whatever the relationship between performance management and evaluation is going to be, it is apparent that RBM and performance management are taking over some evaluation functions performing them in a more simplified and less expensive way. That is why performance management might constitute a healthy alternative to evaluation.

¹⁷ We consider RBM to be part of more generic notion of performance management and one of possible techniques employed within performance management.

Box 11. Role of Evaluation in Performance Management

The role of evaluation vis-à-vis performance management has not always been clear-cut. In part, this is because evaluation was well established in many governments before the introduction of performance management and the new approaches did not necessarily incorporate evaluation. New performance management techniques were developed partly in response to perceived failures of evaluation; for example, the perception that uses of evaluation findings were limited relative to their costs. Moreover, evaluation was often viewed as a specialized function carried out by external experts or independent units, whereas performance management, which involves reforming core management processes, was essentially the responsibility of managers within the organization.

Failure to clarify the relationship of evaluation to performance management can lead to duplication of efforts, confusion, and tensions among organizational units and professional groups. For example, some evaluators are increasingly concerned that emphasis on performance measurement may be replacing or "crowding out" evaluation in U.S. federal government agencies.

Most OECD governments see evaluation as part of the overall performance management framework, but the degree of integration and independence varies. Several approaches are possible.

At one extreme, evaluation may be viewed as a completely separate and independent function with clear roles vis-à-vis performance management. From this perspective, performance management is like any other internal management process that has to be subjected to independent evaluation. At the other extreme, evaluation is seen not as a separate or independent function but as completely integrated into individual performance management instruments.

A middle approach views evaluation as a separate or specialized function, but integrated into performance management. Less emphasis is placed on independence, and evaluation is seen as one of many instruments used in the overall performance management framework. Evaluation is viewed as complementary to -- and in some respects superior to -- other routine performance measurement techniques. For example, evaluation allows for more in-depth study of program performance, can analyze causes and effects in detail, can offer recommendations, or may assess performance issues normally too difficult, expensive or long-term to assess through on-going monitoring.

This middle approach has been gaining momentum. This is reflected in PUMA's Best Practice Guidelines for Evaluation (OECD, 1998) which was endorsed by the Public Management Committee. The Guidelines state that "evaluations must be part of a wider performance management framework". Still, some degree of independent evaluation capacity is being preserved; such as most evaluations conducted by central evaluation offices or performance audits carried out by audit offices. There is also growing awareness about the benefits of incorporating evaluative methods into key management processes. However, most governments see this as supplementing, rather than replacing more specialized evaluations.

Source: Binnendijk, 2000, pp. 7 - 8.

That is especially relevant considering that the development practitioners in the field are not 'statisticians or academics, and generally find the task of rigorous results

measurement daunting' and that 'measurement is often classified as an 'overhead', with the associated pressures to reduce the cost to an absolute minimum.' (Tanburn, 2008, p. 1). The cost of delivering aid (partially because of the overhead costs related to evaluation) remains high. 'In 2005, the 34 developing countries covered by the survey [VL: OECD 2006 Survey] received 10,507 donor missions, more than one for each working day.' (Tanburn, 2008, p. 7).

2.6.3 Performance Measurement and Performance Budgeting

Performance measurement as a tool of performance management in the OECD countries is aimed at:

- improving the performance of an organisation from the point of view of economy, efficiency, effectiveness, cost-effectiveness and quality of service;
- improving control mechanisms for managers and ministers and accountability mechanisms for external reviewers such as auditors and legislators;
- informing the budgetary process by providing decision-takers with new kinds of information which allows them to make linkages between performance and budget;
- motivating staff to improve performance (OECD, 1994, p. 13).

The extent to which the above objectives are 'served' by performance measurement depends on the country and the circumstances. But regardless the extent to which performance measurement is put into practical use, the "input-activity-output-outcome" sequence remains explicit frame of reference for performance measurement (OECD, 1994, p. 13).

Performance measurement is used at both the target setting (*ex ante* or project design) and the performance review (*ex post* or project evaluation) stages (OECD, 1994, p. 11).

In many of the OECD countries the performance measurement systems are used as control and monitoring systems at the organisational level. For example, in Finland performance measures are used in pay policies and management improvement programmes within agencies. In the United States, local governments developed

management and budgetary systems which merge performance information with financial information to track a programme's cost per unit of output or service. In the performance budgeting system of Sunnyvale, California, city officials closely track the provision of services throughout the year, and the pay of managers is based on whether the performance goals of the programmes under their control are met. The city officials detail specifically the level of service to be provided for street cleaning. Staff and materials used each day are monitored. All the money allocated to a particular job is tied into that cost. In Sweden, a new **budgetary process focuses on performance**. It has changed the microbudgetary process from one which regulates in detail the input of resources to agencies, to one which regulates output and performance using performance information drawn from annual reports (OECD, 1994, p. 23-24). **Box 12** provides more examples of how performance measurement was used in performance management.

Box 12. Progress in Performance Measurement in the OECD Countries

In the **United States**, performance measurement is used extensively in local government, which provides many services directly to the public, but less at the state and federal levels where it is also mainly for internal use. The Government Performance and Results Act of 1993 has introduced an ambitious 10-year programme requiring the development, use and publication of performance information by all federal agencies.

In the **Netherlands**, interest has focused on performance measurement in local authorities, stimulated by a new Municipal Act. Its aim is increased efficiency and service quality. Performance measures and indicators are being used in various areas such as the maintenance of roads and parks, the use of creational and cultural facilities, and crime and fire 1 prevention.

In **Australia**, progress in developing performance measurement is an integral part of reforms such as the Financial Management Improvement Programme, of specific reforms such as Programme Management and Budgeting and of projects of commercialisation (Government Business Enterprises). Agencies develop performance measures as part of their corporate plans, which feed into budget negotiations and published budget documents.

In **Denmark**, progress has been made on the input side, with performance being related to resources in a budgetary context, and on the output end with a focus on the content and quality of services rendered to customers. In a number of "contract agencies", multi-year funding is provided on the basis of target performance levels.

In **Finland**, there is a phased introduction of performance measurement through results-oriented budgets. In 1991 there were 12 such budgets, and 30 more in 1992, all framed in terms of 1995 results.

In **Norway**, the development of corporate plans for departments and the guidelines of the Directorate of Public Management indicate the progress made in evolving performance measurement.

In **New Zealand**, the public sector is presented both as an "owner" of agencies and as a purchaser of their services so it is focusing increasingly on financial performance and on specification of product and service delivery. Budget appropriations are provided to departments on the basis of agreed types and volume of outputs to be produced.

Source: OECD, 1994, p. 23.

Performance measurement can go as far as providing performance information for resource allocation **budgeting decisions** (that will be touched upon in the section on Results Based Budgeting). It is seldom the sole basis for budget decisions and is only one element among others to be taken into consideration (OECD, 1994, p. 14). The link between performance measurement and the budgetary process tends to be indirect rather than direct (OECD, 1994, p. 19). As Allen Shick wrote as to practice of performance budgeting, 'Performance budgeting is easy to explain but has been hard to implement. The basic idea is that governments should budget for actual or expected results (typically labelled as outputs and outcomes) rather than for inputs (personnel, supplies and other items). When deciding the budget, governments should be informed of the services that public agencies will provide and the expected benefits and social conditions that will derive from spending public funds. As appealing and sensible as this idea is, putting it into practice has been exceedingly difficult. Governments have many things on their minds when they allocate resources; performance is only one preoccupation and usually not the most urgent' (Schick, 2007b, p. 122).

Many of the performance measurement instruments failed to be effective for various reasons, but mostly because the results often were set unrealistically high. For example, the experience of OECD Member countries revealed that 'the disappointing results reflected a failure to recognise inherent difficulties in performance measurement in the public sector and a search for too many performance measures. There was also a failure to recognise the need for a corresponding change in management culture at all levels, with the reforms focused too much on a "top down" approach.' (OECD, 1994, p. 22). The major lesson that can be drawn from the OECD experience that has direct implication to development administration is that information obtained from performance measurement constitutes an important foundation for the future policy decisions (OECD, 1994, p. 23).

The above examples and experiences (**box 12**) might be relevant and potentially highly applicable to development administration. But whatever the degree of performance measurement practical application is, it promotes the shift from an administrative or compliance culture to a managerial or performance culture (OECD, 1994, p. 15). The sheer adherence to rules and procedures, however important, is no longer sufficient (OECD, 1994, p. 19). In this context, improved performance measurement is viewed as an essential element in establishing accountability for achieving results and promoting good management (OECD, 1994, p. 15).

Nevertheless, performance measurement is still in its evolutionary stage. Even in countries where it is used at all levels of government, it is neither comprehensive nor fully systematic. It seems that it will take decades before performance measurement is used consistently across OECD Member countries as a major tool in policy and operating decisions, and for improving public sector management (OECD, 1994, p. 15).

Performance measurement should also heighten ‘awareness of the cost of the goods and services provided, and these have to be both consistent with government objectives and meet taxpayers’ or customers’ requirements’ (OECD, 1994, p. 19). This is a very important acknowledgement that paves a way for further considerations in this regard.

2.7 RBM, Financial Performance Management and Cost-Benefit Comparisons

Financial performance management¹⁸ perspective is one of the key factors of ensuring that inputs are processed in a way that the expected and meaningful results emerge. That seems to be impossible without the knowledge not only of cost of processing inputs, but also of the costs of the ‘products’ (in our case those ‘products’ are results – outputs, outcomes and impacts).

¹⁸ **Financial Performance Management** is the term that has been introduced by the author to point out to the financial aspects of performance management (i.e., costs of results desired etc.) that can be viewed in the context of the overall financial performance management system.

The knowledge of not only costs of inputs, but also of the costs of products is something that in 'non-projectized' business environment that is a past history. For example, any business entity manages both overall costs and overall results of business activity (by means of Financial Accounting and Budgeting), and also the product-related costs (by means of Managerial Accounting and Financial Management).

In development project management this is not the case since development project management is traditionally focused on inputs cost management. Therefore, the challenge for RBM would be to get focused on cost management of results by complementing the budget line cost management with the results costs management. The latter would provide for the cost-benefit comparisons of project 'products' (outputs, outcomes and impacts) as a key instrument in conducting project financial feasibility study and establishing if project benefits outweigh project costs in case of each specific result.

2.7.1 Social Cost Benefit Analysis

For socially-focused projects there is a special tool, the **Social Cost Benefit Analysis** (SCBA), which enables the weighing costs and benefits, both internal and external. 'To be acceptable the net social benefits of the project should exceed the social opportunity cost of the capital required.¹⁹ SCBA thus develops a social opportunity cost target which the project's net benefits should exceed.' (Hubbard, 2000, p. 385-386). Because of its complexity the SCBA is generally carried out 'for large scale capital investments which will affect society and the economy substantially and involve public investment and regulation, such as power stations, harbours, airports and dams. In development projects with diverse outputs which are difficult to measure a full cost-benefit analysis does not necessarily add exactness beyond a simpler and rougher analysis.' (Hubbard, 2000, p. 386).

¹⁹ 'A full cost benefit analysis quantifies all costs and benefits (both internal and external) over the life of the investment, using competitive market prices for all inputs and outputs. The investment's net present value is estimated and compared with the opportunity cost of capital to society (the social discount rate - usually the cost of long term borrowing) to decide if it is a socially beneficial use of resources.' (Hubbard, 2000, p. 385).

‘A simpler and rougher analysis’ to weigh project benefits against project costs is what is needed and what is missing in the design of development projects. In this regard depending on the nature and complexity of development project the ‘full-fledge’ SCBA might be required and justified. But what seems to be needed at the design phase of most development projects is a ‘simpler and rougher’ application of some elements and principles of SCBA, namely its core idea of weighing project benefits against project costs to complement LFA and verify its conclusions.

2.7.2 Estimation of Benefits

The ‘**potential impact approach**’ (Hubbard, 2000) is an example of how the core idea of SCBA, weighing project benefits against project costs, could be used without resorting to full-fledge SCBA as a tool and at the same time without relying solely on technical target setting and LFA. Unlike SCBA, ‘potential impact approach’ goes further and deeper by not only weighing project benefits against project costs, but also by establishing if project intervention is adequate in relation to resources used by the project by making comparisons between potential impact and actual impact (Hubbard, 2000, p. 388).

The **potential impact** can be estimated based on the contribution the project makes to overall project objective by deploying the project resources. Such kind of answer can be obtained by:

- drawing on the benefits of similar project interventions (that is rarely the case because this information is not usually available and environments differ substantially making projects often unique) or
- focusing on: (1) obstacles to maximum achievement of objective; (2) the extent to which project can help remove these obstacles; and (3) the external costs (‘costs to others’) caused by project intervention (Hubbard, 2000, p. 388).

The focusing on ‘the obstacles to potential impact’ technique provides ‘a rough tool for use at the project design stage, where alternative activities are being considered to fulfil the objective’ (Hubbard, 2000, p. 388).

The project would have the highest potential impact under the following circumstances:

- if obstacles are potentially removable
- if it is in the power of project to remove them
- if without the project intervention obstacles will not be removed
- if external costs inflicted by project on others are minimized (Hubbard, 2000, p. 389).

Based on the above, the greatest impact can be achieved if: (1) the pre-existing potential for the project is high, but (2) not realized and (3) can be realized only due to the project intervention. It means that the greatest benefit that development assistance can provide to the recipient is to enable the recipient to realize its full potential. (Hubbard, 2000, p. 391).

There might be different approaches, both quantitative and/or qualitative, with regard to assessing project benefits.

Whatever methods are used to assessing project benefits, it is not a straightforward process. The benefits, however defined, should be compared to costs to establish if from the financial management perspective the project is feasible. If the project is not financially feasible, the project should not necessarily be rejected 'by default'. The project financial feasibility is a very important aspect of project design, though not the only one. The development projects, despite being financially unfeasible, can be launched for other reasons (political, humanitarian, environmental etc.), especially considering the non-profit and development nature of development assistance work. It should be also mentioned that if estimation of costs is an objective process (based on how much an activity costs to be undertaken), the estimation of benefits is a very subjective since it heavily depends on methods of estimation used. That is why it should be kept in mind that the cost-benefit comparisons in development projects are not always feasible and credible. Therefore, the cost-benefit comparisons, though desirable, might not always make sense. Because of that sometimes the estimation of costs without estimation of benefits might be more credible option.

2.7.3 Estimation of Costs

The **costs** should in principle be an **easier figure to obtain** (Tanburn, 2008, p. 21). Some existing approaches with regard to costs estimation are considered below.

The cost management in development projects is based on cost management of inputs by budget lines which became the centers of project financial management in key development aid agencies. For example, the UNDP Programming Manual (Ch. 5, section 5.2 'Preparing Budgets') requires the preparation of project budgets by inputs or budget lines (UNDP, 2000b, pp. 11-19). This is not to reject the need to keep the focus on budget lines in cost management. This points out to the need to complement the budget line perspective of the project cost management with additional perspective on objectives and results.

The budget line perspective does not provide with an insight into how much each of the desired project result costs both at the design, planning and execution phases. In other words, there is no financial information on costs related to each of the output, outcome and impact.

That makes the overall process of managing objectives and results within RBM harder to achieve since the financial aspect of planned and actual costs related to each desired result is not made directly available. It is also difficult to introduce and conduct any type of cost-benefit analysis to make 'across-objectives' analysis (e.g., Hubbard, 2000).

For example, an objective might be worth to be pursued, but might not be worth to be spent a lot of money on. Therefore, such kind of 'best value for money' comparisons are harder to make under the current RBM setting.

The WHO Case (**section 6.2**) provides an example of how WHO approached the problem of costs and benefits estimation with regard to water and sanitation improvements.

2.7.4 Results Based Budgeting (RBB) in Performance Management

RBM along with Results Based Budgeting (RBB) represent the results-focused performance management approaches both sharing new public management as the joint methodological platform. Though both approaches, RBM and RBB, originated approximately the same time (1990s), but unlike RBM, still there is no consensus with regard to the definition of RBB. Nevertheless, there is a growing common understanding of the term (JIU, 1999, p. 3).

As a matter of some compromise, the definition of RBB by Secretary-General of the United Nations (1998) can be quoted: 'A programme budget process in which: (a) programme formulation revolves around a set of predefined objectives and expected results; (b) expected results justify the resource requirements which are derived from and linked to outputs required to achieve such results; and (c) actual performance in achieving results is measured by objective performance indicators.' (JIU, 1999, p. 3). The similar definition was given at the briefing of the United Nations Secretariat (1999): 'RBB is about formulating programme budgets that are driven by a number of desired results which are articulated at the outset of the budgetary process, and against which actual performance is measured at the end of a biennium.' (*ibid*). RBB can be associated with performance budgeting which, loosely defined, is any system that provides information on the volume of outputs, activities, workload, indicators of demand, impact of expenditures. Strictly defined, performance budgeting is the budgetary system which links increments in spending to increments in results (Schick, 2007b, p. 123), 'seeks to base spending decisions on actual or projected results' (Schick, 2007b, p. 110). Under the first, 'loose' one, definition many agencies would claim to have only performance budgets, under the second, 'strict' one, only few could (Schick, 2007b, p. 123).

RBB was initially used by developed countries, where the major civil service reforms based on new public management were implemented (Mizutani, 2009, p. 2) followed up by the UN system since late 1990s.

Like RBM, RBB uses logical framework which 'establishes a top-down link and interrelationship among objectives and results and resource requirements.' (JIU, 1999, p. 3). A key feature of RBB is 'linking the achievement of results to the budget and

thereby more transparency and direct accountability of programme managers.’ (JIU, 1999, p. 3-4).

RBB represents a shift from program/project budgeting, in which ‘results-oriented features were latent’, to a system with more explicit linkages between objectives, outputs and inputs (Mizutani, 2009, p. 1).

While in some OECD countries, **performance-based budgeting** is ‘a key objective of performance management’, it makes sense to take a more modest approach and ‘to estimate the costs of achieving planned results, rather than the cost of inputs or activities’ (Binnendijk, 2000, p. 7). As **box 13** points out, shifting the focus from estimating costs of inputs to the costs of desired results would provide for better aid allocation decisions and, ultimately, to ‘performance-based budgeting’. (*ibid*).

Box 13. Cost Management and Performance-Based Budgeting

Of particular interest is the intended use of performance information in the budget process for improving budgetary decisions and allocation of resources. The ultimate objective is ensuring that resources are allocated to those programs that achieve the best results at least cost, and away from poor performing activities. Initially, a more modest aim may be simply to estimate the costs of achieving planned results, rather than the cost of inputs or activities, which has been the traditional approach to budgeting. In some OECD countries, performance-based budgeting is a key objective of performance management. However, it is not a simple or straightforward process that can be rigidly applied. While it may appear to make sense to reward organizations and programs that perform best, punishing weaker performers may not always be feasible or desirable. Other factors besides performance, especially political considerations, will continue to play a role in budget allocations. However, performance measurement can become an important source of information that feeds into the budget decision-making process, as one of several key factors.

Source: Binnendijk (2000), p. 7.

The link between performance measurement and the budgetary process tends to be indirect rather than direct. Some countries contemplate a fairly strong resource-performance link, but few have tried to forge a tight relationship between resources and performance. Performance information is a necessary but not a sufficient condition for good resource allocation. The information influences the discussions between administrators and policy-makers as well as the budgetary process, and thus becomes an element in the decision-making process. It also transforms the nature of

budgetary discussions between the Ministry of Finance and line departments. It makes the debate more specific and quantitative or concrete. Performance measurement, when established in and developed from individual agencies, may transform the budgetary process in the long term (OECD, 1994, p. 19).

Though RBM and RBB represent different performance management approaches within new public management, they do not exist in parallel. To apply RBB practically, some form of performance management²⁰ needs to be put in place as a precondition for RBB because ‘if managers don’t manage for performance, they will not budget for performance either.’ (Schick, 2007a, p. 16). In its simplified version RBB can be viewed as a system of budgeting that displays output or services provided by each spending unit.’ (Schick, 2007a, p. 14). The ‘full-fledge’ version of RBB calls for a budgeting system that ‘explicitly links each increment in budget resources to an increment in output or changes in outcomes.’ (Schick, 2007a, p. 14).

It needs to be mentioned that the RBB as the system of formulating program and project budgets that are linked to desired results which are articulated at the outset of the budgetary process, (JIU, 1999, p. 3) was practically abandoned or put on the ‘back burner’ in its practical use during the recent decade having been put to practical use in the UN system.²¹

Therefore, RBB along with RBM represent different aspects of performance management each of which links resources to results. RBB, as a system of **financial performance management**, can greatly complement RBM at the design stage. Hence, it would be beneficial to embed some elements of RBB into the project design to get a better synergy of both systems at the project design phase.

²⁰ In this paper we often use the term ‘**performance management**’ and **RBM** interchangeably to a certain extent. More strictly speaking, we treat performance management as a broader and more generic concept (OECD, 2002a, p. 29), of which RBM and RBB are part. We believe that performance management exists within an organization if at least some elements of RBM and/or RBB are incorporated into the organization’s strategic management system.

²¹ For example, Joachim Bilger, the former Controller of the World Intellectual Property Organization (WIPO) had led the way in developing the concept of RBB in the United Nations system, and in making practical application of this concept to WIPO (JIU, 1999, p. 3).

2.8 RBM, Key Success Criteria and Key Success Factors

The **Key Success Criteria** (KSC) help to establish relevance and validity of project design. At the superficial level it might appear that RBM does not have any explicit links with KSC. At least this is the impression that one might get after analyzing the RBM systems of some agencies. Nevertheless, the implicit links between RBM and KSC exists through performance indicators. The performance indicators of all results levels need to be prior validated through the prism of KSC: relevance, sustainability, effectiveness, efficiency (OECD, 2009).

Different agencies use different KSC, most of which overlap (relevance, sustainability, effectiveness, efficiency). For example, the OECD-DAC on top of those four lists the fifth KSC – impact, defining the impact as ‘the long-term development result indicating ‘the positive or negative changes produced by a development intervention’ (OECD, 2009).

Box 14 provides definitions of five KSC that OECD uses.

Box 14. OECD Definitions of Key Success Criteria

Impact is the long-term development result indicating the positive or negative changes produced by a development intervention.

Relevance is the extent to which results are consistent with overall goal.

Effectiveness is a measure of extent to which the aid activity attains its objective.

Efficiency is a measure of internal cost-efficiency of activities, i.e., outputs *vis-à-vis* inputs.

Sustainability is concerned with measuring whether the benefits of activity are likely to continue after donor funding has been withdrawn.

Source: OECD. (2009).

Based on OECD definitions of KSC (**box 14**) and the author attempted to establish the correspondence between the levels of results (the strategic, tactical and operational levels) and the types of KSC pertinent to each level of results (**table 2**).

