

d·i·e

Deutsches Institut für
Entwicklungspolitik



Years | 1964–2014

German Development
Institute

Studies

The Role of Indicators in Development Cooperation

An overview study with a special focus on the use of key
and standard indicators

Sarah Holzapfel

The role of indicators in development cooperation

The German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) is a multidisciplinary research, consulting and training institute for Germany's bilateral and multilateral development cooperation. On the basis of independent research, it acts as consultant to public institutions in Germany and abroad on current issues of cooperation between developed and developing countries. Through its nine-month training course, the German Development Institute prepares German and European university graduates for careers in the field of development policy.

Sarah Holzapfel, Bi- and Multilateral Development Cooperation Department
German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE)
Email: sarah.holzapfel@die-gdi.de

The role of indicators in development cooperation

An overview study with a special focus on the use of key
and standard indicators

Sarah Holzapfel

Studies / Deutsches Institut für Entwicklungspolitik
ISSN 1860-0468


Die deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über <http://dnb.d-nb.de> abrufbar.


The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data is available at <http://dnb.d-nb.de>.

ISBN 978-3-88985-588-6

© Deutsches Institut für Entwicklungspolitik gGmbH

Tulpenfeld 6, 53113 Bonn

 +49 (0)228 94927-0

 +49 (0)228 94927-130

E-mail: die@die-gdi.de

<http://www.die-gdi.de>

Contents

Abbreviations

Executive summary	1
1 Introduction	11
2 Background to the study	13
2.1 The aid effectiveness agenda: results, transparency and accountability	14
2.2 Results-based management	17
2.3 Relevance of indicators	20
3 Definition and types of indicators	21
3.1 Definition of indicators	21
3.2 Typology based on function	22
3.3 Typology based on how parameter values are measured	34
4 Limitations	36
4.1 The attribution problem	36
4.2 Measuring qualitative change and complex phenomena	38
5 The use of indicators for strategic planning	39
5.1 Aid allocation based on indicators	39
5.1.1 Inter-recipient allocation of aid	41
5.1.2 Allocation of aid within countries	45
5.2 Formulating development strategies and planning interventions	49
6 The use of indicators for monitoring, evaluation and reporting	52
6.1 At agency level	52
6.1.1 Results frameworks	55

6.1.2	Measuring development results by means of standard indicators	58
6.1.2.1	Standard indicators for measuring development outcomes and impacts	59
6.1.2.2	Standard indicators for measuring intervention outputs and outcomes	67
6.1.3	Aid transparency: publishing the results of individual aid activities	96
6.1.4	Measuring operational and organisational effectiveness	99
6.1.4.1	Indicators of operational effectiveness	99
6.1.4.2	Indicators of organisational effectiveness	101
6.2	At country level	102
6.3	At programme and project level	104
7	Use of indicators in results-based approaches	107
7.1	Approaches that specify output indicators	108
7.2	Approaches that specify outcome indicators	109
8	Costs, risks and adverse effects of using indicators	114
8.1	Distortions arising from an emphasis on measures of success and on quantified aspects of performance	114
8.2	Shifting resources to easily measurable and “more productive” areas	115
8.3	Use of indicators for assessing staff performance	117
8.4	Use of standard indicators for assessing donor agencies’ contributions to development	118
8.4.1	Limited usability of standard indicators as a measure of development effectiveness	118
8.4.2	Potential adverse effects: using standard indicators to meet reporting requirements	120
8.4.3	Compatibility of standard indicators with the aid effectiveness agenda	121

9	Process of selecting indicators and defining baseline conditions and targets	122
9.1	Selecting indicators for measuring the performance of interventions or development strategies	123
9.2	Aggregating development results at agency level	127
9.2.1	Development outcomes and impacts in partner countries	128
9.2.2	Agencies' contributions to development outcomes and impacts	131
9.3	Assessing baseline conditions and formulating targets	133
9.3.1	Interventions and development strategies	133
9.3.2	Agency-level performance measurement	134
9.4	Disaggregating indicators	137
9.5	Documenting indicators	138
10	Collecting data and monitoring indicators	141
10.1	Collecting and monitoring data along the results chain	141
10.2	Capacity constraints in partner countries' monitoring systems	145
10.3	Monitoring standard indicators: challenges for donor agencies	147
11	Conclusions and policy recommendations	153
11.1	Conclusions	153
11.2	Recommendations	157
	Bibliography	159

Annexes

Annex I

Table A1: List of interviewees	179
--------------------------------	-----

Annex II

Table A2: Comparison of statements made by donor agencies on the use of results frameworks	182
Table A3: Experiences with standard indicators in German development cooperation	186
Table A4: List of standard indicators for measuring development outcomes and impacts in partner countries	187
Table A5: List of standard indicators measuring intervention outputs and outcomes	205
Table A6: Indicators measuring operational effectiveness, organisational effectiveness and efficiency – comparison of donor agencies	234

Tables

Table 1: Examples of efficiency, effectiveness and sustainability indicators	25
Table 2: Examples of standard and custom indicators (project for GlobalGAP certification in Indonesia)	28
Table 3: Indicators for assessing countries' needs and performance	41
Table 4: Standard indicators assessing countries' needs in selected sectors	48
Table 5: Donor agencies reviewed: use of indicators for agency-wide performance measurement	54
Table 6: Comparison of donor agencies' results frameworks	56
Table 7: Purpose of monitoring development outcomes and impacts in partner countries	60
Table 8: Sectors/priority areas for which standard outcome and impact indicators have been selected	64

Table 9: Standard outcome and impact indicators used by the agencies in relation to the infrastructure sector	68
Table 10: Purpose of standard indicators measuring intervention outputs and outcomes	72
Table 11: Sectors/priority areas for which standard indicators measuring intervention outputs and outcomes have been defined	75
Table 12: How are results counted and reported? Differences between donor agencies	82
Table 13: Examples for how DFID calculates results that are attributed to its support: hypothetical return on DFID-supported cash transfer coverage	87
Table 14: Examples of standard indicators defined by the donor agencies reviewed for different levels of the results chain	90
Table 15: Comparison of selected infrastructure indicators (transport, water, sanitation and energy)	93
Table 16: Indicators used in results-based approaches	112
Table 17: Checklists used by Danida, USAID and CIDA to assess the quality of indicators	126
Table 18: Criteria applied by donor agencies in selecting standard outcome and impact indicators	130
Table 19: Disaggregation of indicators	138
Table 20: Example of an indicator information sheet used by USAID	140
Table 21: Data collection along the results chain	142