Table 2. Types of Key Success Criteria Correspondence to Levels of Results

Level of results	Type of objective	Type of result	Time frame	Beneficiary reach	Key Success Criteria
Strategic level	Overall goal	Impact	Long-term	Indirect beneficiaries (society at large or some of its segments)	Impact, Relevance, Sustainability, Effectiveness
Project level	Project objectives	Outcomes	Medium-term	Direct beneficiaries	Relevance, Sustainability, Effectiveness
Operational level	Activities	Outputs	Short-term	Direct beneficiaries (treatment group)	Efficiency

The following **conclusions** can be drawn from **table 2**.

1. The strategic and tactical levels of results are characterized by the KSC of ‘**external efficiency**’ (impact, relevance, sustainability, effectiveness), whereas the operational level of results is characterized by the KSC of ‘internal efficiency’. ‘External efficiency’ characterizes the benefits for the client i.e., the extent to which the objectives were met given the time and budget constraints regardless the project’s internal cost-effectiveness.
2. ‘**Internal efficiency**’ characterizes the benefits for the project in terms of its internal cost-effectiveness. It implies that the client might quite be satisfied with the project results even if the project was incurring losses at the operational level.

The importance of ‘filtering’ the preliminary performance indicators through KSC can be highlighted by the following arguments.

- **Relevance** is needed to ensure that impact and outcomes obtained are aligned with the overall project goal and project objectives (that might not be the case of emergence of unexpected impact or outcomes).
- Impact and outcomes might turn out to be relevant to objectives, but financially or environmentally **unsustainable** (that is why performance indicators are to be screened for sustainability).
- Impact and outcomes might turn out to be relevant to objectives and sustainable, but partially **ineffective** if the objectives are not attained in full.
- The project’s operational results need to be screened for **cost-effectiveness** since otherwise the project operations cannot be sustained financially.

For the above reasons it seems important to provide room within the RBM framework for the key success criteria by incorporating the key success criterion perspective into the logframe matrix.

Key Success Factors (KSFs) represent conditions which either facilitate the process of transformation of inputs into results or hamper it. Those conditions lie both outside a project (i.e., in its environment) and inside a project.

Metaphorically speaking, KSC represent the ‘quality control’ aspect of transformation process results, whereas KSFs are the right ‘conditions’ under which the transformation is successful.

2.9 Shifting From Demonstrating Results to Managing for Results

2.9.1 Demonstrating Results vs. Managing for Results

The advent of MDGs greatly reinforced the need to demonstrate development results thus reinforcing the accountability-for-results function of RBM. For almost a decade, intentionally or unintentionally, RBM was turned into the system of demonstrating results. RBB, though conceptualized and practically applied, got abandoned for a decade. By focusing on how to demonstrate results the RBM system got deeply flawed (Ika and Lytvynov, 2009, p. 111).

The very essence of RBM calls for measurement of actual results achieved against objectives set. Therefore, the design phase in RBM should be given the highest priority since without the diligent design work there is a higher likelihood of project failure (e.g., Smith, 1988; Tacconi and Tisdell, 1992; Hulme, 1995).

There is a fundamental difference between demonstrating results and managing results. Through management of results the latter cannot only be demonstrated, but also designed, planned and attained. When the demonstration of results starts to dominate project management processes, the demonstration of results is implicitly seen as the end result. Then the rest of the results management processes tends to be skipped or reduced to superficial level.

A good example of that is the UNDP Programming Manual that places logical framework outside the project design document context thus granting it the 'optional' and the 'fringe activity' status: 'The logframe is not part of the project document. It can, however, be valuable in the design stage and as a reference at the implementation stage.' (UNDP, 2000b, p. 13). The disguised message here is that 'logframe' can be reduced to the level of unimportant activity, especially at the project design phase.

The donors' main concern is visibility of development results for the money provided to the development programs and projects. To satisfy the donors' need in visible results, the heavy emphasis in the RBM system was placed on monitoring, evaluation and reporting (e.g., Morgan, 1983; Rondinelli, 1983). The monitoring, evaluation and reporting system within RBM became not only costly, but also complex with numerous monitoring indicators some of which being introduced into the project at the monitoring and evaluation stage for the reporting purposes. The 'forest' of bigger development results behind the 'trees' of performance indicators very often cannot be seen (Ika and Lytvynov, 2009, p. 112). The evaluation of and reporting on performance targets can take up time from more important job of managing results and endanger the latter.

That is how UNDP evaluates the problem of overemphasizing performance indicators within RBM: 'When an organization overemphasizes any set of performance indicators and targets, the staff tend to become preoccupied with those indicators and targets rather than the wider results. ... Results systems have been designed mainly to meet **the demand for data for reporting** to the Executive Board rather than to manage outcomes' (UNDP, 2007a, p. VII, p. XII).

There is one statistical observation to prove the point that 'performance management' and 'performance measurement' are mostly referred to monitoring, evaluation and reporting rather than project design phases. The bibliographical literature review paper prepared by John Mayne on RBM (Mayne, 2007, pp. 13-19) has the total of 58 references on performance management, performance measurement and results management, out of which 8 references bear RBM as the heading and 14 are directly devoted to monitoring, evaluation and reporting as the only focus theme.

Measurement for the sake of reporting turns out to be an expensive way of reporting and undermines the basic idea of RBM – measurement against objectives set to see the progress being made towards achievement of those (Ika and Lytvynov, 2009, p. 112).

2.9.2 Measurability of Results

The problem with overemphasizing results stems from the problem of how results are measured within RBM and performance management in general. As it appears, in performance management what gets included in the category of results and gets managed is mostly the measurable and, therefore, easily attributable, demonstrable and verifiable results (Schacter, 1999; Binnendijk, 2000, Tanburn, 2008).

The ‘**measurable**’ and ‘**attributable**’ approach to defining results (Tanburn, 2008, pp. 10-20) is intrinsic to RBM. As a consequence, all the non-measurable results or the ones for which the evidence of change is not easily demonstrable and verifiable are end up being excluded from the context of RBM, particularly in case with ‘soft’²² or ‘process’²³ types of projects. The idea that only ‘what gets measured gets done’ (Peters and Waterman, 1982; Schacter, 1999, p. 22) is deep-rooted into the RBM culture.

Therefore, ‘RBM policy, if taken at face value’, leads to conclusion that all types of assistance that are hardly ‘measurable’ or ‘attributable’, such as all types of ‘soft’ assistance, are ‘virtually incapable, by definition, of producing results of any sort!’ (Schacter, 1999, p. 10). This is an absurd conclusion and contradicting the reality, but the strict application of the RBM definitions of results leads to such kind of conclusions.

‘**Soft**’ assistance (see **box 15**), that includes **policy advice** and **dialogue, advocacy, coordination**, and ‘has potential for reducing poverty and promoting human development by affecting the national policy environment’ was often overlooked (UNDP, 2002, pp. 13, 16).

²² ‘**Soft**’ assistance includes policy advice and dialogue, advocacy, coordination (UNDP, 2002, pp. 13, 16).

²³ ‘**Process**’ type projects are related to organizational or capacity development (Hubbard, 2000, p. 386).

Box 15. UNDP on Significance of 'Soft' Assistance

"Soft" assistance is a term that includes **policy advice** and **dialogue, advocacy** and **brokerage/coordination** services. It is "soft" as compared to the "hard" or **concrete contributions** to development that are identifiable as a building or a study or a training programme. In the past, this kind of assistance was often overlooked in the planning, assessment and documentation of programming and performance. It is now recognized as an important input for the achievement of results, a **shift** in emphasis brought about by the use of **results-based management** and the adoption of the Administrator's Business Plans (2001-2003), both of which direct attention to "soft" assistance. ...

"Soft" assistance has **potential for** reducing poverty and promoting human development by **affecting** the **national policy environment**. National policies and regulations must be conducive to an enabling environment in which human development can flourish. Policy advice, advocacy and brokerage represent critical tools with which UNDP can promote its development agenda.

Source: UNDP (2002), pp. 13, 16.

The following constitutes the **specificity** of 'soft' assistance (**box 16**): it produces intangible outputs; outcomes and impacts develop slowly; causality is difficult to attribute (Schacter, 1999, p. 9).

Box 16. Characteristics of 'Multilateral' Work by CIDA²⁴

The below are characteristics of multilateral work ('soft' type of activities) that:

- are not self contained, involving a **wide network of actors** who may have overlapping or conflicting roles and interests;
- produce **intangible outputs** (e.g., influence, persuasion, new ways of thinking);
- deal with systemic development **issues not confined to a country, region or sector**;
- **do not** always **progress in a linear fashion** from inputs to outputs to outcomes to impacts (often, the process is iterative and out of sequence, e.g., from inputs to outputs, back to inputs, then outcomes, etc.);
- **progress** from inputs to outcomes or inputs to impacts over a relatively **long period of time**;
- involve **cause and effect relationships** that are **difficult to** observe and **validate**;
- the **link with** development **outcomes and impacts** is **indirect**;
- have a direction over which CIDA, on its own, has a **low degree of control** or influence.

Source: Schacter (1999), p. 5.

²⁴ In his discussion paper *Results-Based Management and Multilateral Programming at CIDA* Mark Schacter refers to the **CIDA multilateral activities** versus bilateral activities. The bilateral activities are much more quantifiable compared to the multilateral work with Multilateral Development Institutions. The multilateral work is the example of the 'soft' type of assistance referred to by UNDP (box 1). Mark Schacter also sees the similarity of multilateral work with 'soft' assistance: 'The logic of RBM raises similar problems with so-called "soft" sectors of bilateral programming, such as governance and capacity development. They share important features with multilateral programming: they produce few, or no, physical outputs; as well, outcomes and impacts develop slowly, and causality is difficult to attribute' (Schacter, p. 9).

The ‘hard’ type of assistance has opposite characteristics (**box 17**): it produces tangible outputs; progress from inputs to outputs to outcomes to impacts is easy to observe and quantify; cause and effect relationships are easy to observe and validate (Schacter, 1999, p. 4).

Therefore, not all results, like the ‘soft’ type of assistance, can demonstrate the evidence of change since those are activities ‘for which robust forms of measurement are not available’, especially in case with multiple actors involved (Schacter, 1999, p. I).

Box 17. Characteristics of ‘Hard’ Assistance

The below are characteristics of multilateral work ‘**hard**’ activities that:

- are largely self-contained, involving a relatively limited and identifiable range of actors (e.g., CIDA, executing agency, country counterparts), each of whom has relatively clearly defined, complementary roles and interests;
- produce tangible outputs;
- deal with a discrete and well-defined development problems that have a defined physical location;
- progress from inputs to outputs to outcomes to impacts in a way that is relatively easy to observe and quantify;
- progress from inputs to outcomes or from inputs to impacts over a relatively confined period of time;
- have immediate cause and effect relationships that are relatively easy to observe and validate;
- there is a direct link with development outcomes and impacts;
- have a design and direction over which CIDA has had a high degree of control or influence.

Source: Schacter (1999), p. 4.

The practical implication of that is a certain degree of cautiousness exercised by some practitioners when it comes to dealing with ‘soft’ assistance issues. As one CIDA officer admitted, “you start to think twice about getting involved in doing things that you feel are worth doing, but where you know it will be difficult to measure results. The attitude becomes ‘can’t measure: shouldn’t do’.” (Schacter, 1999, p. IV). This is the situation of a tail (performance management) wagging a dog (development aid).

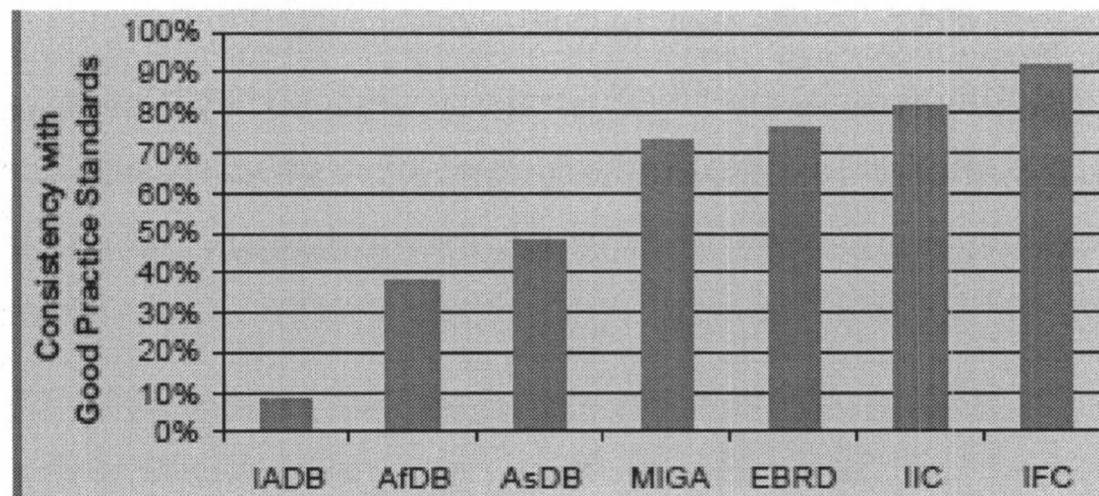
Results Comparability

The incomparability of results of different projects and agencies is also a problem. In practice little progress has been made on an inter-agency basis in developing a common methodology (Tanburn, 2008, p. 6-7). The situation gets worse because most

agencies do not conform to their own good-practice guidelines (Tanburn, 2008, p. 7).

Box 18 illustrates that.²⁵

Box 18. Meeting Good Practice Standards for Private Sector Evaluation



Source: Tanburn, 2008, p. 7.

‘Attribution’, ‘Contribution’ and ‘Deadweight’

From the theoretical perspective, measurement of more distant results (outcomes and impacts) is known to be more challenging problem compared to measurement of short-term results (outputs). Impact measurement is the most challenging for various reasons, including the problems of ‘attribution’, ‘contribution’ and ‘deadweight’. (Tanburn, 2008, p. 10).

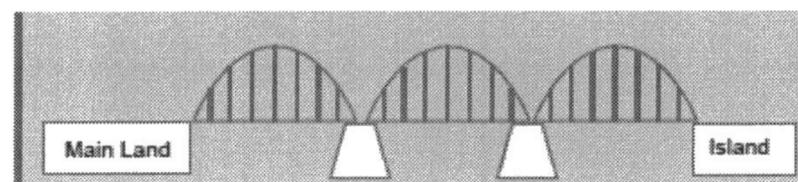
‘Attribution’ reflects the measured impacts resulted from the specific intervention of one agency, rather than from other interventions (of other agencies or from something completely different). (Tanburn, 2008, p. 10). The concept of **attribution** is explained in **box 19**.

There is a **‘contribution problem’** at the project level since other factors may also contribute to the project results: “The further away from the output is the effect to be measured (e.g., ‘Purpose’ and ‘Goal’- the higher levels of the log frame) the greater is the error likely to be, because the causal link between the project’s activities and the effects becomes weaker as the number and the contribution of other determining factors becomes greater. So ‘Purpose’ and ‘Goal’ target levels are more likely to be arbitrary and the evaluator is at greater risk of overestimating or under estimating the contribution of the project at these levels” (Hubbard, 2000, p. 387).

²⁵ <http://www.businessenvironment.org/dyn/be/docs/141/Michelitsch.pdf>

Box 19. Concept of Attribution

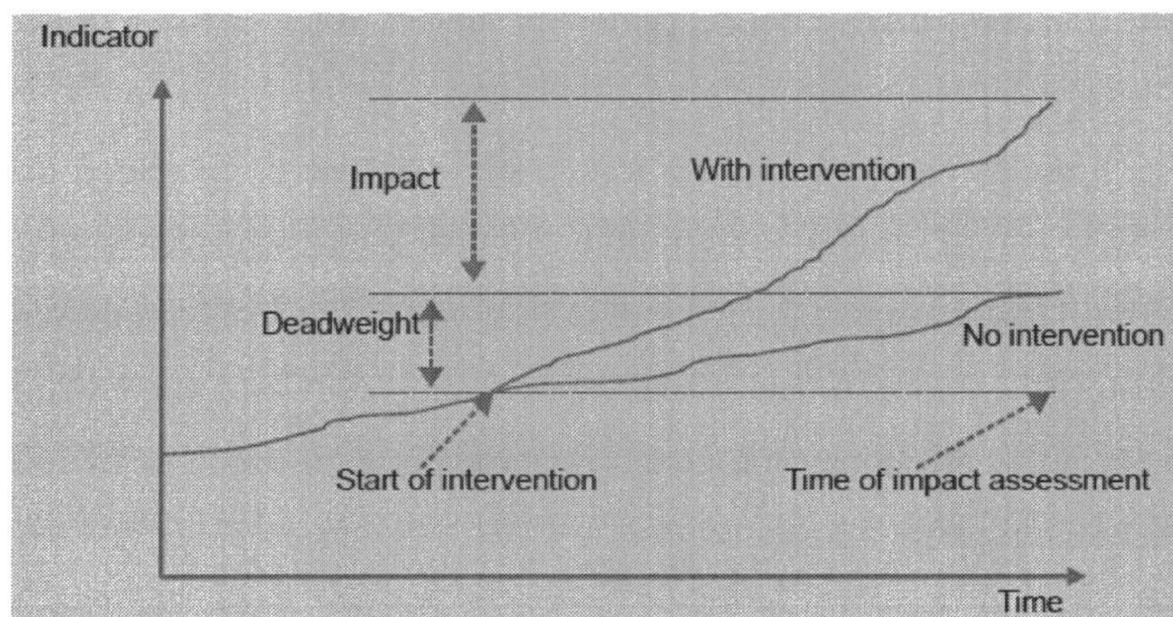
To illustrate the question of attribution, consider the example of a bridge built to link an island to the mainland; each span of the bridge has been built by a different agency – a good example of donor coordination. Once the bridge is completed, trade between the island and the mainland improves greatly, benefiting many islanders. All 3 donors might claim to have achieved the total impact, since without their part of the bridge, there would have been no impact at all. Besides, others involved in boosting the trade, such as the banks and the State, deserve some of the credit. How much, therefore, of the total impact can each individual donor claim?



Source: Tanburn, 2008, p. 11.

‘Deadweight’ is the measurement of impact that would have taken place without any intervention at all (Tanburn, 2008, p. 10). The concept of deadweight is illustrated in **box 20**.

Box 20. Concept of Deadweight



Source: Tanburn, 2008, p. 11.

The **measurement of impact** can employ various **methods** and techniques that can be grouped into the **quantitative** and **qualitative** ones.

Among the **quantitative** methods the following ones can be mentioned.

‘Randomised Controlled Trials’ (RCTs) is the most rigorous and costly approach. It is based on comparing the results of control group (that gets treatment) with treatment

group (the one that does not get treatment) (Tanburn, 2008, pp. 13-14). For more details on the issue of costs related to RCTs refer to **box 21**.

Box 21. Cost of Direct Impact Measurement

The comments [...] about the cost of RCTs imply a question about the appropriate proportion of a programme's budget that should be allocated to measuring the impact; while this question is often asked, there is regrettably no single answer. There may be cases where an expensive study is fully justified, for example in validating the impacts of a new approach, or in validating a proxy. In general, however, there is a feeling that measurement costs should not greatly exceed 10% of the overall programme costs.

Source: Tanburn, 2008, p. 16.

The **measurement of proxies** is a less expensive method of measuring results, based on indicators that might reasonably be expected to be closely correlated with the result to be measured. This might include, for example, traffic through the local bus park or electricity consumption locally. Proxies, and normally need to be validated (i. e. to be demonstrated to correlate closely with the indicator for which they are intended to be a proxy). This requires more rigorous and costly measurement, ideally using RCTs. Such validation is not carried out every time (Tanburn, 2008, p. 14).

The use of **qualitative methods** is a less costly alternative, compared to the RCTs method. They can be based on different techniques one of which is ranking based on perceptions of respondents. Such kind of technique is used by the World Bank, Transparency International, and EBRD. For example, 'Transparency International rank the level of corruption in a country according to perceptions of respondents.' (Tanburn, 2008, p. 16).

Therefore, with regard to measurement of results, 'there is no one method that will always be most appropriate, and a combination is required.' (Tanburn, 2008, p. 20).

With regard to definition of results and their measurement there might be an apparent, fix – to change the coverage of what is to be included and managed within any performance management system so that 'soft' or hardly measurable and verifiable types of results are included.

2.9.3 Consistency of Results Management Across the Project Management Phases

There is a more deep-rooted problem with results management within RBM. It is the consistency of results across the project management phases. In other words, the scope of results coverage needs to remain the same across all the project management phases, starting from project design.

Drawing an analogy with **business management**, ‘the products’ (be they tangible goods or intangible services) need to be managed starting from their design, throughout production and till the close-up phase (if there is any). In this sense it is unlikely to imagine the situation in business management when:

1. the new product²⁶ is vaguely outlined at the project design phase and it is up to the future product managers to identify more specifically the type of product to be produced depending on how the situation evolves.
2. the costs to producer²⁷ as well as the benefits for producer of the future product’s production are not estimated.

Unlike business management, in international development project management it might not be the case.

2.10.4 ‘Product Management’ and International Development Project Management

The **product management** is central to business management. It guides the product lifecycle management from birth through death: (1) product development; (2) product operation; and (3) decommissioning the product (Windley, 2009). The product development is impossible without in-depth understanding of various technical, marketing and financial aspects of the product throughout its lifecycle.

Unlike business management and performance management in public administration, in **international development project management** it is quite typical to find that

²⁶ Supposedly in case the new product is to be launched and requires the project management type of intervention.

²⁷ Ideally, especially in the context of Social Cost-Benefit Analysis, the costs and benefits to other stakeholders, including general public, government etc. are also considered.

despite the procedural presence of performance management the idea of ‘product management’ is not there because:

1. the results (i.e., the ‘products’ for the sake of emergence of which the inputs are processed) are generally identified superficially
2. the scope of results and the list of their measurable indicators identified at the design phase are not comparable with the scope of results and their indicators being present at the execution phase
3. the higher the level of result is, the less rigorous its design generally is
4. as the project implementation progresses, the results are generally looked at with more rigour
5. costs per result are not accounted for (there is only accrual type of accounting with overall project costs split into budget lines²⁸)
6. benefits of results are not generally estimated.

The above scenario might be the typical one in the development project management. The author’s own professional experience with development agencies and five **interviews** conducted with the development practitioners from United Nations Development Agency and International Finance Corporation prove that point.

The potential **critics** can argue that in business management the products can be managed and costs accounted for on per unit basis out of necessity, because business environment leaves no other choice. Otherwise the producer would be placed out of competition. But in public administration (and in development administration, by similarity with public administration) it should be different. Public administration, they might argue, ‘produces’ intangible results (e.g., services) that are hard to design, measure, and cost account for on per unit basis.

The critics can be referred to the existing since the 1990s experience of the OECD countries of linking performance measurement to resource allocation, pay policy etc. For example, as it is explained in more detailed way in the sections on performance measurement and RBB, in many OECD countries the performance measurement

²⁸ For example, UNDP Programming Manual recommends to group inputs by the following budget lines: Personnel, Contracts, Training, Equipment, Micro-capital grants (UNDP, 2000b, Ch. 4, pp. 19-20).

systems are used as control and monitoring systems at the organisational level: in pay policies (Finland); to track programme's cost per unit of output or service (US municipalities); to link budgetary allocations to performance of agencies (Sweden) (OECD, 1994, p. 22). Nevertheless, performance measurement is still in its evolutionary state. Even in countries where it is used at all levels of government, it is neither comprehensive nor fully systematic. It will take time before performance measurement is used consistently across OECD countries as a major tool in policy and operating decisions, and for improving public sector management (OECD, 1994, p. 15).

2.10 Tools for Aligning RBM with Management-For-Results

The literature review revealed that results management in RBM is not completely aligned with its *management-for-results* function for the following reasons.

- Reporting on measurable, but **low-level results** (UNDP, 2007a, p. 7), preoccupation with the activity level management, lack of control over longer term, presence of numerous **insignificant results**, indicators, and objectives (OECD, 2002b, p. 8).
- The UN-adopted MDGs (2000) have not been 'operationalized' (in other words, not translated into operational project activities) (UNDP, 2007a, p. 6). The policies and procedure to manage for results did not translate into improved practices at the operational level (UNDP, 2007a, p. 6).
- Inappropriate **quantitative precision** (Schacter, 1999, p. 3-4). Much of what donor agencies do (especially the largest multinational development aid agency, such as UNDP) is the 'upstream' level activities (capacity building, policy reform, policy advice, and advocacy) aimed at long-term and high-impact results. This '**soft**' **assistance** cannot easily fit into the RBM rigid context of 'neat' and quantifiable results. That can lead to improper measurement of and reporting on results, or abandoning 'soft' assistance for the fear of not being able to measure it in the context of direct causal link between activities, outcomes and impacts (Schacter, 1999).
- Low **comparability of results** of different projects because of lack of standard indicators (Binnendijk, 2000, p. 14). Unlike business performance indicators or economic indicators, the results of different projects and agencies are hard to compare because most of **performance indicators** are not standardized. Business performance indicators (like Return on Investment, expressed as a ratio or in percentage terms and

easily comparable across businesses and countries), or economic indicators (like GDP *per capita*, 1993 US\$ denominated, PPP-based) can well serve as the universal indicators of business or economic activity easily comparable across businesses and countries).

- Lack of strong **results culture** in some agencies (Flint, 2003, p. 50; UNDP, 2007a, p. 88).

Therefore, we concluded that results in RBM are not placed **operationally** in the core of project management and that RBM cannot fully perform its intended function of management-for-results without the ‘**product type of management**’ of results, including:

- proper identification of results at the design phase
- treating results as the individual quasi-‘products’
- costs and benefits attributable to each individual desired result.

It is apparent that for the sake of demonstrating results RBM was built on **positivistic** principles and designed to tackle the type of assistance with easily measurable results and easily attributable to one or a limited number of partners involved. To provide for better management of results within RBM, the problems of results identifications and results management need to be addressed at the project design phase to prevent the problems of measurement, causality, contribution and attribution from appearing later during the project execution. The management of results in development administration should receive the same type of treatment as the results management in business management, i.e., with clear identification of results at the design phase, consistency of results throughout all project management phases, and costs and benefits attributable to each result.

With understanding of that the function of management-for-results in RBM needs to be reinforced with specific tools capable of addressing the challenges facing RBM, having in mind first of all:

- clear identification of results at the design phase
- consistency in terms of scope of results throughout project management phases, and

- costs and benefits attributable to each result.

For that reason ‘a simpler and rougher analysis’, also known as ‘**quick and dirty technique**’ (Hubbard, 2000, p. 395), is what is needed to weigh project benefits against project costs and what is missing in the design of development projects. In this regard depending on the nature and complexity of development project the ‘full-fledge’ Social Cost-Benefit Analysis (SCBA) might not be required or justified. But what seems to be needed at the design phase of most development projects is a ‘**simpler and rougher**’ application of some elements and principles of SCBA (Ika and Lytvynov, 2009). In fact, the cost-benefit comparisons in development projects are not always feasible and credible because they (and especially the benefits estimation) are very subjective since they depend heavily on methods of estimation used. ‘Full cost benefit analyses are complex and rely on reasonably predictable and measurable benefit and cost streams from the investment. ... In development projects with diverse outputs which are difficult to measure a full cost-benefit analysis does not necessarily add exactness beyond a **simpler and rougher analysis**’ (Hubbard, 2000, p. 386).

3. Preliminary Research Interview and Survey Findings

Section 3 describes the findings of the preliminary research interviews conducted by the author (**section 3.1**) and the findings of the secondary-source survey conducted among the UNDP programme staff at the country office level (**section 3.2**).

3.1 Interview Questionnaire Development

In a course of the research process five in-depth **preliminary research semi-structured interviews** have been conducted with the development practitioners²⁹ from two multilateral international development agencies: United Nations Development Programme (UNDP) and International Financial Corporation (IFC).

The **objective** of conducting the interviews was to verify the preliminary conclusions reached through the literature review process as to the extent to which RBM supports its intended management-for-results function and to outline possible methodological solutions as they can be derived from the development practitioners' perspective.

3.1.1 Agency Selection

The author deliberately targeted the **multilateral agencies** for interviewing because the impact that these research findings can potentially make within the multilateral donor community would be higher compared to the bilateral donor agency option.

The choice of **UNDP** is explained by the following considerations:

- UNDP is one of the largest multilateral agencies and, therefore, has a significant impact on the existing RBM and development project design methodology
- most of the UNDP programming guidance material can be obtained from the UNDP website (UNDP, 2000; UNDP, 2002; UNDP, 2007a) that made possible the verification of information obtained via the interview process against the official methodological stance of UNDP.

²⁹ For the ethical reasons the names, titles and positions of the interviewees, as well as the titles of the projects, were not disclosed (the non-disclosure provision was the basis on which the interviews were conducted).

IFC was selected because:

- being part of the World Bank Group, IFC's main focus is on financial assistance³⁰ rather than on technical assistance³¹ that makes it the unique research object from the point of view of how technical assistance type of projects are managed in 'non-technical assistance' type of environment
- as the agency, IFC is less researched compared to other agencies that might provide an exposure on some unexpected findings
- IFC follows programming guidance that is not publicly available and for that reason it seemed worthwhile to have a look 'behind the curtain' which could provide an exposure on new practice and experience.

The choice of **Canadian International Development Agency (CIDA)** would have been a natural one for the research conducted within the Canadian university. Nevertheless, CIDA was not selected considering its pioneering experience in RBM, availability of some solid studies already conducted on the use of RBM within CIDA (CIDA, 2000; CIDA, 2009a; CIDA, 2009b; Schacter, 1999) and availability of the secondary research (Schachter, 1999) specifically describing the results of the interviews conducted on the use of RBM in CIDA. Those already preexisting research findings have been actively used for the purposes of this research and referred to in the literature review section.

3.1.2 Interview Process

The **semi-structured interviews** conducted were aimed at understanding how development agencies practically manage their projects to achieve results and what kind of problems, difficulties and challenges they face with regard to designing project results. The implied objective was to determine the extent to which the results management is an 'art', based on creativity, intuition, and perceptions of the project managers, and to which extent it is the result of following and relying on corporate guidance and strategy. All the interviews were recorded.

³⁰ Loans aimed at private sector development.

³¹ The difference between 'financial assistance' and 'technical assistance' (or 'technical cooperation') is explained in **section 2.1**.

Five agency representatives (interviewees) were interviewed from UNDP and IFC. All were the international staff of mixed nationalities. The interviews were conducted by means of telephone and e-mail in English. All had English as their mother tongue or were fluent in English. This reduces the risk of misunderstanding due to the language barrier. The interviews lasted from one hour to one hour and a half.

The **candidates** for the interviews were **selected** based on the criteria of being the subject matter experts in:

- development aid methodology and practice
- project management, including the 'field' experience, managing international development projects
- Results-Based Management application methodology, monitoring, evaluation and measurement of and reporting on the **output-outcome-impact** relationship
- project design.

To comply with the principle of '**triangulation**' five experts/development aid practitioners were chosen for the interviews. Triangulation was used to avoid the situation in which two opposing opinions might not lead to any conclusion. Thus, the number of five experts, being the odd number, complies with the triangulation principle.

Considering the qualitative nature of this preliminary part of the research, the **small pool** of interviewees (five) was selected.

The potential interviewees were preselected from the development agencies through the internet. Then, initial contacts were established through e-mail and/or telephone. The author's ex-colleagues were also contacted to get their informal guidance and friendly advice on targeting the right candidates.

The interviewees were briefed on the overall goal and specific objectives of the research and on the impact they personally can make on the research outcomes by agreeing to participate in the interview process. It was explained to them that they were volunteering to participate in the research on free-will basis and were not be

obliged to do so either morally or for any other reasons. Their anonymity and confidentiality of their responses were duly preserved. The consent form, approved by the UQO Ethics Committee, was provided to them as a proof of their **free-will participation** and possibility to withdraw from the interview process at any time. The potential interviews were given sufficient time (2 – 4 weeks) to make up their mind with regard to their participation.

Once the positive responses from the potential interviewees were obtained, they were asked to sign the consent forms and return them to the interviewer (the author). Then the interview format and technical details were negotiated. As it was agreed, the interviews were conducted through telephone aided by e-mail communication since the interviews were located in different parts of the world.

As it was explained above, the interviewees were **recruited** over the telephone and/or through e-mail by the interviewer (the author), located in Gatineau (Québec). There was no need for further recruitment.

To help the potential interviewees to arrive at clear and unbiased decision with regard to their participation in the research, they were provided with the **consent forms** (see **Annex 1**) that they signed and returned to the interviewer. The consent form was to indicate that:

- the interviews are to be recorded
- the data is be deleted if the potential respondents decide to withdraw
- the data is be deleted if a respondent decides to terminate the interview
- the data is be stored safely and destroyed after five years and not be used for any other purposes without the respondents' consent.
- the data can only be used for purposes specified in the consent form and cannot be used for any other purposes without the interviewee's formal consent.

The possible **professional risks** were unavailability of the respondents for the interview (business trip, project site visit, advisory mission etc). In such case the

telephone interview could have been rescheduled and an e-mail interview could have been conducted as the last resort option.

The interviewees and their respective agencies were provided with the full access to the information collected resulting from this research. The research data collected were of **qualitative nature** (opinions, problems, challenges, and solutions) that did not make the data collected classified. The access to the research results and findings was also provided through publication(s) resulting from the research conducted.

The interviews were strictly **anonymous** and **confidential** (the respondents were assured not to be identifiable personally). All responses were kept strictly confidential. The data should have been deleted if the respondent decided to withdraw from the interview process.

The data was **stored** in the office at the *Université du Québec en Outaouais*. The data will be destroyed after five years and will not be used for other purposes without the respondents' formal consent.

3.1.3 Interview Guide

The **Interview Guide** has been prepared for the purposes of conducting the semi-structured interviews. This guide was designed to be conducted with the project management practitioners from the development aid agencies (i.e., programme officers, project managers, project advisers, consultants etc.) to investigate how the development aid projects/programmes are managed to ensure that development results are attained.

The interviewing framework was comprised of one **Central Research Question**, which was the objective of the research, and a series of the **Research Questions**³² that collectively provide an answer to the Central Research Question. Each of the Research Questions was supported with the **Interview Questions**, the ones that have been actually asked during the interview process. The interview questions carry the same substantive content as the Research Questions, but formulated differently

³² The Interview Questions were pretested with the smaller group of interviewees comprised of the UQO graduate administrative sciences students.

considering the audience addressed to and are sequenced in a way that helps to smooth out the interview process. Some of the interview questions have been formulated deliberately to overlap with others to double-check and clarify some of the points made.

The **Central Research Question** was: ‘Are projects managed in a way that the intended results are reached?’

The interviews aimed at getting responses to **six research questions** for each of which the specific **Interview Questions (IQs)** have been posed.

Research Question 1:

Is there in place any **corporate system** of results management?

IQ 1: Within your organization, do you follow any corporate guidance (manuals/guides) that stresses the need for and the way of management for results?

IQ 2: If yes, could you please be more specific and provide the reference to the document(s)?

Research Question 2:

Are **definitions** and **coverage of results** consistent across the agencies and the project management phases?

IQ 1: How would you define results?

IQ 2: How would your organization define results?

IQ 3: What are the boundaries of what can be categorized as the ‘result’?

IQ 4: How would you structure results with regard to time span?

IQ 5: Do you normally observe the same number of result indicators throughout project management phases (i.e., project design, planning, execution, and close-out)?

Research Question 3:

What is the **system of results** from the point of view of development practitioners?

IQ 1: How would you relate results to the project overall/development/strategic goal?

IQ 2: How would you relate results to the project immediate objectives?

IQ 3: Would you agree that results form a system? If so, what are the main elements of it?

IQ 4: How would you structure the results as to the time span? Are there short-, mid-, and long-term results? What are they?

IQ 5: Is there a difference between the 'system of results' and the 'results chain'?

IQ 6: Would you prioritize different types of results depending on the focus of managerial attention and efforts?

Research Question 4:

What are the definitions of and the difference between **different types of results** (i.e., outputs, outcomes, and impact)?

IQ 1: Would you categorize the result of 'Conducting a Conference' as an 'Output' or 'Activity'?

IQ 2: Is the above answer based on your intuition or on the corporate guide? If on the guide(s), please refer to one (some).

IQ 3: Would you categorize 'increase of knowledge' or 'awareness raised' type of result as an output or outcome? Please explain, why.

Research Question 5:

Are there any antagonisms between **demonstrating** and **managing results**?

IQ 1: In your opinion, is there difference between demonstrating and managing results?

IQ 2: In your practical work, do you strive for demonstrating or/and managing for results?

IQ 3: In your practical work, would you prioritize demonstrating results over managing results or *vice versa*?

Research Question 6:

To what extent can different types of the results be **controlled or managed**?

IQ 1: Would you say that within the projects you manage you control or have direct influence over:

- Outputs?
- Outcomes?
- Impact?

IQ 2: Which level of results do you primarily target within a project intervention: outputs, outcomes, impact? In other words, would you prioritize the importance of different levels of results depending on the focus of managerial attention and efforts?

3.2 Interview Data Collected

The data collected through responses can be grouped into the below sections.

3.2.1 Corporate Systems of Results Management

With regard to the **first research question** on presence within an organization a corporate system of results management, the answer in all the cases was positive. All the organizations have certain management systems in place that lead to results, though ‘the clear method for doing so is not necessarily applied across the board in a uniform manner’, according to one of the respondents. This statement confirms the above documentary review finding about the RBM methodology **lacking uniformity** across the development aid agencies.

3.2.2 Coverage of Results Across Agencies and Project Management Phases

The **second research question** was related to the **definitions and coverage of results** used by the agencies. Comparing all the answers obtained, it was possible to reach a conclusion about the variance of opinions on what the results are that depends not only on the development agency, but also on the personality. Though, as the literature review section demonstrated, despite the presence of corporate definitions of results, the definitions of results are inconsistent with each other. Not surprisingly that representatives of the development agencies interviewed have their personal, rather than corporate position on that matter. The typical position was as such: ‘I am not

certain a common definition of results exists as such... Because much of what is Advisory Services is driven by the needs and their views of results, the definition at this organisation gets defused to some extent’.

The coverage of results is inconsistent not only across agencies, but also across the project management phases. Practically all the respondents agreed that the number of result indicators throughout project management phases (i.e., project design, planning, execution, and close-out) is different. Typically when the project is at the design phase, the logframe contains very limited number of results and indicators which (both the number of results and indicators) grow in number as the project implementation progresses to the planning and then to the execution phase. That has been confirmed by most respondents.

The very fact that the results and indicators grow in number as the project implementation progresses cannot by itself be considered as a weakness. But what most of the respondents confirmed was that the limited number of results and indicators at project design phase usually indicate that the project is started with the tentative idea about what to be done and this idea shapes up into the plan and activities as the project implementation progresses. In other words, the discrepancy between the number of results and indicators at different project management phases typically points out to a superficial design, poor knowledge of the project context that results in inability to produce some, even tentative, estimates of costs and benefits of the results expected. And less rarely it is the reflection of changing development context and the consequent need to change the project content, activities, expected results and budget.

3.2.3 System of Results

With regard to the **third research question** on the types of results and their structure in terms of time span, there was a consensus among the respondents.

There are three types of results all of which are ‘what comes at the end of an entire cycle of activity, output, outcome and impact’. Considering the time span, ‘results should be split into interim and long-term categories’. ‘The ‘interim’ category should reflect results at the end of each of the phrases of the cycle. One can have: activity

results, output results, outcome results and impact results. These are the points that get reported on and what can be referred to in describing the subject matter'. 'The category of 'long-term' (or possibly 'final') are what can be used to describe the results of the entire process'.

As it seems, there is some element of confusion in hidden assumption that certain types of results (like impact) can belong to both the 'interim' and 'long-term' categories. It is an interesting observation that indicates that sometimes the boundaries between the mid- and long-term are blurred.

Nevertheless, the more important issue is the issue of boundaries between the type of results related to and reflecting the project's specific and overall objectives³³. As it seems from the responses obtained, such boundaries are not clearly established in practice. Though, one of the respondents linked in a very interesting way the project's strategic goal with results by drawing on the analogy between a theory and practice: 'Results are the evidence that support the initial theory. In the end the result is what should guide the strategy of the next project or the correction of the existing one'. In other words, the respondent made the point that ultimate results matter the most and, hence, should be managed accordingly.

There is also an interesting idea expressed by one of the respondents about the feedback role played by the project interventions: 'If the project immediate objective is informed by a previous result, then there is a direct link. But for the management this is experience versus new ground'. From that the respondent arrived at more general conclusion:

1. the results are 'the criterion of virtue' and verify (or not) what the project is up to, and
2. the results guide the future strategy or correct the existing course of actions.
3. the results feed back the project management process of the future projects through 'lessons learned' of the previous projects.

³³ To avoid the terminological confusion we will use the term 'goal' to refer to the long-term overall (strategic) objective/goal and the term 'objective' to refer to the specific objectives to be attained by a project in a course of project implementation.

Therefore, as it was confirmed by the literature review, the distinction between outputs and outcome is often blurred. That confirms that, in the strict terms, results across agencies are not comparable.

3.2.4 Types of Results

The **forth research question** touched upon the issues of the definitions of, the difference between and the measurement of **outputs, outcomes and impact**.

According to **IFC**, for example, one of the distinctions between outputs, outcomes and impact is in what is within and what is outside the project **control**.

Outputs, according to the interviews with IFC, should be:

1. considered to be fully within the project control and
2. for that reason finalized (produced) no later than a time of project coming to an end
3. determinable right after the project activities are complete.

In this sense the IFC's approach to defining outputs coincides with the above mentioned the **UNDP's definition** of outputs as 'Direct result of completing activities'. The **CIDA's definition** of outputs as 'Cumulative short-term development result to which completed activities contribute' conforms to the IFC's idea of an output being fully within a project's control.

Outcomes, according to the interviews with IFC, are:

1. very often the '**behavioural**' **changes** (based on, for example, the survey results conducted after the project activities are finalized)
2. the development results **50 percent** of which are **controlled** by the project
3. normally determinable no earlier than **half-way through** the project implementation.

Therefore, the IFC practice of treatment of **outcome** is closer to the CIDA definition of outcome as 'cumulative mid-term development result to which outputs contribute'.

Highlighting the importance of the link between the outputs and outcomes, one of the respondents mentioned: ‘Assuming that the output is done properly, ... then the outcome can be predicted to some extent, though not with total certainty’.

Impact, according to the interviews with IFC, is the long-term development result:

1. over which a project has **very little control** (5-10 percent on average)
2. that **emerges** on average **in two-three year** time period after a project is complete
3. that is normally the cumulative **end-result of multiple project/programme intervention**, including both the donor and the recipient side efforts, to which any project adds only incremental value
4. that **is linked to** the project **strategic/development goal**.

With regard to **impact** one of the respondents mentioned: ‘I would say that the project has a very low level of management control over impact. This is a combination of many factors that have to come together to determine a course of action a societal change and often may come only after the project is long gone. Moreover, the memory of the project as being the catalyst for the impact, or event the outcome, may have been long forgotten ... Thus, the convergence of all of the ‘outputs’ whether solely the project’s or those of other participants ... , is what will lead to ‘impact’. And on the contrary, there are projects ‘that generate outputs, but the outcomes, for a variety of reasons (poor delivery, quality, quantity...) do not ignite a wide appeal and therefore do not evolve into ‘outcome’ ideas or themes that go one to have ‘impact’.

3.2.5 Demonstrating vs. Managing Results

The respondents, at first thought, did not see any antagonism between demonstrating and managing for results. And there should not necessarily be such an antagonism because results can be demonstrated by managing for them, rather than demonstrating them with little or no management. That is why the respondents had to be briefed on the findings of the literature review section in which two paradigms, demonstrating results and managing for results were introduced. Once the respondents became aware of the concepts of demonstrating results and managing for results, they acknowledged that the ‘antagonism’ does exist and it is often a typical practice to sacrifice the ‘management’ part and focus mostly on the ‘demonstration’ (i.e., reporting) part. As it

was mentioned in this regard in the literature review section, ‘results systems have been designed mainly to meet the demand for data for reporting to the Executive Board rather than to manage outcomes’ (UNDP, 2007a, p. XII).

3.2.6 Extent of Control Over Results

The interviewees confirmed that outputs and outcomes are the types of results that can be controlled. All the interviewees, directly or indirectly, made a point that the **outcome management** needs to become the focus of international development project management. Some interviewees said that the ‘challenge for international development project management today is to look beyond the output management scope into the outcome management’.

The production of outputs *per se* cannot make the project successful. At the same time, failure of the project to reach an impact cannot be qualified as the project’s failure since the project, at most, can make a contribution to impact. Outcomes can and should be attained due to project intervention and, therefore, outcome management should be gaining momentum supported by a consequent shift of project management responsibilities from output to outcome management.