Figures

Figure 1: Results chain	19
Figure 2: Indicator system for assessing performance	26
Figure 3: Interrelations between different types of indicator	34
Figure 4: Results chain of agency-level results framework	57

Abbreviations

ADB	Asian Development Bank
ADF	African Development Fund
AfDB	African Development Bank
AIDS	Acquired Immunodeficiency Syndrome
APT	Annual Performance-Based Tranche
AUD	Australian dollar
AusAID	Australian Agency for International Development
CIDA	Canadian International Development Agency
COD Aid	Cash on Delivery Aid
CPIA	Country Policy and Institutional Assessment
DAC	Development Assistance Committee
DFI	Development Finance Institutions
DFID	Department for International Development
DG DevCo	Directorate-General for Development and Cooperation
DHS	Demographic and Health Survey
DOTS	Development Outcome Tracking System
DPT	Diphtheria, pertussis, tetanus
EC	European Commission
EDF	European Development Fund
EDFI	European Development Finance Institutions
EEA	European Environment Agency
EU	European Union
EVI	Economic Vulnerability Index
FAO	Food and Agriculture Organization of the United Nations
GAVI	Global Alliance for Vaccines and Immunisations
GBS	General budget support

GDP	Gross domestic product
GIZ	Gesellschaft für Internationale Zusammenarbeit
GGDCs	Good governance and development contracts
GNI	Gross national income
GPEDC	Global Partnership for Effective Development Co-operation
GPOBA	Global Partnership on Output-Based Aid
GTZ	Gesellschaft für Technische Zusammenarbeit
Ha	Hectares
HAI	Human Asset Index
HDI	Human Development Index
hh	Households
HIV	Human Immunodeficiency Virus
IATI	International Aid Transparency Initiative
IDA	International Development Association
IDB	Inter-American Development Bank
IDG	IFC Development Goal
IEG	Independent Evaluation Group
IFC	International Finance Corporation
IMF	International Monetary Fund
IPC	Integrated Food Security Phase Classification
ISS	Immunisation services support
KfW	Kreditanstalt für Wiederaufbau
kWh	Kilowatt hour
MCA	Millennium Challenge Account
MCC	Millennium Challenge Corporation
MDG	Millennium Development Goal
M&E	Monitoring and evaluation
MfDR	Managing for Development Results

MICS	Multiple Indicator Cluster Survey
MIS	Management information system
MPI	Multidimensional Poverty Index
NSDS	National Strategy for the Development of Statistics
OBA	Output-Based Aid
OECD	Organisation for Economic Co-operation and Development
PAF	Performance assessment framework
PARIS21	Partnership in Statistics for Development in the 21st Century
PBA	Programme-based approach
PCDP	Post-Crises Direction Paper
PFM	Public financial management
PPO	Project and Programme Overview
PPP	Purchasing power parity
PRSP	Poverty Reduction Strategy Paper
PWYF	Publish What You Fund
PCIF	Post-Conflict Performance Indicators Framework
RBA	Results-based aid
RBF	Results-based finance
RBM	Results-based management
RFI	Results framework indicator
SRC	Sector Reform Contract
UCLA	University of California, Los Angeles
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UN DESA	United Nations Department of Economic and Social Affairs
UNDG	United Nations Development Group
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme

UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
USD	United States dollar
USG	United States government
WDI	World Development Indicators
WGI	Worldwide Governance Indicators
WHO	World Health Organisation

Executive summary

As more and more emphasis is placed on results and calls for transparency and accountability grow ever more vocal, so indicators are becoming increasingly important in the field of development cooperation. With tighter budgets in many traditional donor countries and mounting criticism of the general effectiveness of aid, development cooperation agencies are being challenged to become more accountable to the public and to generate more value for money.

Several global initiatives have been taken in recent years that focus on results and aim to increase overall aid effectiveness. For example, the Millennium Development Goals (MDGs) set a range of internationally agreed goals and targets for the period up to 2015. Moreover, in a series of High Level Fora on Aid Effectiveness, donors and partner countries committed to become more results-oriented and “managing for results” was adopted as one of the guiding principles of development cooperation. Transparency and accountability are central themes of the aid effectiveness agenda as well.

Indicators which measure development results and provide information on the development context are crucial to honouring the commitments of the aid effectiveness agenda. They help to plan and implement development interventions or strategies, to monitor and evaluate and to report on development results at three different organisational levels: agency level, country level and programme or project level.

However, indicators are not always easy to use and are associated with a variety of costs and risks. These costs and risks differ between the three organisational levels and depend on the type of indicator and the purpose for which it is used. Moreover, while donor agencies have already gained considerable experience in using indicators at project or programme level, there are still many lessons to be learned with respect to their use for planning, management and reporting at country and agency level. Country-level statistical and monitoring systems are often described as weak and agency-level performance measurement systems using indicators to report on results delivered across interventions and partner countries have only recently been introduced.

In light of the above, this study explores the role of indicators at three organisational levels (i.e. agency, country and project or programme levels) and makes recommendations on how they can best be used and the associated risks mitigated. Particular emphasis is laid on agency-level performance measurement systems, since evidence is especially scarce in this area. The analysis presented in this study is based on a thorough literature review and on semi-structured interviews with over 20 representatives of 14 donor agencies.

Types of indicator

Since there is no generally accepted terminology for indicators and results in relation to development cooperation, the study starts by providing definitions for different types of indicator which perform diverse and complementary functions at all stages of results-based management (RBM).

Several types of indicator are needed to monitor and evaluate the performance of development interventions and strategies and to report on progress. Indicators that measure progress along the results chain (i.e. input, activity, output, outcome and impact indicators) provide important information during the implementation process and can be used to evaluate the overall success of an intervention or strategy. In addition, contextual indicators provide information on the risks and enabling factors that may influence the performance of a project, programme or strategy. Finally, efficiency, effectiveness and sustainability indicators can be used to monitor and evaluate efficacy. These indicators do not measure results, but present information about how changes at one level of the results chain translate into changes at the next level(s).

As a further point, the indicators chosen to monitor progress or to assess contextual conditions often fall into one of two categories: key or composite indicators. This study distinguishes the two types of indicator as follows. “Key indicators” are measures of one specific phenomenon and are interpreted *pars pro toto*, i.e. they can be used as proxies to reflect broader developments in a given field such as health or education. “Composite indicators”, by contrast, consist of a variety of indicators and can be used to measure multidimensional phenomena such as human development.

For analytical purposes, the types of indicator identified above can be classified as either “custom” or “standard” indicators. According to the definitions given in this study, an indicator is said to be a custom indicator if it is tailored to describe a specific phenomenon or to estimate a distinct change in unique circumstances. Standard indicators, by contrast, are indicators that have a common definition, method of measurement and interpretation. They produce data that can be aggregated and compared across interventions, countries or regions. Due to their characteristics, custom indicators may be said to be particularly useful for monitoring the performance of individual interventions, whereas standard indicators serve primarily to report on results at an aggregate level and to inform decision-making.

Use of indicators for strategic planning

By providing information on the development context, indicators are useful for strategic planning at agency, country and programme or project level. First, donor agencies often base inter-recipient aid allocation decisions on standardised key or composite indicators which compare needs (e.g. income per capita, population) and performance (e.g. world governance indicators) between countries. Similarly, indicators can be used by both donor agencies and partner country governments to allocate resources within a country at sub-national, sector or sub-sector level.

Second, indicators provide useful information to development agencies as well as to policy-makers and officials in partner countries, so that they can formulate development strategies and set strategic goals. At an agency level, internationally agreed standard indicators such as the MDGs are especially helpful for strategic planning since they provide information on development challenges and constraints across partner countries. At a country level, indicators which paint a picture of the overall situation in a country and which measure country progress in key areas are crucial.

Third, indicators are useful for identifying and formulating development projects and programmes within partner countries that are most likely to foster the country’s development. Here, data on additional custom indicators often need to be collected in order to make a more detailed assessment of the strengths and weaknesses of the sector in question and the problems that have to be addressed.

Use of indicators for monitoring, evaluation and reporting

Indicators are also very useful for monitoring and evaluation, and for reporting on performance at agency, country and programme or project levels. Different strategies and challenges can be identified at the three organisational levels.

a) Agency level

At agency level, indicators can be used to measure and aggregate results across interventions and countries, to assess progress in implementing a strategy or strategic framework, and to monitor an organisation's operational and organisational effectiveness. The analysis shows that measuring development results at agency level is particularly challenging since development agencies usually work in different countries and sectors and undertake a broad set of very diverse interventions. This makes it very difficult to identify a limited number of indicators that adequately capture the broad variety of activities undertaken. To analyse how donor agencies deal with the challenge, we compared the experiences of 12 selected bilateral and multilateral donor agencies.

The results show that donor agencies often use two sets of standard indicators to report on development results at an aggregate level:

1. The first set measures outcomes and impacts in partner countries. It is used to provide information on the general development context and strategic information for donor agencies. However, since results measured at this level are the product of joint efforts by partner country governments, development actors and other factors, they cannot be attributed to individual stakeholders.
2. The second set of standard indicators is used by donor agencies to aggregate intervention outputs and outcomes across partner countries in order to present a snapshot of their contributions to higher-level development. While some agencies report on results achieved by partner countries with their support, others report on results that are directly attributable to their own engagement. The latter may, however, be criticised in terms of country ownership. Moreover, attribution is often not plausible when outcome-level changes are measured that are influenced by a variety of factors.

The study also shows that, in parallel with or as an alternative to the use of standard indicators for agency-level reporting, a growing number of donor agencies publish the results of individual aid activities on-line, either as part of an international common standard for reporting, the International Aid Transparency Initiative (IATI) standard, in the form of reports or as part of on-line databases. The information provided can be used by the public in donor countries as well as in partner countries to hold development actors to account. In addition, the obligation to publish information on-line may incentivise project and programme managers to become more results-oriented.

b) Country level and project or programme level

Similar types of indicator are used at country and programme or project level. Indicators at different levels of the results chain as well as contextual indicators included in results frameworks are useful for managing the implementation of individual interventions, country programmes and development strategies at national, sub-national, sector or sub-sector level. Moreover, they help to monitor progress towards targets and to report on development results.

Nonetheless, the challenges encountered when using indicators differ at the two levels. One of the main challenges identified at project or programme level is how to make more use of information on indicators for decision-making and intervention management purposes, and how to foster a results culture focusing not only on accountability, but also on management and learning.

At a country level, further progress needs to be made in strengthening partner countries' performance monitoring systems. These should ideally serve as a basis for donors and other development actors to assess the performance of interventions and to report on progress. However, partner countries' monitoring systems have long been described as weak: development objectives have traditionally been defined externally and monitoring has been done at project level rather than at sector or country level. While the quality of country-level monitoring systems has improved in recent years, big challenges remain, in particular with respect to statistical capacities, data availability and quality, and the underutilisation of results indicators for management purposes.

Furthermore, as long as partner countries' monitoring systems do not operate efficiently, donor agencies have an incentive to create parallel reporting systems in partner countries. Yet it is also important for partner countries to have a single monitoring framework that is used jointly by their own government and their development partners. This will paint a comprehensive picture of the activities undertaken, the progress made and the challenges that remain.

Use of indicators in results-based approaches

Indicators that measure results can also be used to make decisions on the disbursement of funds. This is the case in results-based approaches, which differ from more traditional aid approaches in how payments are disbursed. The level of funding is usually based on the inputs needed to achieve results. In results-based approaches, however, payments are made only once certain predefined results have been achieved. Indicators play a crucial role in this respect since they are used to measure and verify the attainment of results.