Though different project might be ‘impact-’, ‘outcome-’, or ‘output-focused’, most of the international development projects target outcomes. It is rarely when the project inputs are processed for the sake of outputs without aiming at outcomes and/or impact. From this point of view ‘the international development project management is becoming outcome management-focused’, according to one of the interviewees.

3.2.7 Project Results Designed vs. Project Results Reported: The Case of Real-Life Project

The case of one project, as the complement to the interview, was provided by one respondent to illustrate the issues touched upon in **sections 3.2.1 - 3.2.6**. One specific project³⁴ was referred to based on which the outputs and output indicators, outcomes

³⁴ The name of the project as well as the agency implementing the project cannot be disclosed due to the non-disclosure provision.

and outcome indicators, impact and impact indicators at the project design and project execution (reporting) phases were compared³⁵ (**table 3**).

As point of reference, it needs be explained that the project referred to in **table 3** is the one that has been already successfully implemented in other countries and the new project is the replication of its ‘predecessors’ in the new context. Therefore, the project design of this project was done with a great deal of knowledge of activities and the expected results. From this point view this might be an atypical case, i.e., better designed project compared to the typical real-life case.

Table 3. Project Design vs. Project Execution (Reporting): Outputs and Output Indicators, Outcomes and Outcome Indicators, Impact and Impact Indicators

(project objective 1 considered only)

- Project Goal:** To promote the **development of the private sector**.
- Objective 1:** Raising the level of local management **skills**; improving **access to financing**.
- Activities:** Direct **assistance to companies** through training and consulting in areas of corporate governance, financial management, asset management and investment/financing strategies.

Outputs (project design)	Output indicators (project design)	Output indicators (reporting)
<ul style="list-style-type: none"> • Increased understanding and knowledge of corporate governance, financial and asset management and investment/ financing strategies on the part of local firms and educational institutions • Improved basic skills in corporate governance, financial and asset management on the part of local firms and educational institutions 	<ul style="list-style-type: none"> • Number of seminars/workshops on CG, FM, AM and Inv./Fin. Strategies conducted • Number of participants attending seminars/workshops on CG, FM, AM³⁶ and Investment/Financial Strategies • Level of satisfaction at and relevance of seminars/workshops • Number of companies/company managers receiving consultations on CG, FM, AM and Inv./Fin. Strategies • Level of demand for and satisfaction with consultations; • Number of publications issued, telecasts and radio broadcasts aired and newspaper/ magazine articles published 	<ul style="list-style-type: none"> • Number of seminars conducted • Number of participants attending seminars • % of participants satisfied • Number of consultations provided (for non-pilots) • Number of assisted companies (non-pilots) • Number of new assisted companies (non-pilots) • Number of selected pilot enterprises; • Number of workshops delivered for pilot enterprises • Number of consultations provided for pilot enterprises

³⁵ Only one out of four project objectives was chosen to be analyzed.

³⁶ CG – corporate governance; FM – financial management; AM – asset management

Outcomes (project design)	Outcome indicators (project design)	Outcome indicators (reporting)
<ul style="list-style-type: none"> • Companies adopt model documents thereby improving internal rules of operation and shareholder protections to ensure long-term commitment to good corporate culture • Companies develop sustainable practices regarding corporate governance, financial and asset management 	<ul style="list-style-type: none"> • Number of corporate documents drafted and adopted by companies • Number of companies that improved corporate practices • Level of satisfaction of companies with new internal documents and practices 	<ul style="list-style-type: none"> • Number of corporate documents prepared/amended for companies • Number of corporate documents adopted by companies • Number of pilots with improved corporate governance practices, financial and asset management • Percentage of participants satisfied with workshop / seminars

Impact (project design)	Impact indicators (project design)	Impact indicators (reporting)
<ul style="list-style-type: none"> • Companies operate more effectively and are able to attract needed financing or investment • The next generation of business graduates is better equipped to integrate their business into the global economy 	<ul style="list-style-type: none"> • Improved financial performance by companies • Number of companies attracting investment or financing 	<ul style="list-style-type: none"> • Number of pilots with improved Return on Assets ratio • Number of pilots with improved Return on Investment ratio • Number of pilots with improved dividend payout ratio • Number of pilots attracting investment or financing • Amount of investment attracted by companies • Number of pilots created new businesses

Nevertheless, **tables 3 and 4** by providing comparisons of project results at the design and execution phases, can reach some observations.

Table 4. Output, Outcome and Impact Indicators: Project Design vs. Reporting

(four project objectives considered)

	Project Design	Project Reporting
Number of Output Indicators	6	27
Number of Outcome Indicators	6	12
Number of Impact Indicators	4	8

1. **Identification of outputs** at the project design phase is inconsistent with identification of outputs at the reporting phase. The outputs at the project design phase are identified in terms of outcomes, rather than outputs (increased understanding and knowledge, improved skills). That has been done intentionally since the project was funded by CIDA and the CIDA definition of outputs as 'the short-term effects of completed activities' (CIDA, 2000, p. 13) was applied. In this case such an approach to identifying output is

unproductive because: (1) it blurs the boundaries between outputs and outcomes; (2) it makes difficult reporting on the direct progress on outputs as intangible categories of ‘understanding’, ‘skills’, ‘knowledge’. That is why the project was reporting on outputs as tangible products, such as seminars and consultations, resorting to ‘product-type’ treatment of outputs as ‘specific products and services which emerge from processing inputs through activities’ (UNDP, 2000a, p. 2) or ‘product, result or service generated by process’ (PMBOK, 2008, p. 431). Even the designers of this project demonstrated that they had some physical content in mind behind outputs by resorting to physical measures of output indicators (number of seminars, number of participants, number of companies).

2. The **difference between outcomes** (e.g., ‘improving rules’, ‘developing sustainable practices’) **and impact** (e.g., ability to attract funding and be better integrated into the global economy) is subtle and hardly distinct since both outcomes and impact reflect project outcome (i.e., access to funding) rather than project impact (i.e., private sector development, which is the upper level of aggregation).
3. Some of the **impact indicators** reported on (amount of investment attracted by companies; number of newly created businesses) reflect the extent to which the project contributes to **private sector development** and, therefore, are good examples of the project’s impact.
4. The number of output, outcome and impact indicators on average tends to grow (2 - 4 times) as the project implementation progresses (**table 4**), something that has been pointed out to before by the interviewees. In case with this project this is the reflection of growing understanding of what the output, outcome and impact indicators are, rather than changing project content.
5. The estimates of **costs** and **benefits** of results were not performed. There was no real need to perform those since the expected benefits were well known. But the more interesting issue is that based on how the outputs, outcomes and impact were formulated at the design phase it would have been difficult to arrive at those since they were formulated in difficult to measure terms. Alternatively, had the outcome and impact indicators been formulated in terms of project objective 1 (as the number of new businesses and new jobs created),

that would have provided the direct link to outcome and impact benefit measurement.

6. The **options analysis** has not been performed. In this case it would have been redundant since the project is the replication of the other projects and there was no real need to perform one.

3.3 Results Culture: UNDP Program Staff Survey

The conducted primary data interviews described in the previous section been complimented by the author with already available results of the survey available from the *Evaluation of Results-Based Management at UNDP* report (UNDP, 2007a, pp. 109-110). The questionnaire and the percentage of respondents agreeing and disagreeing are presented in **box 22**. The total of 365 respondents were interviewed, out of whom 52 were UN Resident Coordinators/UNDP Resident Representatives (RCs/RRs) and UNDP Deputy Resident Representatives (DRRs), and 313 were other program staff.

The **research question** that the Survey tried to give the answer to can be formulated as: ‘In your opinion, does the results culture exist within your agency?’

Some of the questions thematically overlapped with the primary source interview questions. For that reason the survey results complemented the findings of the primary data interviews. Though, as it seems, there might be a problem with the interpretation of the responses because it might be the case that the interviewees provided their opinions on how things ought to be done, rather than how things are actually done. Nevertheless, even if it is the case, the opinions would add value since they reflect what UNDP as the agency is striving for at the downstream level.

Box 22. Summary of results from the UNDP staff survey on RBM

Percentage of respondents (A)greeing or (D)isagreeing	n= A/D	365 All	52 RC/RR/ DRR	313 Others
Culture and leadership				
3 UNDP encourages risk taking and mistakes in the pursuit of results	A D	35 65	52 48	32 68
4 In UNDP it is more important to achieve results, than to follow process and deliver outputs	D	66	64	66
5 In my country office an adequate budget is made available for operating the results-based management system	A D	46 54	56 44	44 56
Programme focus				
6 The main value of the service lines is in allowing us to focus our programme by saying no to partners in non-strategic areas	A	53	58	52
7 UNDP outcomes in my country are developed through a process that brings ownership by all stakeholders (government, other UN organizations, development partners, civil society)	A	76	87	74
8 It is normal in our country office that policy and planning decisions are informed by empirical evidence on past performance.	A	66	77	64
9 The organization in my office is structured to deliver the CPAP outcomes	A	72	79	71
10 I can confidently explain to my colleagues and development partners the difference between an output and an outcome	A	93	96	93
11 I can explain clearly how outputs contribute to programme outcomes	A	94	100	93
12 The focus of management in my country is the achievement of outcomes rather than implementation of individual projects	A	56	69	54
Monitoring and reporting				
13 The ROAR is an effective outcome monitoring tool	A D	59 41	41 59	62 38
14 The country office Balanced Scorecard is more important than the ROAR in managing for results at country programme level	D	62	73	60

Percentage of respondents (A)greeing or (D)isagreeing	n= A/D	365 All	52 RC/RR/ DRR	313 Others
15 Monitoring and reporting are well harmonized with other development partners and make use of country reporting systems	D	67	94	63
Adjustment and learning				
16 Stakeholders and managers collectively analyze performance and decide on action	A	61	65	60
17 Development managers have the latitude, flexibility and authority to arrange resources (financial and personnel) as required to achieve the desired outcomes	A	57	73	54
18 There is a clear link between allocation of the Biennial Support Budget and four yearly Programme Allocation, and evidence of results in our country programme	D	61	69	60
19 Because most of our funds are raised through cost sharing or from donors, we have little scope in allocating resources across our programme or within outcome areas according to results.	A	56	55	56
20 Whether positive or negative, performance information is used to foster learning	A	72	82	70
21 There is effective follow-up and actions on management response to evaluations	A	61	73	59
Evaluation and accountability				
22 Roles and responsibilities at all levels in my country office are clearly set out and known to staff	A	61	83	57
23 Under the RCA, the key factor in UNDP enhancing promotion and advancement prospects is demonstrating a proven ability to raise resources and in delivery	A D	49 51	37 63	51 49
24 The RC/RR/CD is accountable for achievement of country programme outcomes	A	79	74	80
25 The RC/RR/CD can only be held accountable for delivery of UNDP outputs	D	61	45	64
26 In my office, country programme staff are under more pressure to raise resources and ensure timely delivery than on enhancing the contribution by UNDP to achievement of the outcomes	A	64	53	66
Support systems				
27 I can easily find guidelines and support from the RSCs and headquarters to help design objectives and indicators for projects and programmes	A D	55 45	35 65	58 42
28 The training I have received has equipped me with the ability to plan and manage for outcomes	A	60	67	59
29 In our country office adequate time and structured occasions are made available to learn from results and evaluations.	D	58	39	61
30 UNDP's rewards systems provide real incentives for strengthening a results culture within the organization	D	76	81	75

Source: UNDP, 2007a, pp. 108-109.

Acronyms: RC = UN Resident Coordinator

RR = UNDP Resident Representative

DRR = UNDP Deputy Resident Representative

Box 23, which is the summary of **box 22**, presents the survey results as to percentage of respondents believing that the pro-results culture exists within UNDP vs. percentage of respondents believing the opposite.

Box 23. Summary of results from the UNDP staff survey on RBM
(percentage, by program thematic areas)

	Respondents believe that UNDP has pro-results culture	Respondents believe that UNDP does not have pro-results culture
Culture and Leadership	0%	100%
Programme Focus	86%	14%
Monitoring and Reporting	67%	33%
Adjustment and Learning	50%	50%
Evaluation and Accountability	75%	25%
Support Systems	67%	33%

Based on: UNDP, 2007a, pp. 108-109.

The following **conclusions** can be reached based on the UNDP survey results (i.e., information presented in **boxes 22** and **23**).

1. In general, there is a strong belief within UNDP that the results-based managerial environment exists within UNDP.
2. As to specific areas of management, this is not true for the area of 'Culture and Leadership'. There is an overwhelming belief that results-based management is not present in that management domain. For example, the program staff believe that 'Following the procedures and delivering outputs, in the opinion of the majority of the program staff, is more important, than achievement of outcomes' (questions 4). This is the conclusion based on the fact that 66% of respondents believe that doing 'things right' is more important than doing 'right things' even though the intended results are not achieved. It is a reflection of the positivistic belief that following the right project/program management procedures yields the intended results. As to the senior program staff, RCs/RRs and DRRs, they were marginally (64% of respondents or 2 percentage point margin) less prone to thinking that way. This is the reflection of the internal organizational culture that is not conducive to achievement of final results (i.e., outcomes), the point already made in the literature review and in the primary source interview sections.

3. As to the 'Adjustment and Learning' area, the opinions were divided equally in favour and against the existence of results-based management within UNDP.
4. As to the Programming and Monitoring and Reporting areas, there is an overwhelming belief that the results-based management is present there, that UNDP is able to focus on the strategic programming areas and to reject the stakeholders' requests to support the areas of non-strategic importance. The program staff have a solid command of knowledge of the 'results chain' and believe in priority of outcomes over project outputs.
5. The program staff believe that the RCs/RRs should be personally accountable for achievement of not only outputs, but also outcomes. This point was referred to in the literature review (sections of RBB, performance management and performance measurement). This is a very pro-results management stance.
6. The issue that greatly distracts attention of program staff from the focus on results (especially outcomes) is the pressure of fund-raising and insuring timely delivery (UNDP, 2007a, p. 110, question 26).

3.4 Interviews and Survey: Conclusions and Findings

The results of the interviews conducted and survey data confirmed some of the literature review findings and also provided with some new insights into the practical application of RBM.

1. The answer to the interview central research question on management of projects in a way that ensures intended results was not in all cases positive.
2. There is a growing understanding within the agencies that the challenge for international development project management today is to look beyond the output management scope and that **outcome management** should become the central focus of development efforts to ensure that individual projects' outputs contribute to the bigger goal such as outcome. Therefore, **outcome management** is to become the focus of RBM.
3. The interviews conducted confirmed the same conclusion reached at in the literature review as to the **distinction between outputs and outcome** which is often blurred and which makes the results of different agencies and projects not fully comparable.

4. The very fact that the number of results and **indicators grow in number** as the project implementation progresses in most cases points out to a superficial design, poor knowledge of the project context that results in inability to produce some, even tentative, estimates of costs and benefits of results expected and less rarely it is the reflection of changing development context and the consequent need to change the project content, activities, results and budget.
5. The scope of results and the list of their measurable indicators identified at the design phase are not comparable with the scope of results and their indicators at the execution phase.
6. The higher the level of result is, the less rigorous its design generally is.
7. As the project implementation progresses, the results are generally looked at with more rigour.
8. **Costs and benefits** of results are not generally estimated.
9. Based on the UNDP survey it can be concluded that the **results culture** is present within the agencies. Though, in some areas of management its presence is stronger (program area) and in others (culture and leadership, monitoring and reporting, learning) it is weaker.

4. Theoretical Framework

4.1 Theoretical Concepts and Theories Drawn Upon

Since this research is focused both on project design (as part of RBM) and international development (international development is part of development studies and development administration), the theoretical framework for the study was based on theories and concepts from which both project design and international development originate.

Schematically, the theoretical constructs and concepts from which both project design and international development originate and their influence on this study is depicted in **figure 3**. As can be seen, RBM and RBB have two major influences coming from the **performance management** and the **development studies** sides³⁷ each of which have their own influences.

4.2 Performance Management Concepts

Performance management³⁸ originated from or were heavily influenced by the following theoretical constructs and concepts³⁹:

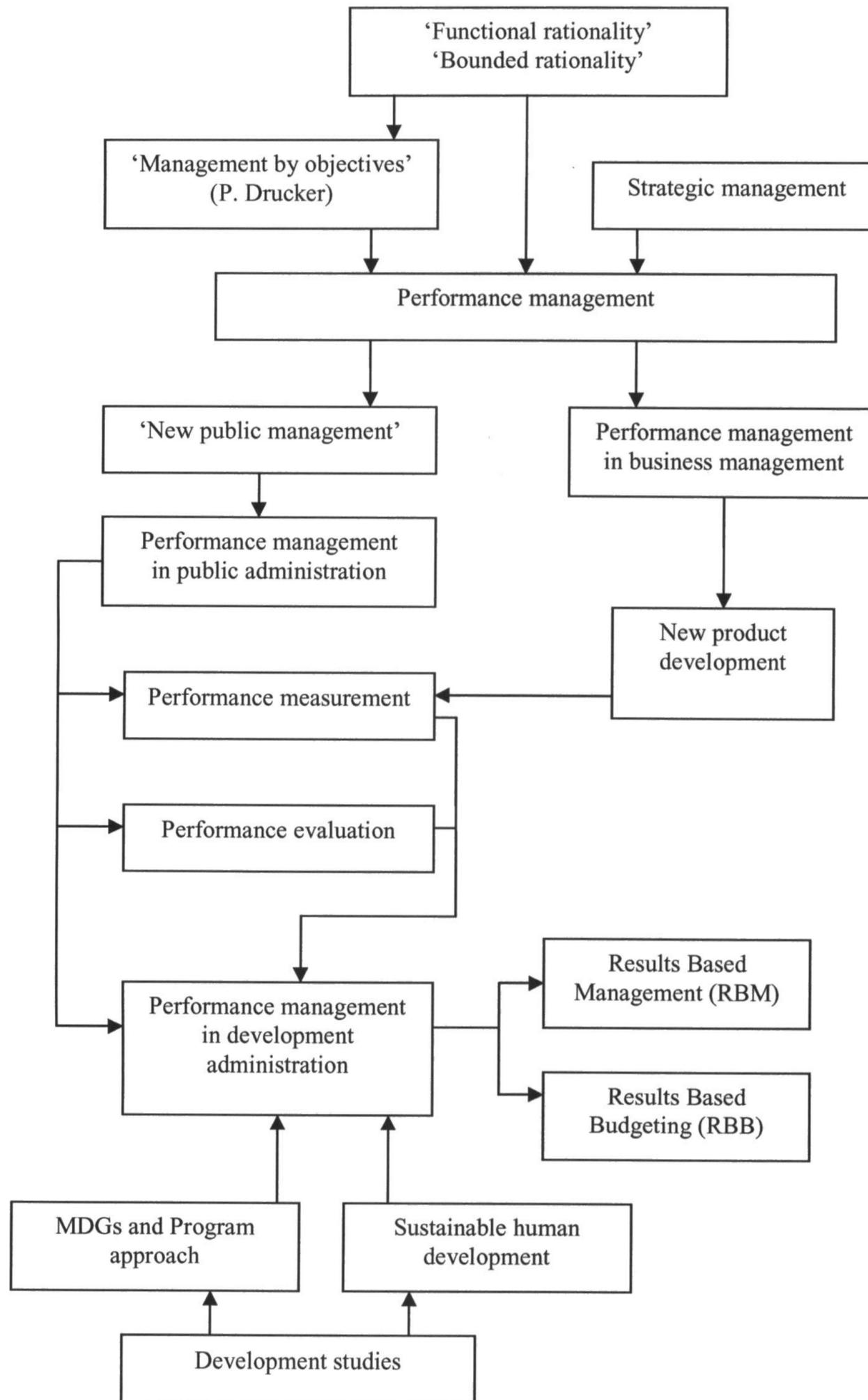
- management-by-objectives (Peter Drucker, 1993)
- concept of 'functional rationality' (Max Weber and Karl Mannheim)
- concept of 'bounded rationality' (Herbert Simon)
- new public management
- strategic management.

³⁷ Their positioning on the figure of various blocks (above and below the performance management block) has no 'hierarchical' meaning and is done for presentation purposes only.

³⁸ Performance management can be also referred to as Management-by-Results, Management-for-Results, Management of Results, Objective-Oriented Management, Project Cycle Management.

³⁹ That does not exclude the influence of other theories and concepts not mentioned here.

Figure 3. Theoretical Influences on RBM and RBB



4.2.1 Management by Objectives

Management by objectives concept introduced by Peter Drucker in 1954 in his book 'The practice of Management' (Drucker, 1993) can be considered as a precursor of performance management. By focusing the work of managers on the main purpose or

objective, the management by objectives concept ask for consolidation of efforts of the whole company, from top to bottom managerial levels, and streamlines them at achieving strategic results. For that managers implement performance management systems and tools to help them to keep the company on the 'strategic results' course. Over the years, RBM and RBB became such performance management systems.

All performance management systems by 'striving for maximum functional rationality' and greater 'efficiency', despite sacrificing creativity and initiative, are designed to reach intended results, like it is the case with RBM. 'Logframe' is one of the RBM tools which 'disaggregates' and 'translates' strategic goal into specific project objectives and then activities thus creating hierarchal relationship between activities and inputs and intended results. By designing results in such way the performance system does not have in mind and does not count on the individual initiative and talents as the driving force behind reaching the objectives (though des not exclude them). By using the performance management tools project designers believe that the objectives will be reached and results will be attained if each individual worker assigned to specific task duly performs. Therefore, the Weberian concept of functional rationality is in the core of performance management.

4.2.3 Bounded Rationality

The **bounded rationality** concept states that most people are only partly rational and tend to 'settle for satisfying solutions' because 'information gathering is costly, and gathering full information would be prohibitively costly' since 'our mental capacity to process information is limited' (Langley et. al., 1995). Any performance management system assumes that information collected to design the project and to produce the logframe is not complete (i.e., not ideal) and is only 'to the best of our knowledge' on the issue. Therefore, performance management might not necessarily settle for the best solutions, but for those that are to be realistically achievable given the time and budget constraints.

4.2.4 New Public Management

New public management (NPM) is the concept used in public administration by governments since the 1980s in an attempt to make public sector more efficient, i.e., more focused on results. NPM is a broad term that describes the series of public

administration reforms started in the 1980s. Behind this general concept there are more specific ones that all reflect orientation towards results in public sector (see **section 2.2** for more details). The main thrust of the NPM reforms was on bringing the results-focused management from private into the public sector and make it more efficient and more adaptable to changing context so that public agencies could be ‘judged on the results that they generate’ (Miller and Dunn, 2009, p. 4). That gave birth to new performance management concepts and tools in public administration, including RBM, RBB, logframe. Those later made a leap from public administration to development administration and became the main tools of international development project management (IDPM).