There are different types of results-based approaches. Some use indicators at output level, while others focus on outcome-level results. The selection and formulation of appropriate indicators is especially crucial in results-based approaches since performance incentives depend largely on the type and quality of indicators chosen. If the indicators are poorly defined or incomplete, the results are not fully measurable, which makes it difficult to pay for performance.

Limitations, risks and adverse effects of the use of indicators

While the potential uses of indicators are manifold, there are also certain limitations, risks and adverse effects connected with their use. In general, this study identifies two main limitations of indicators. First, there is the problem of attributing development results. Development outcomes and impacts are influenced by many factors beyond the control of the actors responsible for an intervention. As a result, changes measured by outcome and impact indicators cannot easily be attributed to individual actors.

Second, it is easier to identify suitable indicators that measure results in certain sectors and intervention areas than in others. For example, many results are qualitative (e.g. changes in the quality of governance) and very difficult to assess, which makes finding suitable indicators especially challenging. Furthermore, different unintended effects might result from the use of indicators. For instance, when indicators are used to assess performance, too strong a focus may be placed on results measured by indicators, at the expense of unquantified aspects of performance (i.e. tunnel vision). This may also lead to an emphasis being placed on measures of success rather than on the underlying objective (i.e. measure fixation). Resources may be shifted to areas where performance is easier to measure or where results are easier to achieve. Finally, the use of indicators as a control measure may encourage cheating and lead to risk avoidance.

The following limitations and risks apply to the use of standard indicators by donor agencies for reporting on their aggregate contributions (i.e. intervention outputs and outcomes) to longer-term development in partner countries.

1. First, intervention results aggregated at agency level are not an adequate measure of development effectiveness. Standard indicators are typically formulated at output or immediate-outcome level and it remains unclear whether results measured at these levels contribute to long-term development. Moreover, standard indicators have to be very broadly defined in order to apply to a variety of intervention contexts, and hence only provide a very rough and overly simplistic approximation of the results achieved.
2. Second, adverse effects may result from the use of standard indicators in order to comply with accountability demands. Results that can be measured with standard indicators are not always the most important results from an intervention perspective. Yet pressure on achieving results measured with standard indicators and aggregated at agency level tends to be greater than in relation to non-standardised results.
3. Third, the use of standard indicators may have a negative effect on the fulfilment of commitments made at the four High Level Fora on Aid Effectiveness. For example, the cost of setting up a joint performance measurement system and the cost of data collection are both high if

aid is delivered by means of programme-based approaches and each donor wants to use its own set of standard indicators. Moreover, the use of standard indicators may adversely affect the use of country-level monitoring systems since partner countries' results frameworks do not necessarily include standard indicators used by donor agencies. On the other hand, harmonising standard indicators among donor agencies may significantly reduce coordination and monitoring costs for donors and partner countries.

Selection of indicators

In order to minimise the risks associated with the use of indicators for performance measurement, they must be carefully selected. In general, the selection process should be participatory, involving the main stakeholders of the intervention or strategy that is to be monitored. Based on the literature, this study identifies five steps that should ideally be taken when selecting indicators for inclusion in results frameworks:

1. The first step is to analyse the intervention or strategy for which indicators are to be selected and to clarify its objectives.
2. An initial list of candidate indicators should be compiled for each desired result.
3. The candidate indicators should be assessed against a variety of criteria, such as reliability, objectivity and validity, in order to evaluate their quality, appropriateness and utility.
4. The selected indicators should be documented.
5. Targets should be set for individual indicators within a given time frame.

Data collection and monitoring

The usefulness of indicators for measuring performances and taking decisions in development cooperation depends largely on the quality of the data collected and more generally on the availability of data. The data sources, data collection methods and the frequency with which information is needed differ at different levels of the results chain, which means that the main challenges also differ. Data on inputs, activities and

outputs are obtained mainly from project and government records, where changes can be monitored on a regular basis. Changes in outcome and impact indicators, by contrast, take time to evolve. Surveys often need to be performed to assess progress at these levels.

Capacity constraints in partner countries' monitoring systems influence data availability and quality at all points in the results chain. There are no regular, reliable country data on many key outcome and impact indicators that are needed in order to monitor poverty reduction strategies or the progress made towards the MDGs. In addition, administrative data are often inadequate to produce reliable figures on input, activity and output indicators. Donor agencies also face many challenges in collecting and monitoring data. In order to aggregate intervention results at agency level, donor agencies have to centrally collect data on standard output and outcome indicators from a variety of interventions performed in a variety of countries. There are five main challenges here:

1. how to ensure the inclusion of standard indicators in programme or project level results frameworks;
2. how to organise the central data collection process;
3. how to improve the availability and quality of data;
4. how to deal with double counting;
5. how to measure the number of beneficiaries.

Policy recommendations

Based on the findings of this study, we make the following recommendations for future policies on indicators and methods of measuring results:

1. Development partners should make more use of indicators for management and learning purposes. To date, indicators are often used mainly to satisfy reporting requirements. This can have an adverse effect, such as too strong a focus on quantifiable results at the expense of unquantifiable aspects of performance.
2. Since the usefulness of indicators depends to a large extent on data quality and availability, development partners should increase their support for national statistical, monitoring and evaluation systems

and invest in statistical capacities in organisations and at project or programme level.

3. When reporting on results at agency level, donor agencies are advised to report on outputs and outcomes they have supported in partner countries and not to attribute results to their own engagement. Attribution is contrary to the principles of country ownership and the use of country systems. Moreover, attribution is not plausible when outcome changes are measured that are influenced by a variety of external factors.
4. Donor agencies should try harder to harmonise definitions, units of measurement and reporting standards for indicators designed to measure outputs and outcomes. This would help to reduce the overall cost of data collection and monitoring, as well as to lower the cost of coordinating joint projects and programmes.
5. Given the limitations and risks associated with the use of standardised key indicators for reporting on performance, donor agencies should explore alternatives or complementary means of reporting on results at agency level. One possibility is the use of the IATI standard for publishing results indicators for individual aid activities on-line.

1 Introduction

Indicators have long played an important role in development cooperation. They provide crucial information that donor agencies, partner countries' governments and other development actors can use as a basis for planning, managing, monitoring and evaluating development strategies and interventions (Canoog 2009, 9; UNDP 2002; Delorme / Chatelain 2011, 2-3).

In recent years, however, a number of factors have lent even greater significance to indicators in development cooperation. Bilateral and multilateral development agencies in particular are expected to display more and more public accountability and to raise the efficiency and effectiveness of development aid. The Paris/Accra Agenda¹ and the Busan Partnership for Effective Development Cooperation² call on suppliers of development cooperation to adopt results frameworks that are consistent with partner countries' development strategies and to design cost-effective instruments for managing results (OECD/DAC 2005/2008; Fourth High Level Forum on Aid Effectiveness 2011). Closely related to this, there has been a shift from a focus on inputs and outputs of development programmes and projects, such as the number of schools built, towards measuring the effect of such programmes on overall development, e.g. on literacy rates (OECD 2008c).

In order to demonstrate development results and obtain information on the overall development context, indicators have to be formulated and monitored. Indicators describe changes and phenomena (OECD 1993, 6)

-
- 1 The Paris Declaration on Aid Effectiveness (2005) is an outcome of the Second High Level Forum on Aid Effectiveness and was endorsed by 138 developed and developing countries and 30 international organisations (OECD 2014). It is based on five core principles for improving aid effectiveness (i.e. ownership, harmonisation, alignment, results and mutual accountability). The Paris Declaration lists actions that need to be taken to improve the quality and impact of development cooperation and establishes a monitoring system for assessing the progress made by donors and partner countries against the commitments made (OECD/DAC 2005/2008). The Accra Agenda for Action takes stock of the progress, sets the agenda for accelerated progress and suggests areas for improvements (OECD/DAC 2005/2008).
 - 2 The Busan Partnership document is the outcome of the Fourth High Level Forum on Aid Effectiveness and has been endorsed by 160 governments and 45 organisations to date (GPEDC 2013). It specifies four principles for effective development cooperation: "ownership by developing countries", "focus on results", "inclusive development partnerships" and "transparency and accountability to one another" (Fourth High Level Forum on Aid Effectiveness 2011).

and can be used to verify whether progress has been made towards targets and goals (UNDP 2002). In the field of development cooperation, they are especially useful for strategic planning, monitoring, evaluation, and for reporting on performance at three organisational levels: agency, country and programme or project level. While indicators have long played an important role at project level, the use of indicators for country-level strategic planning and management is still at an early stage. This is due partly to a lack of capacity in partner countries' statistical and monitoring systems (Vähämäki / Schmidt / Molander 2011, 26). Agency-level performance measurement systems that use indicators to report on results across interventions and partner countries have also been introduced only recently.

Performance can be adequately assessed only if indicators have been selected that reflect the intended results, and if data availability and quality are guaranteed. The use of indicators to measure the performance of development cooperation is not without controversy, though. First, indicators show only whether progress has been made, but do not explain why a change has occurred (UNDP 2002). Second, a strong focus on measurable results may have adverse effects. Emphasis may be placed on achieving quantifiable goals, while equally important but unquantifiable goals may be neglected (Vähämäki / Schmidt / Molander 2011, 22-23; Delorme / Chatelain 2011, 3). Third, collecting data, monitoring indicators and reporting development results are costly and time-consuming, leaving fewer resources and less time for actual project work (Vähämäki / Schmidt / Molander 2011, 24).

Against the background of these opportunities and challenges, the objective of this study is to contribute to the debate on how best to use indicators to boost the effectiveness of development cooperation, while also highlighting the limits and potential risks associated with indicators.

Most existing studies and guidance documents on the use of indicators in development cooperation are compiled by donor agencies and focus on the role of indicators in results-based management at project and programme level (see, for example, UNDP 2002; CIDA 2008b; USAID 2010b; Danida 2006b). However, these neglect the challenges, implications and risks of using indicators for results-based management and reporting at country and agency level. Furthermore, since many development agencies have developed their own results and indicator terminology, there are no generally accepted definitions of the types of indicators used in development cooperation.

This study aims to address these research gaps by providing a comprehensive conceptual inventory of the indicators used for many different purposes in development cooperation. I place special emphasis on agency-level performance measurement systems, since evidence is particularly scarce in this area. Based on a literature review and a series of semi-structured interviews, I compare the experiences of 12 selected donor agencies, not just with standard indicators for measuring longer-term development progress in partner countries, but also with aggregating intervention outputs and outcomes across countries. I attempt to set standards for the use of indicators by making recommendations for their selection and for the organisation of data collection and monitoring.

The study is structured as follows. First, I explain the background to the study by discussing the links between results, transparency and accountability as part of the aid effectiveness agenda, and by introducing the concept of results-based management (RBM). I go on to provide definitions for different types of indicators used in development cooperation. This is followed by a chapter discussing the limitations on the use of indicators in development cooperation. Chapter 5 deals with the use of indicators for planning development measures and strategies and for allocating resources. Chapter 6 analyses the role of indicators in monitoring, evaluation and reporting at agency, country and programme or project levels. Chapter 7 discusses the use of indicators for deciding on the disbursement of funds as part of results-based approaches. Chapter 8 examines the costs, risks and adverse effects associated with the use of indicators. Chapter 9 makes recommendations for selecting indicators, assessing baseline conditions and defining targets. Chapter 10 deals with the process of collecting and monitoring data throughout the results chain. It explains partner countries' capacity constraints as well as the challenges facing aid agencies in collecting data on indicators. Based on the conclusions of the study, the final chapter contains policy recommendations for the use of indicators in development cooperation.

2 Background to the study

Indicators that measure results are becoming more and more important in development cooperation, due to the heightened focus on results and greater demand for transparency and accountability. This chapter sets

out the background to the study: it discusses the links between results, transparency and accountability as part of the aid effectiveness agenda and explains the concept of results-based management which has been identified as crucial for raising aid effectiveness. I then go on to discuss the relevance of indicators in development cooperation against this background.