Therefore, NPM should be viewed as the guiding philosophy and the closest predecessor of performance management, RBM and logframe in IDPM.

4.2.5 Strategic Management

Strategic management is concerned with **linking strategic objectives with environment** of an organization, so that the seamless interface with environment is achieved as much as possible. Therefore, strategic management can be considered to be the backbone of project design since it aligns projects with their environments and stakeholders, thus setting preconditions for future success and smooth implementation.

4.3 Development Studies

Development studies (and **development administration**) represent another major influence on RBM. Namely, the Sustainable Human Development (SHD) concept (see **section 2.1** for more details), Millennium Development Goals (MDGs) and Program Approach had direct influence on RBM as the performance management tools used in IDPM.

Development studies belong to social sciences domain at the same time being closely linked to **natural sciences** domain because ‘development studies is centrally concerned with the poor, the overwhelming number of whom reside in rural areas, work in agriculture, and rely on an interaction with natural resources, clearly natural

science is also of importance' (Sumner and Tribe, 2004, p. 3). Taking an even wider perspective other technical areas are also of relevance, such as the **engineering logistics** of service delivery and its distributional impacts (such as engineering for water, sanitation and electricity provision) (Sumner and Tribe, 2004, p. 3). Development studies have also strong links with **economics**, namely, the economics of development since the main leverage of getting people out of poverty is through economic development, in which private sector development plays the crucial role. As it was pointed out in **section 2.1.3**, economics of development by addressing the root causes of poverty offers the economic platform for:

- shaping up and updating MDGs
- formulating long-term strategic cooperation framework for the agencies and the aid recipient countries
- formulating programs and
- guiding projects based on program approach and the SHD concept.

Sustainable Human Development (SHD) is defined by United Nations Development Programme (UNDP) as 'protection of the life opportunities of future generations [...] and [...] the natural systems on which all life depends' (UNDP, 2007b). This definition points out to two pillars of SHD: (1) improving the living conditions of people and is (2) sustaining livelihoods by 'keeping the share of future generations intact'. SHD is a multidimensional and comprehensive concept reflecting on living standard (measured by the GDP per capita level in the purchasing power parity terms), health dimension (measured by the life expectancy at birth), and educational level (measured by the adult literacy rate), gender empowerment, environment. Therefore, SHD can be considered to be the concept underpinning the development aid concept and RBM the most important 'vehicle' of its delivery.

Therefore, development studies, drawing on economics, natural sciences, engineering etc., represent those theoretical pillars which are of great use while designing project intervention based on the in-depth understanding of barriers to development and root causes of poverty.

5. Research Methodology

5.1 Research Purpose and Objectives

The **purpose** of the research is to identify possible solutions of methodological nature as to reorientation of the RBM system toward management of specific results (like ‘quasi-products’) in order:

- to better align the desired results with MDGs
- to foster the results culture
- to increase projects’ contribution to development effectiveness.

The **specific objectives** of the study are as follows.

1. To establish the **extent** to which RBM supports its intended *management-for-results* function and contributes to project’s effectiveness
2. To outline the **drawbacks** within the current RBM design component
3. To reveal the **challenges** and problems facing the RBM design component in order to gain a better understanding of the specific focus of the research through literature review, preliminary research interviews with development practitioners and secondary-source survey.
4. To introduce **modifications** to design component of RBM aimed at better alignment of results sought with their estimated costs and benefits.
5. To test and verify the **validity, applicability, and relevance** of the methodological modifications suggested by means of study the case of real-life development project.
6. To draw **lessons learned**.
7. To make suggestions for **further research**.

The study **focuses** specifically on the project design component of RBM because most of the challenges facing RBM can be addressed at the project design phase. The study did not focus on how the suggested approach could be used at the project execution phase for the evaluation purposes, for which further research is suggested.

5.2 Methodological Approach

Since the subject area of this work is **cross-disciplinary**⁴⁰, transcending the boundaries of traditional project management approach and crossing into the discipline of development studies, which, in its turn, crosses into many other disciplines (economics, public administration, natural sciences, engineering), the simple application of generic project management or development studies concepts to this study seems to be implausible. Only the synergetic approach and combination of cross-disciplinary concepts and methods could be used for such specific area of project management as international development project management.

The research method for this study was based on the combination of the following research approaches:

- exploratory research
- unobtrusive research
- content analysis.

5.2.1 Exploratory Nature of the Research

Since the subject of the research is of cross-disciplinary nature and relatively new, the exploratory study (Babbie, 2004, p. 87-88) has been undertaken with the objectives: (1) to test the feasibility of the initial model; and (2) to develop the generic approach that can be employed in the project design of international development project management. The first ‘reality check’ took place during the interview process with a help of some questions that served as ‘eye-openers’ in that regard. The interviews helped not only to clarify some concepts, but also to reveal what might work in practice and what kind of instruments and approaches would be beneficial for potential users.

5.2.2 The Unobtrusiveness of the Research

Some of the research methods used in the study were unobtrusive since they were ‘undertaken in society without affecting society’ (Babbie, 2004). The content analysis of secondary-source survey results is an example of unobtrusive research.

⁴⁰ The cross-disciplinary and cross-boundary nature of international development project management was pointed out to at the theoretical framework **section 4.3**.

5.2.3 Content Analysis in the Research

The content analysis was applied when analyzing data of the secondary-source survey conducted among the program staff of UNDP at the country office level on their perceptions of results culture within their organization.

5.3 Research Questions

The research was organized around the following research questions that guided the research process.

Research Question 1:

How well does the RBM as the managerial system support **management-for-results** as the overarching objective of international development project management?

Research Question 2:

Does RBM, and namely its project design component, require any major **modifications** to better serve the management-for-results function?

The answers to those questions present the major contribution of the study to the body of knowledge on international development project management as well as the link to the preceding and the future research in this domain.

5.4 Assumptions

The following **assumptions** have been made to conduct the study.

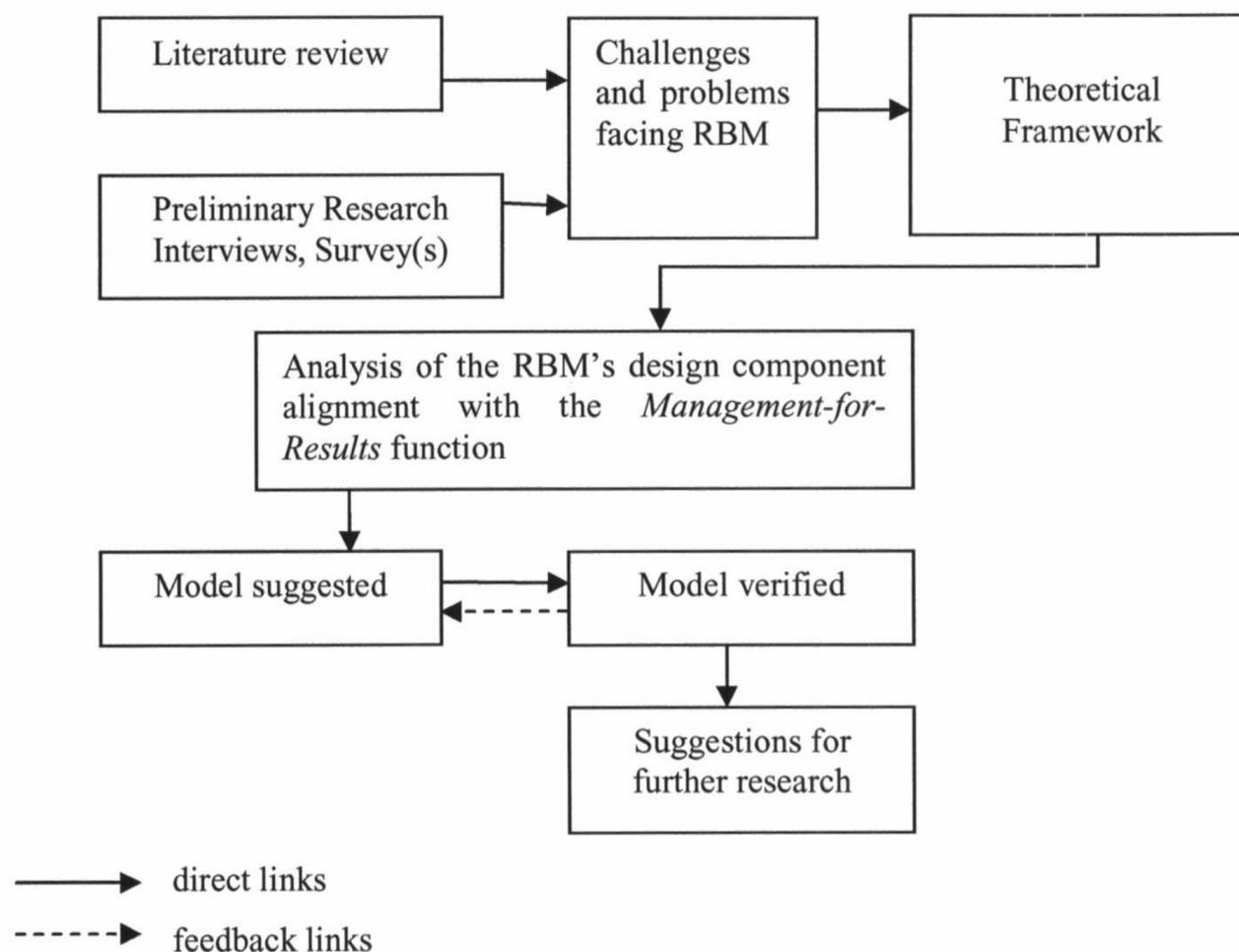
1. The development agencies do their best to adhere to their corporate performance management guidelines and programming manuals.
2. The 'results chain' (outputs-outcomes-impact) relationship does lend itself to bringing results of higher level over time.
3. The project environment is conducive to reaching results at all levels (i.e. with the results culture in place).

Given the above assumptions the conclusions and findings of the study can provide for better projects' design and contribute to effectiveness of development aid.

5.5 Logical Sequence of the Research

The logical sequence of the research phases is presented in figure 4.

Figure 4. The logical sequence of the research.



The starting points for the research were: literature review; the findings of the interviews conducted with development practitioners and the findings of the secondary-source survey conducted within UNDP. That revealed the major problems facing RBM (those, as the author concluded, were in project design) and allowed to construct the theoretical framework for the research which was based on the performance management and the development studies theoretical concepts. With a help of the theoretical framework the alignment of the RBM's design component with its management-for-results function was analyzed. To address the drawbacks of the RBM's project design component, the Management Per-Result Project Design Model was suggested. The next step was the model verification, which has been done based on the WHO real-life feasibility study (Hutton and Haller, 2004). The 'model verified' provided the feedback and an opportunity to revisit the 'model suggested' (that has been done iteratively in a course of the model verification process till the initial model fit the verified model).

5.6 Data Collection Strategy

The data collection strategy for the study reflects the sources of information and the subject selection for the study.

5.6.1 Sources of Information

The sources of information for the study were as follows.

1. Publications and documents on development assistance and its effectiveness, international development project management, project management.
2. Normative (prescriptive) documents (manuals and guides of CIDA, OECD, UNDP etc.) on the RBM use for the development assistance programming purposes.
3. The development aid experts and practitioners (interviews conducted).

5.6.2 Subjects for the Study

There were two types of **subjects** used for the study: (1) projects; (2) project management and development practitioners from selected development agencies.

The **choice of agencies** as well as the choice of **professionals** for the interviews and how they were **accessed** is discussed at length in the Preliminary Research Interview section (3.1).

In general, the **candidates** selected for the interviews were selected to be the subject matter experts in: (1) development aid methodology and its practical application; (2) project management, including the ‘field’ experience of managing international development projects in different regions of the world; (3) RBM application methodology, including monitoring of, evaluation of and reporting on the output-outcome-impact relationship. Five experts/development aid practitioners were chosen for the interviews to comply with the principle of ‘**triangulation**’ when two opinions, in case they are the opposite ones, do not lead to any conclusion. Considering the qualitative nature of research, the **small pool** of interviewees (five) was selected.

The choice of **project for the model verification** is discussed in the Results section (6.2).

The **ethical aspects of the research** are addressed in the Preliminary Research Interviews section (3.1).

5.7 Data Collection Methods

The following data-collection methods were used for this research: document studies; in-depth interviews.

(1) Document Studies. The method of document studies is chosen because it provides a wide range of **opinions** and in-depth **experience** on the RBM theory and its practical applications. Given that the document studies as a qualitative research method is available locally or through Internet, not time-consuming, unobtrusive, it was used as the main data collection channel complemented by the in-depth interview method. The in-depth interviews confirmed the preliminary conclusions arrived at as a result of the document study process.

(2) In-depth Interviews. The interview method is chosen for the sake of getting first-hand insights into the RBM's practice, the possibility of clarifying issues by posing various questions and minimizing the possibility of misinterpretation of some facts. All that made the investigation of the subject matter more effective. The insights could have been obtained through publications, but in general the interview method, providing for the greater confidentiality⁴¹, gave more insights into the situational analysis and practice. The two data collection methods complemented each other.

5.8 Validity of the Results

The purpose of this research was to suggest an approach as to better alignment of RBM with its management-for-results function. Given that the focus of the research was on the design component of RBM and not on the whole RBM as a system, it was implausible to strive for 'absolute validity' of the research by, for example, conducting *post-mortems* of two identical projects, one of which was designed and implemented with the use of the 'management-per-results' approach and the other one – without.

⁴¹ Confidentiality or responses was protected by the **Statement of Ethics**.

Therefore, it was only possible attempting at 'relative validity' of the results when the results of the study were brought up to generic level of the industry and made available as an approach for the use of other development projects. In that sense the research could be claimed to be internally valid. The fact that the 'management-per-results' approach was applied and based on the real-life WHO project points out to the practical applicability of the research findings to the domain of development administration.

5.9 Reliability of the Results

The research is reliable if 'the results of a study can be reproduced under a similar methodology' (Golafshani, p. 598). From this point of view the results of the study are highly reliable since the 'management-per-results' approach suggested in the study can be used by other potential users as the generic project design tool of international development project management. It would be interesting to replicate the application of the model to the design of many other international development projects in order to have a good idea of the validity and reliability of the model. Though, within this research it was not practical given the time and budget constraints.

6. Results

6.1 Management-Per-Result Project Design Model

Most of the challenges facing RBM, if addressed at the design phase, are avoidable at the execution phase. There is a need to switch the focus of RBM from demonstrating to managing results. In this regard the function of management-for-results in RBM needs to be reinforced with specific tools capable of addressing the challenges facing RBM, having first of all in mind clear identification of results at the design phase, consistency in terms of scope of results throughout project management phases, costs and benefits attributable to each result.

The suggested by the author **Management-Per-Result Project Design Model** is an attempt to better align the RBM's management-for-results function with the RBM's project design component. Unlike the links between RBM, evaluation and project design (Ika and Lytvynov, 2009, pp. 105-106), this is a less researched area. The model was given the name the '**Management-Per-Result Project Design Model**' to send a message that the basic product management and performance management principles pioneered in business management and in public administration can equally be applied to project design of international development projects.

The model follows an **iterative approach**. After performing the first cost-benefit comparison, the second, the third etc. iterations can take place within the LFA block till the cost-benefit ratio gets satisfactory or till the overall costs seem affordable.

The 'product management' project design model can be used in two modalities: (1) in its shortened version with estimation of costs only and (2) in its full version with estimation of both costs and benefits.

6.1.1 'Simpler and Rougher' Cost-Benefit Comparisons

The cost-benefit comparisons in development projects are not always feasible and credible because they (and especially the estimation of benefits) are very subjective since they heavily depend on methods of estimation used. 'Full cost benefit analyses are complex and rely on reasonably predictable and measurable benefit and cost

streams from the investment. ... In development projects with diverse outputs which are difficult to measure a full cost-benefit analysis does not necessarily add exactness beyond a **simpler and rougher analysis.**' (Hubbard, 2000, p. 386).

'A simpler and rougher analysis', also known as '**quick and dirty technique**' (Hubbard, 2000, p. 395), is what is needed to weigh project benefits against project costs and what is missing in the design of development projects. In this regard depending on the nature and complexity of development project the 'full-fledge' SCBA might not be required or justified. But what seems to be needed at the design phase of most development projects is a '**simpler and rougher**' application of some elements and principles of SCBA (Ika and Lytvynov, 2009).

6.1.2 Management-per-Result Project Design Model

The 'management-per-result' approach suggested in this paper advocates the need to apply the same type of performance management approach as to managing results in development administration that was used in business management and in public administration.

The **Management-Per-Result Project Design Model (figure 5)** suggests undertaking the following steps:

- **Step 1:** Needs Assessment and Overall Goal
- **Step 2:** Specific Objectives and Options Analysis
- **Step 3:** Costs of Results
- **Step 4:** Benefits of Results
- **Step 5:** Cost-Benefit Comparisons.

Step 1: Needs Assessment and Overall Goal

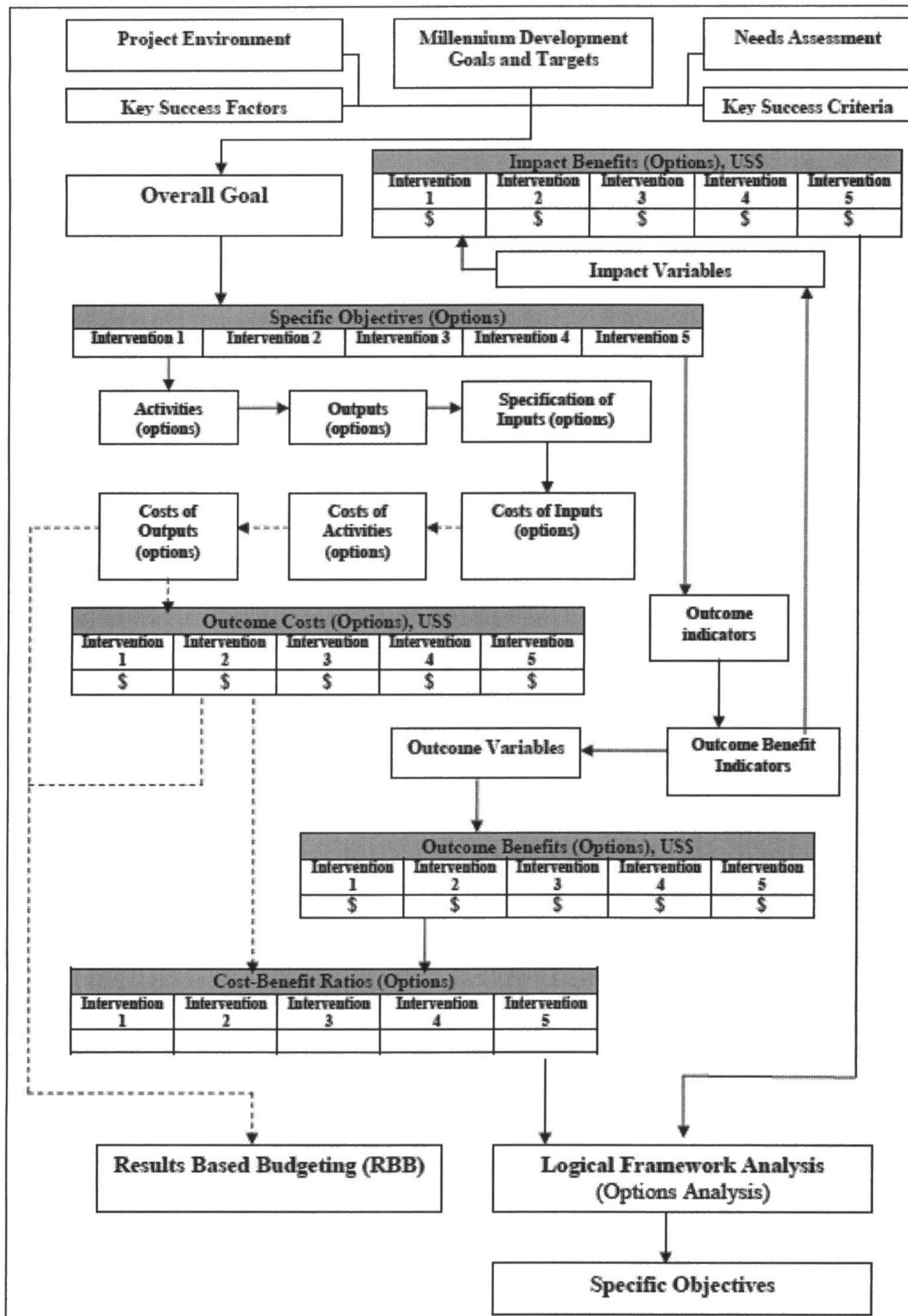
The starting point of the Product Management Model is an **overall goal** of the project, which reflects the **needs** of the project beneficiaries. It is being shaped by factors, such as: MDGs project environment, Key Success Criteria (KSC) and Key Success Factors (KSFs).

The major influence on an **overall goal** comes from MDGs. For example, the overall goal of the WHO report (Hutton and Haller, 2004)⁴² was directly drawn on the MDG 7 ‘Ensure Environmental Sustainability’, Target 3 ‘Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation’ (United Nations, 2009). In a way, drawing the project overall goal on the MDGs spares the project from ‘screening’ project environment in a search for needs and ensures that the project is aligned with the overall global development strategy till 2015. Given the project’s strategic alignment with MDGs, the needs assessment work is aimed at verification of the project context rather than performing the rigorous needs assessment from scratch.

KSC and KSFs, along with MDGs, shape up the project’s context (see **table 5** for the suggested by the author lograme matrix format). To ensure the desired transformation of inputs into outputs and emergence of outcomes and impacts, the project needs to manage not only the transformation process, but also the external environment, including KSFs. Though KSFs do not change the strategic orientation of a project, they can change the project implementation dramatically by putting the project off course or, on the contrary, greatly contributing to its success due to creating more conducive environment than it was initially expected. This needs to be considered at an outset at the project design phase. The project KSC represent additional ‘quality control’ filter through which the performance indicators at all three levels of results need to be validated for relevance, effectiveness, efficiency, impact and sustainability (OECD, 2009).

⁴² The WHO case study is presented in section 6.2.

Figure 5. Management-Per-Result Project Design Model



Symbols:

- > programming linkages
- - - - -> budgeting linkages

At this step the **logframe** is produced at its first and rough approximation. Actually, the logframe is supposed to be revisited, updated and analyzed at each next

forthcoming step so that its scope gets incrementally expanded (at step 1 some of the columns, such as 'Costs', 'Benefits', can be left blank and filled out as soon as the information becomes available). So the logframe analysis is an iterative process that has a definite beginning, but not so definite end. This is new a perspective on the role of logframe, as **table 5** demonstrates. The new logframe matrix format that is suggested in this paper (**table 5**), unlike the traditional logframe matrix format (see **box 4** and UNDP, 2000b, Chapter 4, p.13), provides for consideration of KSC and KSFs, contemplation of costs and benefits throughout iterations. The suggested format (**table 5**) has additional columns for 'Influencing factors (KSC, KSFs, assumptions, risks etc.)', 'Costs', and 'Benefits'.

As the **Management-Per-Result Project Design Model** demonstrates (**figure 5**), the logframe block plays the central role in the model by being closer to its intended role of the 'aid to thinking' and allowing 'information to be analysed and organized in a structured way, so that important questions can be asked, weaknesses identified and decision makers can make informed decisions based on their improved understanding of the project rationale, its intended objectives and the means by which objectives will be achieved' (European Commission, 2004, p. 57). The logframe block of the model accumulates the streams of costs and benefits estimation. The logframe block can accommodate a number of iterations with numerous options in each till the results satisfy the stakeholders. In a way, all preceding the logframe block steps can be considered as a 'prelude' before entering the stage of options consideration and decision making with help of a logframe.

Table 5. Suggested Logframe Matrix Format

	Project summary description	Indicators	Means of verification	Influencing factors (KSC, KSFs, assumptions, risks etc.)	Costs, US\$	Benefits, US\$
Impact						
Outcome(s)						
Outputs						
Activities						
Inputs						

Though the above format of the logframe provides for different levels of results (inputs, activities, outputs, outcomes, impact), in reality different projects might be either ‘**impact-**’, ‘**outcome-**’, or ‘**output-focused**’. It is rarely when the project inputs are processed for the sake of outputs without targeting the outcome and/or impact levels. Normally the projects tend to be ‘tactical’ (‘outcome-focused’) or ‘strategic’ (‘impact-focused’). For example, the WHO study (Hutton and Haller, 2004) presents the ‘outcome-focused’ type of project since the outputs of the intervention (water or sanitation improvement facilities) are of little value without leading to decrease in cases of diarrhoeal disease. On the strategic side, though the GDP growth or increase in the life expectancy at birth are ultimately important, but because it might take a decade or so for it to take place, the stakeholders might not be keen on contemplating costs and benefits related to long-term results (impact). Therefore, contemplating costs and benefits at the outcome level is very often what should become the central issue of the logframe analysis. This is not to be taken as the recommendation applicable to all types of projects, but something typical for most types of projects. For the ‘**process**’ type of **projects** the focus on impact level at the design phase might be more worthwhile since raising capacity is the impact type of result which is the direct intent of the ‘process’ type of project. For the **infrastructure development** type of **projects** the focus on output level at the design phase might be reasonable since the intent of the infrastructure development projects is putting the outputs in place.

Therefore, depending on the nature of the project, LFMs of different types might be considered:

- output-focused (for infrastructure development projects)
- outcome -focused (for most types of development projects)
- impact -focused (for ‘process’ development projects, aimed at capacity building).

The example of the ‘outcome-focused’ LFM is provided in the WHO case (**section 6.2**).

The ‘net benefit’ (difference between benefits and costs) can be established for each level of result. It implies that the project net benefits might be different at the strategic, tactical and operational levels since:

- the **strategic** 'net benefit' reflects the benefits for the society as a whole or its segments
- the project **tactical** net benefit reflects the benefits for direct project beneficiaries outside the narrow treatment group (e.g., the groups not directly involved in the project, but indirectly benefiting from the project outcomes)
- the **operational** net benefit reflects the benefits for direct project beneficiaries directly involved in the project and directly benefiting from the project outputs.

Since the cost-benefit comparisons can reveal benefits at strategic, tactical and operational levels, the project designers might face a dilemma of prioritizing long-term net benefits over short-term net losses or *vice versa*. Nevertheless, the cost-benefit rationale is not the only point of consideration since there might be other, non-economic rationales to consider (humanitarian, environmental or political aspects). Besides, the cost-benefit comparisons are generally subjective and might not be reflective of a project's real value due to misleading assumptions or misinterpretation of facts surrounding the project.

Step 2: Specific Objectives and Options Analysis

The overall project goal, once it is formulated, serves as an input for the project specific objectives block. Multioptional presentation of project specific objectives would be an advantage since in such a way different funding options can be outlined and considered at the project design phase.

Unfortunately, options analysis normally being part of the project design process is often skipped or reduced to bare minimum in the development project management (the author's professional experience in development project management and the interviews conducted confirm that).

Step 3: Costs of Results

The costs of results are estimated based on the **bottom-up approach** by following the sequence: inputs specification, estimation of costs of inputs, activities, outputs and outcomes.

The **overall costs** for each activity (and, hence, output) can be comprised of:

- Operational costs (for sustaining operations during each year of the project)
- Investment costs (i.e., non-operational type of costs).

The **costs of activities** are typically accounted by **budget lines** (those are costs of inputs) by the financial departments and by **objectives** by programming departments.

The **costs of outputs** feed into the costs of outcomes. Normally the programming departments are able to trace the costs of activities to costs of outputs.

Tracing outputs to outcomes is doable because the programming departments are supposed to be aware of which output leads to which outcome. The hints here are the way the expected outcomes are formulated in the project document and how outcomes contribute to specific objective.

An impact, being a very distant result, normally costs as much as all the outcomes cost since it does not normally cost extra to move from outcome to impact over time. It is a matter of time and conducive environment in place, rather than any extra costs.

Step 4: Benefits of Results

The estimation of benefits of results can be performed for different levels of results (outputs, outcomes, and impact). The estimation of the **outcome benefits** is central to the estimation of benefit of results for the following reasons. The estimation of benefits of outputs does not make a lot of sense from the decision-making point of view since outputs do not represent the strategic type of results. Nevertheless, the estimation of benefits of outputs for the infrastructure development projects is worthwhile since in such case outputs represent the central effort of such projects. The estimation of benefits of impact is very imprecise and laborious process which might not yield any practical decision-making conclusions.

The suggested estimation of **benefits of results** is guided by the following approaches:

1. the 'with-and-without' approach
2. the 'net social benefit' approach

3. sector perspective on results' benefits.

(1) The 'With-and-Without' Approach

The '**with-and-without**' approach (Hubbard, 2000; Watkins, 2009a) considers as a benefit of result the marginal benefits between existing benefits without a project and with a project. The impact of a project is the difference between what the situation would be with and without the project (Watkins, 2009a). With/without analysis, therefore, 'relies on picturing the **counterfactual** (i.e., the scenario without the project)' (Hubbard, 2000, p. 387). By applying the 'with-and-without' technique the '**deadweight**' factor⁴³, referred to in the literature review (**section 2.8**), is eliminated (the 'deadweight' is the 'without' part).

The following **example** can illustrate the use of the 'with-and-without' approach. 'In determining the impact of a fixed guideway rapid transit system, such as the Bay Area Rapid Transit (BART) in the San Francisco Bay Area, the number of rides that would have been taken on an expansion of the bus system should be deducted from the rides provided by BART and likewise the additional costs of such an expanded bus system would be deducted from the costs of BART. In other words, the **alternative to the project must be** explicitly specified and **considered** in the evaluation of the project.' (Watkins, 2009a).

(2) Net Social Benefits: Internal and External Benefits

The project's internal profitability and external profitability are the terms used in economics to reflect both components that constitute **net social benefit**. For projects that pursue both social and revenue-generating objectives (like utilities, health care, food production etc.) the internal profitability and external profitability play a role reflecting economic benefits both for a business entity and a society.

The total project benefits represent the **Net Social Benefits** and are expressed as (Watkins, 2009b):

$$\text{NSB} = \text{NIB} + \text{NEB}$$

NSB = Net Social Benefits

⁴³ '**Deadweight**' is the measurement of impact that would have taken place without any intervention at all (Tanburn, 2008, p. 10).

NIB = net internal economic benefit of the project

NEB = Net Effect of Externalities⁴⁴ (net external economic benefit of the project)

The value of **net internal benefits** of the project can be presented as:

$$\mathbf{NIB} = (\mathbf{BIw} - \mathbf{CIw}) - (\mathbf{BIw/o} - \mathbf{CIw/o})$$

NIB = value of net internal benefits of the project

BIw = internal benefits with the project

CIw = internal costs with the project

BIw/o = internal benefits without the project

CIw/o = internal costs without the project

Internal economic benefits are comprised of value-added components that emerge as a result of project implementation (profit, labour remuneration etc). Whereas internal economic benefits as a category is important for socially-focused business projects, it is less pertinent to some types of development project which in most cases do not have any revenue-generating objectives (e.g., ‘process’ projects) and in which case the internal benefit will be of zero value. Nevertheless, the internal benefits should not be completely discarded since in some development projects they may play a role (e.g., when a project presents a combination of development assistance and business type of activity).

The value of **net external benefit** of the project can be presented as:

$$\mathbf{NEB} = (\mathbf{BEw} - \mathbf{CEw}) - (\mathbf{BEw/o} - \mathbf{CEw/o})$$

NEB = value of net external benefits of the project

BEw = external benefits with the project

CEw = external costs with the project

BEw/o = external benefits without the project

⁴⁴ In economics, an **externality** or spillover of an economic transaction is an impact on a party that is not directly involved in the transaction. In such a case, prices do not reflect the full costs or benefits in production or consumption of a product or service. Producers and consumers in a market may either not bear all of the costs or not reap all of the benefits of the economic activity (Wikipedia. Externality).

CEw/o = external costs without the project

External economic benefits is a more complex category which is based on external benefits and external costs. **External benefits** and **external cost** are ‘the good things and the bad things that result from the project and are **imposed upon society** rather than resulting from market transactions’ (Watkins, 2009b, p. 1). Different basis for arriving at the value of external benefits might be considered: time saved for beneficiaries, number of lives saved in the ‘catchment area’, number of bus rides (like in the above BART example), direct and indirect economic benefits of avoiding disease, non-health benefits related to water and sanitation improvement etc.

(3) Sector View on Benefits of Results

The ‘net social benefit’ approach to estimation of benefits based on estimation of all social benefits, rather than only internal benefits, assumes the presence of specific sectors that benefit from the project intervention. In the WHO case study (Hutton and Haller, 2004, p. 23) the beneficiary sectors were: health sector; patients; consumers; and others (e.g., agricultural producers) (see **section 6.2**).

The problem with estimation of benefits might be in identifying of all possible beneficiary sectors and not missing out any of them.

The **outcome estimation** is in the core of estimation of benefits. As the **figure 5** illustrates, the estimation of benefits undergoes the following sequential **stages**.

1. Identification of outcome(s) in a form of **outcome indicator(s)** (for example, the number of cases of diarrhoeal disease in the WHO case study).
2. Identification of the beneficiary sectors’ benefits (**Outcome Benefit Indicators**). For example, in the WHO case study (Hutton and Haller, 2004, p. 23) those were:
 - **health sector benefits:** less expenditure on treatment, health sector benefit due to avoided illnesses;
 - **patients benefits:** less expenditure on treatment, transportation, income and time savings, and lower death rate;
 - **consumers:** income and time savings due to easier access to water collection, less expensive water sources, property value rise;

- **other sectors:** business sector's savings due to less expenditure on treatment of employees, rising productivity, improved technology as a result of less expensive water intake and cleaner water supply.
3. Identification of **Outcome Variables** or per unit values (e.g., per unit cost of treatment: cost per day, cost per visit, average or minimum wage rate); **number of units** (e.g., expected duration of treatment: number of days, number of visits expected to undergo treatment, household size); **ratios** (e.g., hospitalization rate, discount rate); **estimates** (e.g., value of loss of life avoided).

The number of units is to be assessed as the **difference between the 'with' and 'without'** parameters that excludes the **'deadweight'** factor.

The benefits for the beneficiary sectors can be: (1) direct, (2) indirect, and (3) distant or consequential.

The outcome benefits estimation cannot be taken from the positivistic positions in terms of 'ready-made' formulas. The outcome estimation is more of an art leaning toward more constructivist approach when for each type of estimated benefit different solutions can be suggested with none being absolutely correct or absolutely wrong. Therefore, the above approaches with regard to outcome benefits estimation should be treated as possible suggestions only and not 'ready-to-use' recipe.

The **impact benefits** are arrived at as a follow up to the outcome estimation of benefits based on outcome benefit indicators. Depending on the nature of a project and the linkage of its overall goal to MDGs the impact benefits can be set at the high strategic level to represent, for example, the project's contribution to GDP, or to be set in relation to employment rate, expectancy of life at birth, education index, human development index etc.

Given the strategic setting of impact benefit indicators, the impact benefits cannot easily be arrived at in straightforward manner. Apparently, the whole spectrum of the regression and correlation analysis tools can be employed for that purpose. In this

sense the impact benefits estimation is even more of an art compared to estimation of outcome benefits.

The **output benefits** in the model are implied, but not directly considered because output benefits are supposedly self-evident. Nevertheless, the costs of outputs are to be approximated as the precondition of outcome cost approximation.

Step 5: Cost-Benefit Comparisons

What seems to be highly desirable at the project design stage is to arrive at some cost-benefit comparisons which might lead to some managerial considerations, rather than decisions. For example, if the project is not financially feasible, the project should not be automatically rejected. The project financial feasibility is a very important aspect of project design, though not the only one. The development project, as it was noted, despite being financially unfeasible can be launched for non-economic reasons (political, humanitarian, environmental etc.), especially considering the non-profit and development nature of development assistance work. Therefore, the cost-benefit comparisons, though desirable, might not always constitute the basis for decision-making. Because of that sometimes the estimation of costs without estimation of benefits might present a more credible option.

Therefore, by incorporating into the RBM's design component the cost-benefit comparisons the awareness of what the project is expected to achieve and at what cost can be reached. The approach of the study is to be viewed as the 'quick and dirty' approximation without the pretence for universal applicability to all types of development projects.

6.1.4 'Potential Impact' and 'Management-per-Result' Approaches: Comparative Analysis

The 'potential impact' approach was suggested by Michael Hubbard (Hubbard, 2000). Like the 'management-per-result' approach, it employs 'quick and dirty' technique and is intended to be used for the purposes of design and evaluation. For that reason it would be beneficial to compare both approaches to see to what extent they are compatible and how they can be used to complement each other.

The ‘potential impact’ approach is built around the following lines.

- It involves estimating and comparing **potential** and **actual impacts** of the project: actual impact equals potential impact if design and management of the investment are adequate and there are no major upsets in the project's environment. Therefore, if actual benefits are below potential benefits, it points out to the inadequate project management and/or design.
- It focuses on the **obstacles** to maximum achievement of objective; the extend to which public assistance to the investment can help remove the obstacles; and any external costs (costs to others) resulting from the investment. (Hubbard, 2000, p. 388).

The **maximum potential benefits** to the project can be attained when:

- even if the constraints are major, they are potentially removable (i.e., it is in the power of the project to remove them)
- development assistance is essential for investment of resources into the project
- external costs are minimized. (Hubbard, 2000, p. 388).

Table 6 provides some comparisons between the ‘potential impact’ and ‘management-per-result’ approaches.

The noticeable difference between the ‘management-per-result’ the ‘potential impact’ approaches is in the level of results. Whereas the ‘potential impact’ approach does not put any special emphasis on the level of results, the ‘management-per-result’ approach focuses on the logical framework matrices (LFMs) of different types (output-, outcome-, and impact-focused) depending on the nature of the project (infrastructure development, ‘process’ type of project etc). That focuses the efforts of the project right from the design phase on the key result level.

Since both approaches use are based on judgemental estimates of benefits, the ‘potential impact’, which is qualitative and based on questionnaire, can be used for the estimation of benefits in the ‘management-per-result’ approach. It is an area where a synergy from using both approaches can be expected.

Table 6. 'Potential Impact' (PI) vs. 'Management-per-Result' (MPR) Approaches

	PI	MPR
Costs	No	Yes
Benefits (monetary)	No	Yes
Benefits (non-monetary)	Yes	No
Can be used at design stage	Yes	Yes
Can be used at evaluation stage	Yes	No
Can be used at other stages	Yes	Yes
Can complement each other?	Yes	Yes
Relies on informed judgment?	Yes	Yes
Simplicity	Yes	Less
Comparability with other projects	Yes	Yes
Applicability for all types of development projects?	Yes	No

6.2 Applying the Model to a Real-Life Project: The WHO Study of Water and Sanitation Improvements at the Global Level

6.2.1 The WHO Study: Summary

This section describes the study of water and sanitation improvements at the global level undertaken by the World Health Organization (WHO) and prepared as part of the feasibility assessment for the future development intervention(s) in order to generate the interest among potential stakeholders⁴⁵. The study was published as the report⁴⁶ (Hutton and Haller, 2004). Though the study is not the project design⁴⁷ type of document, it bears such important element of project design such as goals and objectives, options analysis, estimation of costs and benefits. The literature review revealed that costs and benefits estimation is one of the weakest links of project design. Even though the focus of the WHO study was specifically on estimation of costs and benefits, the author believes that this research would benefit from drawing valuable lessons from the WHO approach as to estimation of costs and benefits. This case study was chosen because: (1) it demonstrates how the use of the Social Cost-Benefit Analysis (SCBA) in project design can reinforce the case by bringing in the dimensions of costs and benefits and thus making the case more compelling; (2) the WHO case has a potential to turn this approach into the generic one and applicable as

⁴⁵ At the time of the WHO study the type of development intervention (project or program) as well as the funding parties were not known.

⁴⁶ The report prepared by Hutton and Haller (2004) will be often referred to as the 'WHO study'.

⁴⁷ By 'project design' we mean design of both project and program interventions.

a tool and a technique to design of international development projects. Therefore, the WHO study can prove the case of how rigorous project design study that is focused on (1) what should be achieved, (2) at what cost and (3) with what kind of benefit to stakeholders can make a compelling case to be used to secure funding for a development intervention.

The funding for this development intervention was not secured before, during and after the study was conducted. That was an additional reason for making the feasibility study the compelling financial case, rather than build the case as the humanitarian relief intervention. The intervention benefits were intentionally provided in monetary rather than in non-monetary terms (number of deaths avoided, days gained etc.) to provide the cost of 'doing nothing' option and its financial consequences for 55% of the world's poor. As the study proved, the cost of doing nothing is the loss of \$18 - \$556 billion annually worldwide in such forms as: income losses, lost health improvement opportunities, losses due to death and illness cases not being prevented, losses of time savings for productive use at work and at school, etc.

The WHO study focused on five global sub-regions (sub-Saharan Africa, North and South Americas, South-East Asia, European and Western Pacific regions) which together account for 55.4% of the world's population in the year 2000.

The constructed 'management-per-result' project design model (**section 6.1**) was verified against the real-life WHO project. For that purpose the model was tested by inputting into the 'management-per-result' model the WHO study parameters. The initial model was revised a number of times and readjusted. The model readjustment was repeated till it became clear that the model fits the project case.

6.2.2 Application of the Management-Per-Result Design Model to the WHO Case

The purpose of presenting the WHO case is to verify the practical applicability of the **Management-Per-Result Project Design Model** and to draw some valuable lessons of generic nature from it to make this specific experience part of generic knowledge on development project design.

Figure 6 illustrates the sequential **steps** of the **Management-Per-Result Project Design Model** in its relation to the WHO case. Some steps were missing (impact benefits estimation) since those were not reflected in the WHO study. Despite that the validity of the case was not negatively effected.

Step 1: Needs Assessment and Overall Goal

The MDG targets and the ‘Global Water Supply and Sanitation Assessment 2000 Report’⁴⁸ (WHO, 2000) laid a foundation for the project overall goal identification which is the meeting of basic needs in water supply and sanitation of the world’s poorest people deprived of these necessities. The needs assessment (understanding and validating the needs, presenting compelling evidence for intervention) has already been performed within the earlier WHO study - *Global Water Supply and Sanitation Assessment 2000 Report* (WHO, 2000) and reflected in the MDGs. That minimized the scope of needs assessment. The above is the example of ‘operationalizing’ the MDGs by translating them into the program/project overall goal. Different options based on different assumptions were designed to provide for multivariability of scope of intervention and outcomes.

The **expected impact** of all interventions is the reduction in the incidence of diarrhoeal disease.

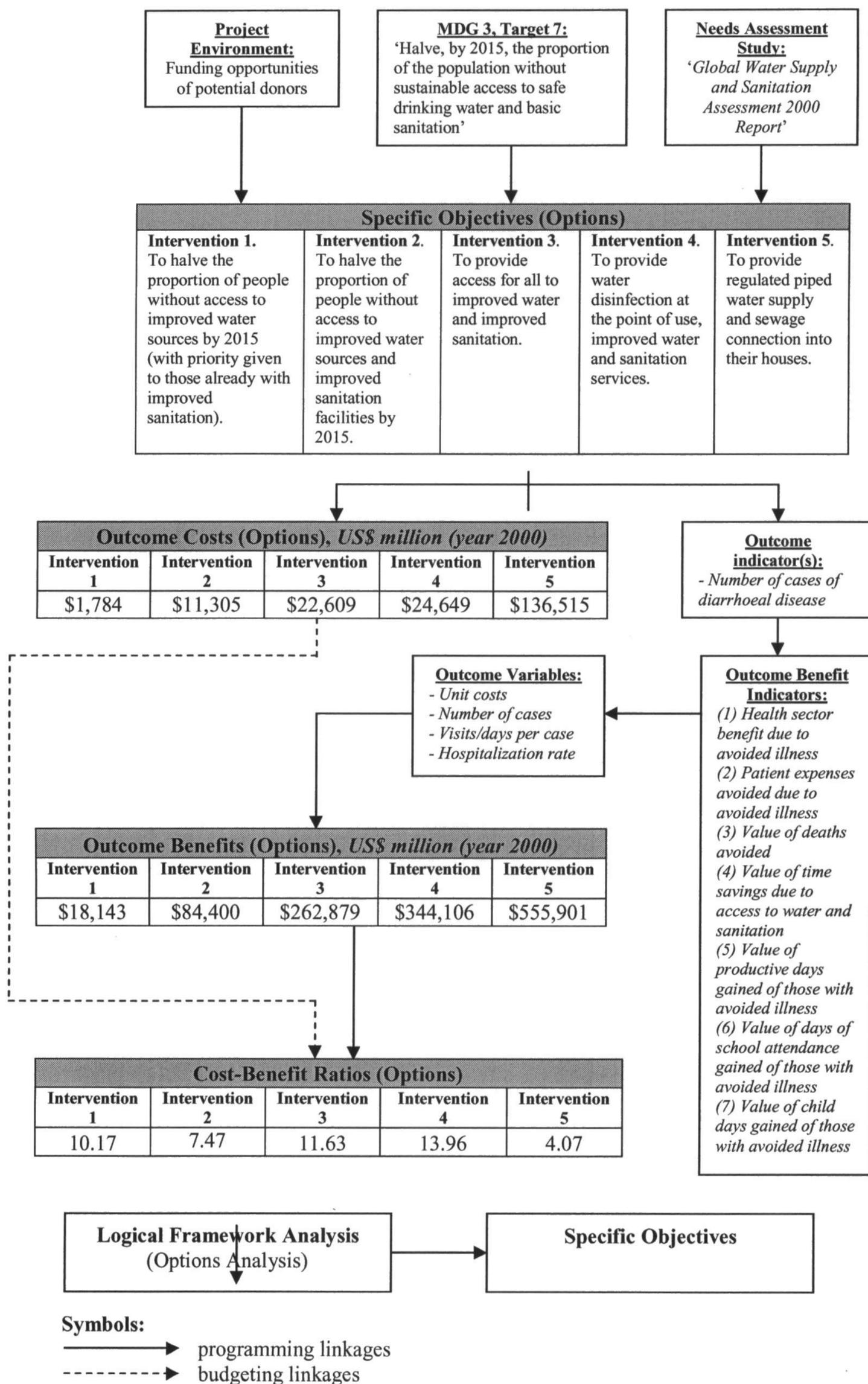
Step 2: Specific Objectives

In the WHO study the choice of different option interventions varying in scope of work depending on the donors’ funding opportunities is offered. All the options have the MDG Target 3, Goal 7⁴⁹ as the baseline offering what exceeds the MDG level depending on the funding availability.