2.1 The aid effectiveness agenda: results, transparency and accountability

The past decade has seen a push to increase the results orientation of development cooperation, with the overall aim of raising the effectiveness of development aid. Governments are being challenged by citizens to improve their transparency and to demonstrate that public money has been spent effectively. Moreover, governments in traditional donor countries have ever tighter budgets and are therefore under pressure to allocate resources more efficiently and generate more value for money (OECD/DAC 2008, 6-7). At the same time, more general criticisms have been voiced at the effectiveness of development aid, with several studies claiming that aid has had only little impact and possibly even a harmful impact on development and poverty reduction during the past 50 years (Doucouliagos / Paldam 2009; Lensink / White 2011; Easterly 2007).³ As part of the Monterrey Consensus in 2002, donor countries pledged to increase their official development assistance to 0.7% of their gross national income (GNI) (UN 2002). Against this background, governments and development agencies have to answer even more critical questions about whether funds have been efficiently spent and whether they have helped to achieve global development goals (Nuscheler 2008, 5).

The push for results began with the adoption of the Millennium Development Declaration in 2000. This was endorsed by 189 United Nations member states and led to the formulation of the Millennium Development Goals (MDGs) (OECD 2011b, 85). The MDGs set goals, targets and indicators

3 Doucouliagos and Paldam (2009) found that aid had been ineffective in fostering economic growth. This finding was, however, challenged in a subsequent study by Mekasha and Tarp (2013), who re-examined the main hypothesis put forward by Doucouliagos and Paldam. In their study, Mekasha and Tarp expanded Doucouliagos and Paldam's meta-analysis to better reflect the economic statistical and data challenges. They found that aid had had a significant, positive impact on growth.

for reducing the many dimensions of extreme poverty during the period up to 2015 and created a global framework for measuring progress and the effectiveness of development aid (OECD/DAC 2008, 7). By specifying outcome targets (e.g. halving the proportion of people suffering from hunger), they reflect the general trend in the development community to shift the focus away from input goals (i.e. how much money is spent as development aid?) towards results (i.e. what can be accomplished with aid?) (Ashoff 2004, 1).

In a series of High Level Fora on Aid Effectiveness, development actors have since sought to sharpen the focus on results, as well as to improve transparency and accountability in development cooperation. The 2005 Paris Declaration on Aid Effectiveness cites “managing for results” as one of the five principles⁴ for making aid more effective. It specifies that the implementation of aid should be guided by the desired results and that information obtained from monitoring should be used to improve decision-making (OECD/DAC 2005/2008, 7).

As part of the principle of “managing for results”, partner countries pledged to “*establish results-oriented reporting and assessment frameworks [...] that monitor progress against key dimensions of the national and sector development strategies*” (OECD/DAC 2005/2008, 7). The idea was that, within these frameworks, a manageable number of indicators should be tracked for which cost-effective data are available (OECD/DAC 2005/2008, 7). Donors promised to link their country programming and resources to results and to align them with partner countries’ performance assessment frameworks. The idea was for indicators to be defined in accordance with partner countries’ national development strategies (OECD/DAC 2005/2008, 7). Donors and partner countries also undertook to “*work together in a participatory approach to strengthen country capacities and demand for results-based management*” (OECD/DAC 2005/2008, 8).

The commitment of donors and partner countries to become more results-oriented and to increase their accountability to the public was endorsed in the Accra Agenda for Action signed in 2008 and the 2011 Busan Partnership for Effective Development Cooperation. The greater results orientation will

4 The five principles of the Paris Declaration on Aid Effectiveness are “ownership”, “alignment”, “harmonisation”, “managing for results” and “mutual accountability” (OECD/DAC 2005/2008).

also remain relevant from a “beyond-aid perspective”, with a shift from aid effectiveness to development effectiveness (ONE 2013). Moreover, plans are now being made for a post-2015 development agenda, which will be outcome-oriented and focus on poverty reduction and sustainable development (UN 2013b).

Transparency and accountability⁵ are key to a greater results orientation since, in their absence, there is no way of knowing whether resources are spent efficiently and whether development objectives are attained (ONE 2013). Moreover, strong accountability mechanisms are generally expected to have a positive influence on aid effectiveness by incentivising those responsible for development interventions to provide better services (Wenar 2006, 7-8; Adserà / Boix / Payne 2003, 478; Winters 2013, 7-8).

Accountability in development cooperation is, however, a complex issue because development involves multiple stakeholders many of whom are accountable to many different actors (OECD 2009). While donor agencies are accountable to their governments, parliaments and citizens⁶ as well as to partner country governments, partner countries have to account to donor agencies and to their citizens (Birdsall et al. 2011, 21; Schacter 2001, 1; OECD/DAC 2005/2008, 8). The aid effectiveness agenda has led to greater emphasis being placed on mutual accountability⁷ rather than on upward accountability by the partner to the donor. Accountability commitments made by partner countries mainly involve strengthening the role of parliaments, local authorities and civil society in formulating and monitoring national development strategies (OECD/DAC 2005/2008, 8; Fourth High Level Forum on Aid Effectiveness 2011, 6). In 2011, donors and other providers of development cooperation undertook to provide timely information on aid flows to increase the medium-term predictability of aid, and to make information on development activities available to the public, including on

5 Accountability may be defined as “*the means by which individuals and organizations report to a recognized authority (or authorities) and are held responsible for their actions*” (Edwards / Hulme 1996, 967).

6 Performance measurement is not only crucial in terms of increasing transparency and accountability, but also to gain public support for development cooperation and to legitimise the budget allocated to development aid (Cook et al. 1995, 1305).

7 Mutual accountability may be defined as a process in which “*two (or multiple) partners agree to be held responsible for the commitments that they have voluntarily made to each other*” (OECD 2009).

their financing, terms and conditions, and contributions to development results (Fourth High Level Forum on Aid Effectiveness 2011, 6).