⁴⁸ The ‘Global Water Supply and Sanitation Assessment 2000 Report’ (WHO, 2000) was completed prior the study of Hutton and Haller (Hutton and Haller, 2004) and was used by Hutton and Haller as the technical feasibility assessment study.

⁴⁹ Target 3 ‘Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation’ of the Millennium Development Goal 7 ‘Ensure Environmental Sustainability’ (United Nations, 2009).

Figure 6. The WHO Cost-Benefit Approach to Project Design



Based on: Hutton and Haller, 2004.

Intervention 1.

To halve the proportion of people without access to improved water sources by 2015 (with priority given to those already with improved sanitation).

Intervention 2.

To halve the proportion of people without access to improved water sources and improved sanitation facilities by 2015.

Intervention 3.

To provide access for all to improved water and improved sanitation.

Intervention 4.

To provide water disinfection at the point of use, improved water and sanitation services.

Intervention 5.

To provide regulated piped water supply and sewage connection into their houses.

The above-outlined five **option scenarios** were based on different assumptions, time and budget constraints. All the intervention scenarios meet at least the target 3 of the MDG goal 7: intervention 1 meets the MDG target exactly, whereas all other four intervention scenarios exceed it. Each of the intervention scenarios is aimed at reaching at least the MDG goal level with regard to drinking water and basic sanitation, but the extent of services provided and resulting from that quality of life improvements are different under each scenario.

Intervention 1 (see box 26) has total annual costs of US\$1.78 billion. At US\$11.3 billion annually, **intervention 2** represents quite a significant cost increase from Intervention 1, as the sanitation improvements are considerably more expensive than water improvements (4 times more expensive, on average). Two sub-regions dominate the global costs of reaching the combined water and sanitation MDGs – South-East Asia (US\$3.6 billion annually) and Western Pacific Region (US\$3.3 billion annually). To reach the entire unserved population with water supply and sanitation services would cost US\$22.6 billion (**intervention 3**), which is twice the

cost of Intervention 2. **Intervention 4** involves only a small cost increase over intervention 3, of US\$2 billion (under 10% increase) as only the cost of chlorination is added. At US\$136 billion annually, **intervention 5** involves a massive investment in hardware as well as running costs, representing an almost five-fold cost increase from intervention 4. (Hutton and Haller, 2004, pp. 25-27).

Therefore, the options analysis is an appropriate reaction to a situation when the issue of funding for an intervention is not resolved and options analysis can be used as an opportunity to outlay different intervention scenarios with the cost option attached to each.

Step 3: Costs of Results

The **costs** of the interventions included investment and operating costs. The main source of data to estimate the initial investment costs of water and sanitation interventions was the Global Water Supply and Sanitation Assessment 2000 Report (WHO, 2000), which gave the investment cost per person for three major world regions (Hutton and Haller, 2004, p. 12).

The costs were estimated by WHO iteratively starting from specification of inputs which led to costs of activities, costs of outputs, and the cost of the whole intervention. The latter also represents the cost of outcomes and at the same time the cost of impact since it does not cost extra to attain an impact compared to what has already been expended on the attaining of outcomes. The intervention costs range from 1.8 to 136 billion US\$.

Step 4: Benefits of Results

The benefits of the interventions are always linked to specific **sectors** which in the WHO study were: (1) health sector; (2) patients; (3) consumers; and (4) others (agricultural producers etc).

The following types of benefits have been identified:

- (1) Health sector benefit due to avoided illness
- (2) Patient expenses avoided due to avoided illness

- (3) Value of deaths avoided
- (4) Value of time savings due to access to water and sanitation
- (5) Value of productive days gained of those with avoided illness
- (6) Value of days of school attendance gained of those with avoided illness
- (7) Value of child days gained of those with avoided illness (Hutton and Haller, 2004, p. 23).

All the **benefits** of the intervention are of three **types**: (1) direct economic benefits; (2) indirect economic benefits; (3) non-health benefits.

(1) Health Sector Benefits

The **health care cost savings** are mainly related to the reduced number of treatments of diarrhoeal cases⁵⁰. As shown in **box 24**, **costs saved** may accrue to the health service (if there is no cost recovery), the patient (if there is cost recovery) and/or the employer of the patient (if the employee covers costs related to sickness) that depends on the nature of the payment mechanism in the country. For the treatment of diarrhoea, health service unit costs are taken from WHO regional unit cost databases. As shown in **box 25**, the **total cost avoided** is calculated by multiplying the health service unit cost by the number of cases avoided, using assumptions about health service use per case (it was assumed that an average case would visit a health facility once, with a range of 0.5 to 1.5 visits). The average hospital length of stay was assumed to equal 5 days (range 3 to 7). In the base case 8.2% of cases were assumed to be hospitalised (data collected by WHO) with a range of 5% to 10% of patients hospitalised. The rest were assumed to be ambulatory. (Hutton and Haller, 2004, pp. 16-17).

⁵⁰ Prüss, A., Kay, D., Fewtrell, L., and Bartram, J. (2002). Estimating the global burden of disease from water, sanitation, and hygiene at the global level. *Environmental Health Perspectives*. 110(5): p. 537-542.

Murray, C. and Lopez, A. (2000). *The Global Burden of Disease*. World Health Organization, Harvard University.

Box 24. Economic Benefits of the WHO Intervention

Table 9: Economic benefits arising from water and sanitation improvements			
BENEFICIARY	Direct economic benefits of avoiding diarrhoeal disease	Indirect economic benefits related to health improvement	Non-health benefits related to water and sanitation improvement
Health sector	<ul style="list-style-type: none"> ▪ Less expenditure on treatment of diarrhoeal disease 	<ul style="list-style-type: none"> ▪ Value of less health workers falling sick with diarrhoea 	<ul style="list-style-type: none"> ▪ More efficiently managed water resources and effects on vector bionomics
Patients	<ul style="list-style-type: none"> ▪ Less expenditure on treatment of diarrhoeal disease and less related costs ▪ Less expenditure on transport in seeking treatment ▪ Less time lost due to treatment seeking 	<ul style="list-style-type: none"> ▪ Value of avoided days lost at work or at school ▪ Value of avoided time lost of parent/ caretaker of sick children ▪ Value of loss of death avoided 	<ul style="list-style-type: none"> ▪ More efficiently managed water resources and effects on vector bionomics
Consumers			<ul style="list-style-type: none"> ▪ Time savings related to water collection or accessing sanitary facilities ▪ Labour-saving devices in household ▪ Switch away from more expensive water sources ▪ Property value rise ▪ Leisure activities and non-use value
Agricultural and industrial sectors	<ul style="list-style-type: none"> ▪ Less expenditure on treatment of employees with diarrhoeal disease 	<ul style="list-style-type: none"> ▪ Less impact on productivity of ill-health of workers 	<ul style="list-style-type: none"> ▪ Benefits to agriculture and industry of improved water supply, more efficient management of water resources – time-saving or income-generating technologies and land use changes

Source: Hutton and Haller, 2004, p. 17.

(2) Patients' Benefits

Patients' Direct Cost Benefits. Patients' benefits present mostly **direct costs** of a non-health care nature incurred to the patient, and are usually related to: **transportation costs**; other expenses associated with a visit (e.g., **food and drinks**); and **opportunity costs** (e.g., time that could have been spent more productively). For example, with regard to transportation costs, it was assumed that 50% (range 0%-100%) of patients use some form of transport at US\$0.50 per return journey. This gives an average of US\$0.25 (range US\$0 to US\$0.50) per patient visit. Other costs associated with a visit to the health facility were also assumed, such as the costs of food and drinks, and added to transportation costs, giving US\$0.50 per outpatient visit and US\$2 per inpatient admission (range US\$1-US\$3). (Hutton and Haller, 2004, pp. 17-18).

Patients' Indirect Benefits. These are traditionally split into two main types: gains related to lower morbidity and gains related to fewer cases of death. In terms of the valuation of changes in time use for cost-benefit analysis, the convention is to value the time that would be spent ill at some rate that reflects its **opportunity cost**. The true opportunity cost is the amount in monetary units that the person would earn over the same period of time if he/she were working⁵¹. This is a relatively easy estimate to make for those of working age, where the **minimum wage can be taken as a minimum value for what their time is worth**. **Work days gained** are valued using the assumed days off work per episode, and multiplying by the number of people of working age and the minimum wage rate. (Hutton and Haller, 2004, p. 19).

For **children of school age** or those unable to work, time not spent at school by children of school age is also valued on the basis of the **minimum wage**. For **children under five**, the assumption is made that a parent or caretaker has to spend more time with sick child than a healthy one, or alternative child care arrangements are needed that impose a cost. Therefore, healthy infant days gained as a result of less diarrhoeal illness are valued at **50% of the minimum wage** rate, reflecting the opportunity cost of caring for a sick baby or infant. (Hutton and Haller, 2004, p. 19).

The **length of illness** is rarely reported in the literature. For the present analysis, an average of two working days lost were assumed per case (range: one to four days) for those of working age, while for those of school age three days of school attendance lost were assumed (range: one to five days). The duration of illness for babies and infants was assumed to be five days (range: three to seven days). In the absence of adequate data on sub-groups all cases are valued according to a **global average cost**. (Hutton and Haller, 2004, pp. 19-20).

In terms of diarrhoea associated **deaths avoided**, the expected number is predicted from the WHO 'health impact model' (number of cases avoided times case fatality rate, both of which vary by world region). To estimate **mortality costs** the number of productive years ahead of the individual who would have died also needs to be

⁵¹ Curry, S. and Weiss, J. (1993). Project analysis in developing countries. MacMillan.

valued, and depends on the age of the person whose life is saved, and therefore the life expectancy. Using assumptions from a previous cost-of illness study, assumptions about length of productive life were: 40 years for the age group 0-4; 43 years for the age group 5-14; 25 years for the age group 15-59; and no years for the age group over 60 years [16]. Future benefits were discounted at 3% per year (range: 1% - 5%) and the minimum wage was used to reflect the opportunity cost. For those not yet in the workforce (those in the 0-4 and 5-15 age brackets) the current value for the future income stream was further discounted to take account of the time period before they become income earners. (Hutton and Haller, 2004, p. 20).

(3) Consumers' Non-Health Benefits. Beyond any argument, one of the major benefits of water and sanitation improvements is the **time saving associated with better access**. Time savings occur due to, for example, the relocation of a well or borehole to a site closer to user communities, the installation of piped water supply to households, closer access to latrines and shorter waiting times at public latrines. These time savings translate into either increased production, improved education levels or more leisure time. The value of convenience time savings is estimated by assuming a daily time saving per individual for water and sanitation facilities separately, and multiplying these by the minimum wage rate for each sub-region. Different time saving assumptions are made based on whether the source is in the house (household connection) or in the community. In this global analysis estimates of time savings per household could not take into account the different methods of delivery of interventions and the mix of rural/urban locations in different countries and regions, due to the lack of data on time uses in the literature. (Hutton and Haller, 2004, pp. 20-21).

Given these wide variations quoted in the literature, the WHO study made general assumptions about time savings following water improvements. It was assumed that, on average, a household gaining access to improved water supply will save 30 minutes per day (range: 15 to 60 minutes) and households receiving piped water 90 minutes per day (range: 60 to 120 minutes). These assumptions give 30.4 and 91.25 hours saved per individual per year, for improved access and piped water, respectively, assuming six members per household (range: eight members for low cost assumption and four members for high cost assumption). For improved sanitation, no

data were found in the literature for an estimate of time saved per day due to less distant sanitation facilities and less waiting time. Therefore, after consultation with sanitation experts, an assumption was made of 30 minutes saved per person per day, from improvements along the above lines. This assumption gives 182.5 hours per person per year saved. Time savings for all age categories are valued at the minimum wage, with GNP per capita used as the low value, and value added per worker in manufacturing as the high value. (Hutton and Haller, 2004, pp. 20-21).

Some of the non-health benefits, tabulated in table 9 (**box 6.1**) were excluded from the overall benefits estimates for various reasons. For example, the costs avoided due to reduced reliance on expensive water sources (such as vendors) from the societal point of view represent transfer payment from one category of population to another with a zero-sum result for society as a whole (Hutton and Haller, 2004, p. 21).

The methodological approach undertaken by WHO as to estimation of benefits is summarized in **box 25**.

The starting point for estimation of benefits was identification of **sectors** that can potentially benefit from intervention either directly in the short term or indirectly in the longer term. Once the beneficiary sectors are identified, the specific **types** of benefits can be linked to them. For each type of benefits an individual methodology of their estimation can then be employed with a use of different methods and techniques. The use of indicators and variables is one of the approaches predominantly used in the WHO study. Expert assessment can be another approach.

Box 25. The WHO Methodological Approach for Estimation of Benefits

Benefit by sector	Variable	Data source	Data values (+ range)
1. Health sector			
Direct expenditures avoided, due to less illness from diarrhoeal disease	Unit cost per treatment	WHO regional unit cost data	US\$4.3-US\$9.7 (cost per visit) US\$16.1-US\$39.7 (cost per day) <i>Varying by WHO region</i>
	Number of cases	WHO BoD data ⁵²	Variable by region
	Visits or days per case	Expert opinion	1 outpatient visit per case (0.5-1.5) 5 days for hospitalised cases (3-7)
	Hospitalisation rate	WHO data	91.8% of cases ambulatory 8.2% of cases hospitalised

⁵² BoD is: World Health Organization (2008). 'The global burden of disease: 2004 update'.

2. Patients			
Direct expenditures avoided, due to less illness from diarrhoeal disease	Transport cost per visit	Assumptions	US\$0.50 per visit
	% patients use transport	Assumptions	50% of patients use transport (0-100%)
	Non-health care patient costs	Assumptions	US\$0.50 ambulatory (US\$0.25-1.00) US\$2.00 hospitalisation (US\$1.0-3.0)
	Number of cases	WHO BoD data	Variable by region
	Visits or days per case	Expert opinion	1 outpatient visit per case (0.5-1.5) 5 days for hospitalised cases (3-7)
	Hospitalisation rate	WHO data	91.8% of cases ambulatory 8.2% of cases hospitalised
Income gained, due to days lost from work avoided	Days off work/ episode	Expert opinion	2 days (1-4)
	Number of people of working age	WHO population data 2002	Variable by region
	Opportunity cost of time	World Bank data	Minimum wage rate (GNP per capita – value added in manufacturing)
Days of school absenteeism avoided	Absent days / episode	Expert opinion	3 (1-5)
	Number of school age children (5-14)	WHO population data 2002	Variable by region
	Opportunity cost of time	World Bank data	Minimum wage rate (GNP per capita – value added in manufacturing)
Productive parent days lost avoided, due to less child illness	Days sick	Expert opinion	5 (3-7)
	Number of babies (0-4)	WHO population data 2002	Variable by region
	Opportunity cost of time	World Bank data	50% minimum wage rate (50% GNP per capita – 50% value added in manufacturing)
Value of loss-of-life avoided (life expectancy, discounting future years at 3%)	Discounted productive years lost (0 – 4 years)	WASH study ⁵³ (Suarez and Bradford, 1993)	16.2 years (9.5 – 29.1)
	Discounted productive years lost (5 – 14 years)	WASH study (Suarez and Bradford, 1993)	21.9 years (15.2 – 33.8)
	Discounted productive years lost (15+ 4 years)	WASH study (Suarez and Bradford, 1993)	19.0 years (16.3 – 22.7)
	Opportunity cost per year of life lost	World Bank data	Minimum wage rate

⁵³ The 'WASH study' is: Suarez, R. and Bradford, B. (1993). "The economic impact of the cholera epidemic in Peru: an application of the cost-if-illness methodology". *Water and Sanitation for Health Project: WASH Field Report No. 415*.

Benefit by sector	Variable	Data source	Data values (+ range)
3. Consumers			
'Convenience' – time savings	Water collection time saved per household per day for better external access	Expert opinion	0.5 hours (0.25-1.0)
	Water collection time saved per household per day for piped water	Expert opinion	1.5 hours (1.0-2.0)
	Sanitation access time saved per person	Expert opinion	0.5 hours (0.25-0.75)
	Average household size	WHO population data 2002	6 people (4-8)
	Opportunity cost of time	World Bank data	Minimum wage rate (GNP per capita – value added in manufacturing)

Source: Hutton and Haller, 2004, pp. 18-19.

The outcome benefits in the WHO study were obtained through the **outcome indicator**, which is the *number of cases of diarrheal disease*. Outcome indicator leads to **outcome benefits** through:

- (1) **Outcome benefit indicators** in the beneficiary sectors (*health sector's savings, patients' savings, consumers' time savings*) and
- (2) **Outcome variables** (*unit costs, number of cases, visits per case, hospitalization rate⁵⁴*).

Beyond those 'sector' benefits are those that the society as a whole or its substantive segment gains. Such kind of benefit is **impact benefit**. The level of impact benefits is not reflected in the WHO study, though can be implied. The **impact variables** for the WHO study could have been: contributions to GDP, employment rate, life expectancy at birth, education index, human development index etc.

Step 5: Cost-Benefit Comparisons

The cost-benefit comparison was the final step of the WHO study which revealed the high impact power of different intervention scenarios ranging from 1:4 to 1:14 in terms of cost-benefit ratios (**box 26**). That clearly demonstrates to stakeholders that not only the cost of each intended result matters, but what matters more is the value of benefits sought in relation to costs of benefits, or return on invested capital.

⁵⁴ Approximate measures.

Box 26. Cost-Benefit Ratios (globally)

Intervention Goals (Options)				
Intervention 1. To halve the proportion of people without access to improved water sources by 2015 (with priority given to those already with improved sanitation).	Intervention 2. To halve the proportion of people without access to improved water sources and improved sanitation facilities by 2015.	Intervention 3. To provide access for all to improved water and improved sanitation.	Intervention 4. To provide water disinfection at the point of use, improved water and sanitation services.	Intervention 5. To provide regulated piped water supply and sewage connection into their houses.
Intervention Benefits (Options), US\$ million year 2000				
Intervention 1	Intervention 2	Intervention 3	Intervention 4	Intervention 5
\$18,143	\$84,400	\$262,879	\$344,106	\$555,901
Intervention Costs (Options), US\$ million year 2000				
Intervention 1	Intervention 2	Intervention 3	Intervention 4	Intervention 5
\$1,784	\$11,305	\$22,609	\$24,649	\$136,515
Cost-Benefit Ratios (Options)				
Intervention 1	Intervention 2	Intervention 3	Intervention 4	Intervention 5
1:10	1:8	1:12	1:14	1:4

Based on: Hutton and Haller, 2004.

For example, in the WHO study the **costs of interventions** expected vary from 1.8 to 136 billion US\$ that by itself, without the consideration of benefits, would have discouraged many potential donors. But with the cost-benefit ratios considered the overall impression is different: all options provide return on investments. Globally and regionally, the highest ratios are to be achieved under option 4. Option 1 is also potentially very worthwhile since with the least possible budget in absolute terms (US\$1.8 billion) very satisfactory cost-benefit ratio can be achieved. Option 1 is suitable for the situation when potential donors are willing to financially support the intervention, but their funding possibilities are limited. This is a relevant assumption considering the current global financial crisis.

Therefore, the value of results (benefits) sought in relation to costs of results is an important characteristic of the development intervention effectiveness that can justify even the high costs of intervention. On the other hand, costs taken alone and outside of the context of benefits would have been more discouraging factor for the donors.

Logical Framework for the WHO Case: Outcome Level

As it was pointed out, we consider the WHO case as the 'tactical' ('outcome-focused') one for which the considerations of outcome costs and benefits become the

central issue of the logical framework analysis since the outputs of the intervention (water or sanitation improvement facilities) are by themselves of little value without bringing the decrease in number of cases of diarrhoeal decease. On the other hand, aiming for strategic level results (impact) in a form of the GDP growth or increase in the life expectancy at birth is ultimately important, though to some extent is futile because that might not lead to some managerial decisions.

For those reasons it is more worthwhile, like in the WHO case, to focus on the costs and benefits of the outcome level results at the design phase.

Table 7 provides suggested by the author the logframe format for outcome level in the WHO case.

Table 7. Logical Framework for the WHO Case: Outcome Level

Intervention Options	Project summary description	Indicators	Means of verification	Influencing factors (KSC, KSFs, assumptions, risks etc.)	Costs, US\$ million (year 2000)	Benefits, US\$ million (year 2000)
Option 1	To halve the proportion of people without access to improved water sources by 2015 (with priority given to those already with improved sanitation).	Number of cases of diarrhoeal decease	Global Water Supply and Sanitation Assessment 2000 Report (WHO, 2000).	Not known directly from the WHO Report (Hutton and Haller, 2004).	\$1,784	\$18,143
Option 2	To halve the proportion of people without access to improved water sources and improved sanitation facilities by 2015.	Number of cases of diarrhoeal decease	Global Water Supply and Sanitation Assessment 2000 Report (WHO, 2000).	Not known directly from the WHO Report (Hutton and Haller, 2004).	\$11,305	\$84,400
Option 3	To provide access for all to improved water and improved sanitation.	Number of cases of diarrhoeal decease	Global Water Supply and Sanitation Assessment 2000 Report (WHO, 2000).	Not known directly from the WHO Report (Hutton and Haller, 2004).	\$22,609	\$262,879
Option 4	To provide water disinfection at the point of use, improved water and sanitation services.	Number of cases of diarrhoeal decease	Global Water Supply and Sanitation Assessment 2000 Report (WHO, 2000).	Not known directly from the WHO Report (Hutton and Haller, 2004).	\$24,649	\$344,106
Option 5	To provide regulated piped water supply and sewage connection into their houses.	Number of cases of diarrhoeal decease	Global Water Supply and Sanitation Assessment 2000 Report (WHO, 2000).	Not known directly from the WHO Report (Hutton and Haller, 2004).	\$136,515	\$555,901

6.2.3 Implications of the WHO Case for the Design of Development Projects

The WHO study provides an opportunity to draw some implications of the generic nature for the project design. Those are.