In order to meet accountability requirements, donors undertook to use partner countries' results-oriented reporting and monitoring frameworks as far as possible (OECD/DAC 2005/2008, 7). There is a risk, however, that strong accountability mechanisms in donor countries and the pressure to deliver "value for money" create perverse incentives to bypass country systems when delivering and accounting for results (Keijzer 2013, 1). In particular, donor agencies have been found to set up parallel reporting systems in partner countries due to a lack of statistical capacities (OECD 2011b, 89). Moreover, to gain public support for development cooperation and to legitimise the budget allocated to development aid, donor agencies have increased investments in communicating results to the general public. In theory, results communication should also be part of the accountability relationship between partner country governments and their citizens. However, this is only rarely practised by partner countries and therefore risks being labelled as a donor agenda (da Costa 2009, 4).

2.2 Results-based management

The principle of results-based management (RBM)⁸ plays a key role in increasing the results orientation of development cooperation and promoting transparency and accountability. Results-based management may be defined as

a management strategy aimed at achieving important changes in the way organisations operate, with improving performance in terms of results as the central orientation. RBM provides the management framework and tools for strategic planning, risk management, performance monitoring and evaluation. (Meier 2003, 6)

8 Many development agencies now prefer the term "Managing for Development Results" (MfDR) to RBM. The terms are used almost synonymously, but compared with RBM, MfDR places greater emphasis on the external environment and the development results to be achieved in partner countries, and less emphasis on the internal performance of development agencies (UNDP 2009, 6). By its own definition, MfDR goes beyond RBM by "incorporating newer ideas about collaboration, partnership, country ownership, harmonization, and alignment" (OECD / World Bank 2006, 9). Moreover, MfDR is claimed to set higher management standards than RBM thanks to its constant focus on long-term country outcomes rather than on short-term outcomes (OECD / World Bank 2006, 9).

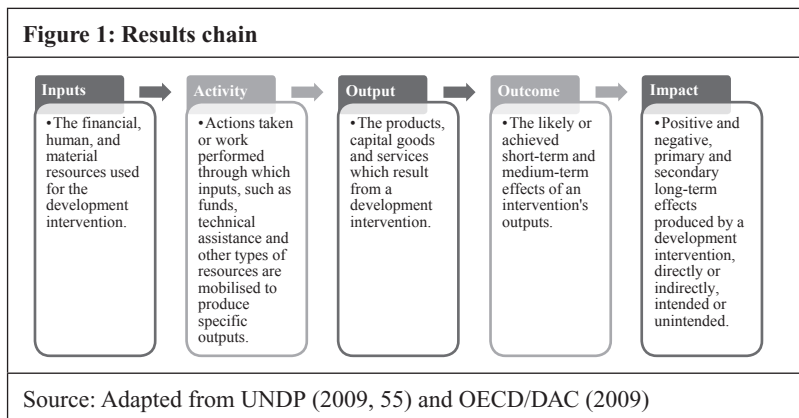
The primary purpose of RBM in the context of development cooperation is to improve the efficiency and effectiveness of development aid through organisational learning, and to raise public accountability by demonstrating results (Meier 2003, 6). RBM can be practised at different organisational levels: project level, country programme level and agency level (Binnendijk 2000, 11).

RBM is a life-cycle approach to planning, monitoring and evaluation. In the planning stage of a development project or programme, goals are set, results frameworks defined, implementation strategies developed and decisions taken on the allocation of resources. Once implementation begins, monitoring becomes important, not only in order to ascertain whether all planned activities have been performed, but also so as to assess whether the intervention is on track to achieve the agreed goals. Evaluations can complement monitoring by providing a more rigorous and ideally independent assessment of progress during the implementation stage. Once the intervention has been completed, impact evaluations assess whether its goals have been achieved. The information obtained from monitoring and evaluation (M&E) is important for taking corrective action during the implementation stage, and for generating lessons and recommendations for future interventions (UNDP 2009, 7-10; UNDG 2011, 2).

At the centre of RBM stands the results chain (see Figure 1). This is a logical and sequential model of steps that need to be taken in order to achieve the desired objectives or results. A result may be defined as *“a describable or measurable change that is derived from a cause-and-effect relationship”* (UNDG 2011, 10). The results chain depicts this causal relationship. It starts with inputs such as the amount of funding allocated to an intervention, followed by the activities undertaken to achieve the desired goals. The resources invested result in direct outputs which contribute to short-term and medium-term outcomes, and long-term impacts (Meier 2003, 6-7; OECD/DAC 2009, 42-43).

It is worth noting at this point that several development agencies have developed their own terms and definitions for depicting the links in the results chain. These are not always harmonised with the definitions formulated by the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD), which complicates comparison of results-based management practices among donor agencies. For example, the OECD/DAC defines outcomes as *“the likely or achieved short-term and medium-term effects of an intervention’s outputs”* (OECD/DAC 2009,

36) and impacts as the “*positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended*” (OECD/DAC 2009, 31). By contrast, the World Bank defines project outcomes as the “*uptake, adoption or use of project outputs by the project beneficiaries*” (World Bank 2007, 2) while impacts are simply referred to as “*higher level outcomes*” (World Bank 2007, 2).



The identification of cause-effect relationships is the basis for drafting a results framework⁹ (Roberts / Khattri 2012, 7). A results framework is one of the core elements in RBM and may be defined as “*the program logic that explains how the development objective is to be achieved, including causal relationships and underlying assumptions*” (OECD/DAC 2009, 43). Hence, in order to develop a results framework for an intervention, a thorough understanding of causal links is necessary:

- Why does a development project lead to outputs?
- In how far are outputs expected to contribute to short- or medium-term outcomes?
- How can these outcomes add to the achievement of long-term impacts?

(Roberts / Khattri 2012, 7-8; USAID 2010a, 1)

9 Besides results frameworks, many similar concepts and tools are used by development agencies. These include the theory of change, logical frameworks, logic models, results chains and outcome mapping (Roberts / Khattri 2012, 7).

Results are usually defined by means of quantitative indicators that are easily measurable. Reference points to measure changes are provided by baseline and target values included in the framework. Often, the results chain is complemented by a monitoring plan which describes the frequency with which and how progress is to be measured (Roberts / Khattri 2012, 8). A results framework also ideally entails a set of underlying critical assumptions that have to be met to achieve the desired results, and identifies risks that may endanger the attainment of goals (Roberts / Khattri 2012, 8; Norad 2008, 11; Danida 2006b, 3). Results frameworks can be used for various purposes (see Roberts / Khattri 2012, 17):

- to portray the contributions of individual interventions to development objectives;
- to help construct a results-oriented approach for a sector or sub-sector strategy;
- to guide and measure the progress made by organisations in seeking to achieve their objectives;
- country-level results frameworks can be included by national governments and development partners as part of their national development plans, country assistance strategies, joint assistance strategies, country development programming frameworks, or other official strategies.