1. **Multioptional approach** is feasible in a situation when the issue of funding for an intervention is not resolved and by providing options potential donors may be exposed to different intervention scenarios with cost scenarios attached to each.
2. Both **cost and/or cost-benefit approximations** are possible and both can be used interchangeably. If there is an obvious lack of information needed to arrive at the benefits of results, the designers may then limit themselves to approximation of costs. Ideally, the comparisons of both costs and benefits per each result sought yields with a better case for a project.

6.2.4 Limitations of the WHO Case

The WHO case has its own limitations. It does not provide for estimation of costs and benefits at the impact level. As it was pointed out, the impact estimation is very time-consuming and imprecise exercise that within the WHO case might not have led to any new conclusions. Given the outcome-focused thrust of the WHO case, we believe that the absence of information on the impact and output level results did not distort the verification of the 'management-per-result' approach.

7. Conclusions and Implications

7.1 Conclusions

The **aim** of the research was to provide an insight into the RBM project design function and to make suggestions as to reinforcing the management-for-results function of RBM. In this regard the study made the following contributions to the body of knowledge on RBM and performance management.

Firstly, the need to refocus RBM from an old paradigm of demonstrating results to a new paradigm of managing for results was emphasized. In this regard this research drew on the concepts and existing experience of performance management in public administration ('new public management'). The new public management as the means of improving public service delivery sets a precedent of how public administration, being very close to development administration, used performance measurement as control and monitoring instruments in pay policies, budgetary allocations etc. Unfortunately, development administration in this regard did not go that far, except for very limited use of RBB. In this research the author advocated the need for integration of some public administration and business management performance management approaches into international development project management domain.

Secondly, to reinforce the management-for-results function of RBM, the study offers the management-per-result approach to project design which adds to RBM the following new features:

- focusing on the strategically important level of results for a specific project depending on the nature of a project (infrastructure development, 'process' or capacity-building type of project etc.) and deciding on if a project is of outputs-, outcomes-, or impact-focused type
- selecting the level of results for which cost and/or benefit estimates are worth being performed
- multi-iterative process of contemplating costs vis-à-vis benefits and revisiting logframe at each iteration
- providing for money-denominated basis for counterweighing project benefits against project costs that allows the comparability of results of different

projects (this is especially valuable perspective on expected project results for potential donors for whom the knowledge of return on their investment into a project is of the utmost importance).

Thirdly, the incorporation of the management-per-result approach into project design can be viewed as the programme-oriented mechanism which bridges the gap between desired project results and MDGs under the program approach.

In the fourth place, though the management-per-result approach advocates the need to apply the cost-benefit technique at the project design phase, it is worth noting the following. The approach does not imply the need to embark on full-scale Social Cost-Benefit Analysis (SCBA) at the project design phase or to treat international development projects as business or production type of projects and apply the product management technique. The latter would have been exaggeration. What seems reasonable is to suggest undertaking the 'do not throw a baby with a bathtub' approach and incorporate some reasonable elements of existing performance management techniques from business management (product management, new product development, cost accounting) and public administration (RBB, linkages between performance and results) into the project design context of international development projects.

7.2 Lessons Learned

The 'management-per-result' approach outlined in this study, like the 'potential impact' approach, employs 'quick and dirty' technique to project design. The 'management-per-result' approach complements other approaches to project design and evaluation, such as Social Cost Benefit Analysis (SCBA) and target setting. Therefore, the 'management-per-result' approach should not be viewed as a substitute of those. The 'management-per-result' approach incorporates key features of Logical Framework Analysis (LFA) and SCBA and can be considered an extension of those to project design.

7.3 Potential of the Tool

The **potential** of the 'management-per-result' approach is in the following.

1. It sets a new approach to designing development projects within RBM by focusing on each expected result in a similar to ‘product management’ manner.
2. The approach reinforces the role of LFA by placing it in the centre of the multioptional design iterations and empowers LFA with additional linkages to KSC, KSFs, costs, and benefits.
3. By providing money-denominated basis for comparing costs and benefits, the ‘management-per-result’ approach thus provides the ‘common denominator’ for comparing the expected performance of different projects. It helps potential donors to decide which project could make a better use of their money. That could contribute to stakeholders’ ‘buy-in’ of a project’s results at the design phase.
4. Unlike the existing approach to LFA, the ‘management-per-result’ approach focuses on the logical framework matrices (LFMs) of different types (output-, outcome-, and impact-focused) depending on the nature of the project (infrastructure development, ‘process’ or capacity-building type of project etc). That sets the focus of the design work on the core issues.

7.3 Limitations of the Approach

The ‘management-per-result’ approach has the following **limitations**.

1. It cannot be universally applied as a ready-to-use technique to all types of development aid projects and, therefore, can be considered only as an approach. It is more suitable for the output- and the outcome-focused projects rather than for the impact-focused projects for which the level of uncertainty makes the approach more difficult to apply.
2. Like other ‘quick and dirty’ techniques (e.g., ‘potential impact’ approach), the ‘management-per-result’ approach takes the ‘subjective’ view of reality, especially when it comes to estimation of benefits. To minimize the influence of ‘subjective’ type of distortions, the ‘management-per-result’ approach considers the ‘outcome-focused’ logical framework matrix as more accurate and worthwhile from the point of view of time and money invested in the process of estimation of benefits.
3. Despite setting an approach, it does not provide any detailed methodology for estimation of costs and benefits (that would require further research).

4. The ‘management-per-result’ approach requires the presence of results-oriented organizational culture, which, as it was pointed out in the literature review section, not all the agencies have.

7.4 Implications from the Research

7.4.1 Implications for Researchers and Development Practitioners

By making practical use of the ‘management-per-result’ approach development practitioners obtain another tool of the ‘quick and dirty’ technique type along with other techniques (e.g., ‘potential impact approach’, target-setting, SCBA). Without attempting to substitute the existing techniques, the ‘management-per-result’ approach complements them and expands the boundaries of contemplating potential benefits against costs at the project design phase.

7.4.2 Implications for Stakeholders

The stakeholders are in a position to either positively or negatively affect the project design, implementation, and the very existence of the project by providing funding or shying away from that. Therefore, their expected and natural concern is the return on their investment into a project.

The ‘management-per-result’ approach by allowing for the money-denominated basis for counterweighing project benefits against project costs thus provides for comparability of results of different projects. That, as it should be expected, provides the project donors with an instrument to compare at the inception and negotiation phase the relative effectiveness of their investments in different projects. The WHO study (**section 6.2**) vividly demonstrates how different in size investments could play out in terms of the overall societal benefits under each of five intervention options.

7.5 Suggestions for Future Research

The ‘management-per-result’ approach can be made more methodologically rigorous that would require **future research** in the following areas.

1. The ‘management-per-result’ approach can be applied to other project management phases (planning and executing) that would require more research.

2. As it appears, the 'potential impact' and the 'management-per-result' approaches can work in synergy complementing each other at both the project design and project evaluation phases. But that would require further research as to how methodologically to bridge them.
3. As it was pointed out, the 'management-per-result' approach can best be applied to the outcome-focused type of development projects. But how to apply the approach to other types of development projects, such as impact-focused projects ('process' or capacity-building projects) and the output-focused projects (infrastructure development projects) needs to be further researched.
4. Since development projects are characterized by the presence of multiple stakeholders, whose interests in projects might be conflicting, it would be reasonable to adopt the societal benefits as the compromising and all-inclusive approach to ultimate benefits to be sought by projects. Though the WHO study (**section 6.2**) illustrates how to approach the estimation of the societal benefits, the generic methodology in that regard still needs to be elaborated.

References

1. Acemoglu, D. (2003). Root Causes: A historical approach to assessing the role of institutions in economic development. *Finance and Development*. June 2003, Volume 40, Number 2. International Monetary Fund, Washington, D.C., pp. 27 – 30.
2. Babbie, Earl (2004). *The Practice of Social Research* (10th ed.). Thomson & Wadsworth, Chapman University.
3. Binnendijk, Annette. (2000). *Results Based Management in the Development Co-operation Agencies: A Review of Experience*. Background Report. Organisation for Economic Co-operation and Development: Development Assistance Committee Working Party on Aid Evaluation (DAC-EV). February 2000.
4. Berg, Bruce L. (2001). *Qualitative Research Methods for the Social Sciences* (4th ed.). Allyn and Bacon. California State University, Long Beach.
5. Canadian International Development Agency (2000) *RBM Handbook on Developing Results Chain: The Basics of RBM as Applied to 100 Project Examples*. CIDA: Results-Based Management Division, December 2000.
6. Canadian International Development Agency (2009). *Results-based Management in CIDA: An Introductory Guide to the Concepts and Principles*. Accessed on Jan. 31, 2009 and available at <http://www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/EMA-218132656-PPK>
7. Canadian International Development Agency (2009). *Results-Based Management in CIDA: Policy Statement*. Accessed on Jan. 31, 2009 and available at <http://www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/EMA-218132656-PPK>
8. Cracknell, Basil E. (1988) Evaluating Development Assistance: a Review of the Literature. *Public Administration and Development*, Vol. 8, pp. 75 – 83.
9. Denzin, N. K., Lincoln, Y. S. (1994). *Handbook of Qualitative Research* (pp. 1-17). Thousand Oaks, CA: Sage.

10. Drucker, Peter F. (1964). *Managing for Results: Economic Tasks and Risk-taking Decisions*. Harper & Row Publishers.
11. Drucker, Peter F. (1993). *The Practice of Management*. Harper & Row Publishers Inc.
12. Easterly, William (2009) How the Millennium Development Goals are Unfair to Africa. *World Development*, Vol. 37, No.1, pp. 26–35.
13. European Commission. (2004). EuropeAid Cooperation Office. *Project Cycle Management Guidelines*. Volume 1: Aid Delivery Methods. March.
14. Flint, Michael (2003). *Easier Said Than Done: A Review of Results-Based Management in Multilateral Development Institutions*. UK Department for International Development (DFID), London, United Kingdom, March 2003.
15. Führer, Helmut (1996). *The Story of Official Development Assistance. A History of the Development Assistance Committee and the Development Co-operation Directorate in Dates, Names and Figures*, Organisation for Economic Co-operation and Development, Paris.
16. Golafshani, Nahid (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*, Vol. 8, No 4, December, pp. 597-607. Accessed on Jan. 31, 2009 and available at <http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf>
17. Hubbard, Michael. (2005). Aid Management: Beyond the New Orthodoxy. *Public Administration and Development*, 25, pp. 365-371.
18. Hubbard, Michael. (2000). Practical Assessment of Project Performance: The 'Potential Impact' Approach. *Public Administration and Development*, 20, pp. 385-395.
19. Hubbard, Michael. (2001). Shooting the Messenger: Log frame Abuse and the Need for a Better Planning Environment - A Comment. *Public Administration and Development*, 21, pp. 25-26.
20. Hulme, David (2007). *The Making of the Millennium Development Goals: Human Development Meets Results-based Management In an Imperfect World*. Brooks World Poverty Institute. BWPI Working Paper 16. December 2007.
21. Hulme, David (1995). Projects, Politics and Professionals: Alternative Approaches for Project Identification and Project Planning. *Agricultural Systems*, 47, pp. 211-233.

22. Hutton, Guy and Haller, Laurence (2004). *Evaluation of the Costs and Benefits of Water and Sanitation Improvements at the Global Level*. World Health Organization. Water, Sanitation and Health. Protection of the Human Environment (WHO/SDE/WSH/04.04). Geneva.
23. Ika, Lavagnon and Lytvynov, Vasyl (2009). RBM: A Shift to Managing Development Project Objectives. Global Management Conference. *GM Conference Proceedings Rio 2009*. April, Rio de Janeiro, Brazil.
24. Joint Inspection Unit (JIU) (1999). *Results-Based Budgeting: The Experience of the United Nations System Organizations*. JIU/REP/99/3. Prepared by Andrzej T. Abraszewski, Fatih Bouayad-Agha, John D. Fox, Wolfgang Münch. Geneva.
25. Langley Ann, Hergy Mintzberg, Pat Pitcher, Elizabeth Posada, and Jan Saint-Macary (1995). 'Opening up Decision-Making: The View From the Black Stool'. *Organization Science*, May-June.
26. Longman Group UK Limited (1991). *Longman Active Study Dictionary of English*, New ed. Longman Group UK Limited.
27. Mayne, John (2007). *Best Practices in Results-Based Management: A Review of Experience*. A Report for the United Nations Secretariat. Volume 2: Annexes. July 2007.
28. Miller, David Y. and Dunn, William N. (2009). *A Critical Theory of New Public Management*. Graduate School of Public and International Affairs and Macedonia Graduate Center for Public Policy and Management. University of Pittsburgh.
29. Minogue, M., Polidano, C. and Hulme, D. (eds) (1998). *Beyond the New Public Management: Changing Ideas and Practices in Governance*. Cheltenham: Edward Elgar.
30. Mizutani, Tomiji. (2009). *Results-based budgeting and performance management in the United Nations system*. Accessed on Feb. 20, 2009 and available at soc.kuleuven.be/io/egpa/fin/paper/slov2004/Mizutani.pdf
31. Morgan, Philip (1983). *The project orthodoxy in development: re-evaluating the cutting edge*. *Public Administration and Development*, Vol. 3, pp. 329-339.
32. Organisation for Economic Co-operation and Development (OECD) (2009). *DAC Criteria for Evaluating Development Assistance*. Accessed on Jan. 29,

2009 and available at

www.oecd.org/document/22/0,2340,en_2649_34435_2086550_1_1_1_1,00.html

33. Organisation for Economic Co-operation and Development (OECD). Development Assistance Committee (2007). *Development Co-operation Report 2006*, – VOLUME 8, No. 1 – ISBN 978-92-64-03105-0.
34. Organisation for Economic Co-operation and Development (OECD). Development Assistance Committee (2002a). *Glossary of Key Terms in Evaluation and Results Based Management*.
35. Organisation for Economic Co-operation and Development: Development Assistance Committee (2002b). *Managing for Development Results and Aid Effectiveness*. DAC Development Partnership Forum: Background Paper. DCD/DAC(2002)31. November 2002.
36. Organisation for Economic Co-operation and Development (OECD) (1994). *Performance Management in Government: Performance Measurement and Results-Oriented Management*. PUMA Public Management Occasional Papers. No. 3. OECD Publications: Paris.
37. Overseas Development Institute (ODI) (2009). *A Development Charter for the G-20*. March.
38. Peters, Tom, Waterman, Robert H. Jr. (1982). *In Search of Excellence: Lessons From America's Best-Run Companies*. Harper Collins.
39. Project Management Institute (2008). *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*, 4th ed. Newtown Square, PA: Project Management Institute.
40. Rodrik, D., Subramanian A. (2003). Primacy of Institutions. *Finance and Development*. June 2003, Volume 40, Number 2. International Monetary Fund, Washington, D.C., pp. 31 – 34.
41. Rondinelli, Dennis, A. (1983). Projects as Instruments of Development Administration: A Qualified Defence and Suggestions for Improvement. *Public Administration and Development*, 3, pp. 307-327.
42. Sachs, Jeffrey D. (2003). Institutions Matter, but Not for Everything. *Finance and Development*. June 2003, Volume 40, Number 2. International Monetary Fund, Washington, D.C., pp. 38 – 41.

43. Schacter, Mark (1999). *Results-Based Management and Multilateral Programming at CIDA: A Discussion Paper*. Prepared for: Strategic Planning Division Policy Branch, Canadian International Development Agency. Institute On Governance, Ottawa, Canada. November.
44. Schick, Allen. (2007a). *Conceptual Elements of Results-Based Budgeting*. II Subregional Workshop in the Caribbean. Presentation Slides. St. Michel, Barbados. July 17- 18.
45. Schick, Allen. (2007b). Performance Budgeting and Accrual Budgeting: Decision Rules or Analytic Tools? *OECD Journal on Budgeting*. Volume 7, No 2, pp. 109-138.
46. Shaw, Ian and Oka, Tomofumi (2001). Qualitative research in social work. September 21. Accessed on Jan. 20, 2009 and available at <http://pweb.sophia.ac.jp/oka/papers/2000/qrsq/qrsq.html>
47. Smith, Peter. (1988). Improving the Project Identification Process in Agricultural Development. *Public Administration and Development*, 8, pp. 15-26.
48. Strauss, A., Corbin, J. (1998). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (2nd ed.). Thousand Oaks, CA: Sage.
49. Suarez, R. and Bradford, B. (1993). The economic impact of the cholera epidemic in Peru: an application of the cost-if-illness methodology. *Water and Sanitation for Health Project; WASH Field Report No. 415*.
50. Sumner, Andrew and Tribe, Michael (2004). The Nature of Epistemology and Methodology in Development Studies: What Do We Mean by 'Rigour'?" Paper prepared for: 'The nature of Development Studies', *DSA Annual Conference* 'Bridging research and policy', Church House, London, 6 November, 2004; *ESRC DSA Postgraduate Training Workshop* 'Exploring the frontiers in Development Studies epistemology and methodology', Abbey Centre, London, 14 December 2004.
51. Tacconi, Luca, and Tisdell, Clem. (1992). Rural Development Projects in LDCs: Appraisal, Participation and Sustainability. *Public Administration and Development*, 12, pp. 267-278.
52. Tanburn, Jim (2008). *The 2008 Reader on Private Sector Development: Measuring and Reporting Results*. International Training Centre of the

- International Labour Organization. ISBN 978-92-9049-437-9. First edition 2008.
53. United Nations (UN). (2009). *Millennium Development Goals*. Accessed on Jan. 23, 2009 and available at <http://www.un.org/millenniumgoals/environ.shtml>
54. United Nations Development Programme (UNDP) (2007a). *Evaluation of Results-Based Management at UNDP*. Evaluation Office. December 2007.
55. United Nations Development Programme. (2007b). *Governance for Sustainable Human Development*. A UNDP policy document. UNDP, January 1997. Accessed on Aug. 29, 2007 and available at <http://mirror.undp.org/magnet/policy/>
56. United Nations Development Programme (2002). *Handbook on Monitoring and Evaluating for Results*. Evaluation Office.
57. United Nations Development Programme (UNDP) (2000a). *Results-Based Management: Concepts and Methodology*. UNDP Results Framework: Technical Note.
58. United Nations Development Programme (2000b). *UNDP Programming Manual*. December 2000, Ch.4 and Ch. 5.
59. Watkins, Thayer (2009a). *An Introduction to Cost Benefit Analysis*. San José State University, Economics Department. Accessed on Feb. 20, 2009 and available at <http://www.sjsu.edu/faculty/watkins/cba.htm>
60. Watkins, Thayer (2009b). *The Relationship Between Private Profitability and Net Social Benefit*. San José State University, Economics Department. Accessed on Feb. 20, 2009 and available at <http://www.sjsu.edu/faculty/watkins/cbaprofit.htm>
61. Windley P. (2009). *The Discipline of Product Management*. *Office of the Governor. State of Utah*. Accessed on May 21, 2009 and available at www.uhah.gov
62. World Health Organization, United Nations Children's Fund, and Water Supply and Sanitation Collaborative Council (2000). *Global Water Supply and Sanitation Assessment 2000 Report*.
63. Wikipedia (2009). *Externality*. Accessed on Mar. 22, 2009 and available at <http://en.wikipedia.org/wiki/Externality>

64. Wikipedia (2008). *Social Constructionism*. Accessed on Jan. 29, 2008 and available at http://en.wikipedia.org/wiki/Social_constructionism
65. Zeitlin, Irving M. (1968). *Ideology and the Development of Sociological Theory*. Englewood Cliffs NJ: Prentice-Hall, Inc., 1968. pp. 311-312.

Annex 1: Consent Form



Université du Québec en Outaouais

Case postale 1250, succursale B, Hull (Québec), Canada J8X 3X7
Téléphone (819) 595-3900
www.uqo.ca

Consent form

'MANAGEMENT PER-RESULT' APPROACH TO DESIGN OF INTERNATIONAL DEVELOPMENT PROJECTS

Vasyl Lytvynov, M. Sc. (Project Management) student

We are asking your cooperation for this research. The **overall goal** of this study, which is of the theory-development nature, is:

- to establish the extent to which the project design component of RBM can serve as an effective instrument in performing the management-for-results function and contribute to project's success
- to outline drawbacks of the current RBM design component setting and
- to identify possible solutions of methodological nature.

The **specific objectives** of the study are:

1. To reveal the challenges and problems facing the RBM design component to gain a better understanding of the focus of the research through literature review and interviewing development practitioners.
2. To introduce modifications to the current RBM design component aimed at better aligning results sought with their estimated costs and benefits.
3. To test the validity, applicability, and relevance of the methodological modifications introduced by means of case study based on real-life development project case.

Your participation to this research project will be to respond to an interview about 60mn to 90mn. This interview is aiming to take stock of the problems, difficulties and challenges that you face with regard to designing project results. It will also cover the tools that you often use in the performing the management-for-results function. The interview will be held once over the telephone or by means of e-mail.. It will be recorded with your formal consent.

The interview is strictly anonymous and you will not be identified personally. All responses will be kept strictly confidential. It will not be possible to identify the project team members or any of the specific projects that you speak about. The research results will be published in the article and will be part of the thesis.

The data will be stored in my office at Université du Québec en Outaouais (UQO), room A-2228. They will be destroyed after 5 years and will not be used for other purposes without your formal consent.

You are free to participate or not to participate. Should you have any question regarding this research project, feel free to contact Professor Ika at (819) 595-3900 # 1938. Should you have any question regarding ethical aspects of this project, please contact Professor André Durivage, president of the Comité d'éthique de la recherche de l'UQO at (819) 595-3900 # 1781.

Participant's name : _____

Participant's signature : _____

Date : _____

Researcher's name: _____

Researcher's signature: _____

Date : _____