2.3 Relevance of indicators

I showed in the previous two sections that both donors and partner countries are being challenged to raise development effectiveness and to become more accountable to the public. I also demonstrated that using RBM at agency, country and programme or project level is crucial in order to meet these challenges.

Indicators play an important role in RBM. Strategic planning is often based on indicators which provide information on context conditions. In addition, results frameworks are drawn up as part of the planning process, and these include indicators for defining expected changes at the different stages of the results chain. Monitoring, evaluation and reporting are based on the indicators defined in results frameworks as well. Yet, while the selection of appropriate indicators is a precondition for the success of RBM, studies have found that this is one of the main challenges faced by development actors

in using RBM (Vähämäki / Schmidt / Molander 2011, 20). Moreover, the use of indicators for measuring performance is not undisputed and comes with various limitations and risks. Against this background, it is important to analyse how indicators can best be used at the different stages of RBM, to identify the limitations and risks, and to make recommendations on how to select indicators and organise data collection and monitoring.

3 Definition and types of indicators

This chapter contains a comprehensive survey of the different types of indicator used in development cooperation. After giving a basic definition, I identify various types of indicators that perform diverse and complementary functions in relation to development cooperation. Taking their function as a starting point, I give definitions of the various types of indicator. Finally, indicators are classified in different categories depending on the way in which parameter values are measured.

3.1 Definition of indicators

Various definitions of indicators exist. Some of these are very general in nature, while others refer to the use of indicators in specific contexts. In general terms, the OECD defines an indicator as *“a parameter, or a value derived from parameters, which points to/provides information about/describes the state of a phenomenon/environment/area with a significance extending beyond that directly associated with a parameter value”* (OECD 1993, 6). This definition, which implies that indicators provide information which extends beyond the properties directly associated with a parameter value, allows us to identify two main functions of indicators:

1. They provide information in summary form and reduce the information need that would normally be required to paint a precise picture of a situation.
2. They can be used to communicate complex phenomena in simplified form to different stakeholders (Delorme / Chatelain 2011, 8; OECD 1993, 5).

However, indicators do not explain why a situation has arisen or a change has occurred (UNDP 2002). In the context of development cooperation, the OECD/DAC (2009, 32) defines an indicator as a “*quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor*”.

3.2 Typology based on function

Indicators are useful for various purposes in development cooperation, and these are explained in detail in Chapters 5, 6 and 7. At agency, country and project or programme level, they are useful for strategic planning, for operational management, for monitoring and evaluation, and for reporting on performance. Different types of indicators are used to perform these various functions. For the purpose of this study, we differentiate between:

- descriptive and performance indicators
- indicators used at different levels of the results chain (i.e. input, activity, output, outcome and impact indicators);
- contextual indicators;
- efficiency, effectiveness and sustainability indicators;
- standard and custom indicators;
- key and composite indicators.

These are not exclusive categories, however. There are many overlaps between the different types of indicators.

Descriptive and performance indicators

There are two basic types of indicators: descriptive and performance indicators. Descriptive indicators describe a situation or change and provide information that is not connected to a concrete target (EEA 2000). Performance indicators, by contrast, are linked to a reference value or target illustrating how far the indicator is from a desired level (EEA 2000). The OECD defines a performance indicator as used in relation to development cooperation as “*a variable that allows the verification of changes in the development intervention or shows results relative to what was planned*” (OECD/DAC 2009, 37).

Indicators used at different levels of the results chain

Within the logic of the results chain, we differentiate between intermediary indicators (i.e. input, activity and output indicators), which help to bring about a development outcome or impact, and final indicators (i.e. outcome and impact indicators), which measure short-term, medium-term and long-term development changes (World Bank 2004).

Using the OECD/DAC terminology, the different types of indicator used at the five levels of the results chain (see Figure 1) may be defined as follows:¹⁰

- Input indicators measure the financial, human and material resources used for a development intervention. *Example: The budget allocated to a vocational education programme.*
- Activity indicators measure the actions taken or work performed as a result of which inputs such as funds, technical assistance and other resources are mobilised to produce specific outputs. *Example: Number of teacher training workshops conducted.*
- Output indicators measure the products, capital goods and services which result from a development intervention. *Example: Number of teachers trained.*
- Outcome indicators measure the likely or achieved short-term and medium-term effects of an intervention's outputs. *Example: Proportion of teacher training graduates employed.*
- Impact indicators measure the positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended. *Example: Unemployment rate among young urban poor.*

The OECD/DAC's definition of outcome indicators is relatively broad and includes both the short-term and the medium-term effects of an intervention's outputs (OECD/DAC 2009, 36). Since there may be a big difference between short-term and medium-term effects, this study also distinguishes between immediate and intermediate outcome indicators. According to a definition

10 The definitions are based on the *Glossary of Key Terms in Evaluation and Results Based Management* published by the OECD/DAC (OECD/DAC 2009).

provided by the Canadian International Development Agency (CIDA),¹¹ immediate-outcome indicators measure changes that are likely to arise from the outputs of an intervention in the short term (e.g. heightened awareness, improved skills or better access to goods or services among beneficiaries, CIDA 2008a, 10). Intermediate outcome indicators, by contrast, measure changes that are “*expected to logically occur once one or more immediate outcomes have been achieved*” (CIDA 2008a, 12). In other words, they measure medium-term changes in behaviour or practice among beneficiaries, such as a greater usage of water in community X at the end of a project or programme (CIDA 2008a, 12). At outcome and impact level, we can also distinguish between indicators measuring country-wide development progress and indicators measuring results in a given geographical area (AfDB Group 2010, 3).

Contextual indicators

Contextual indicators are descriptive indicators that are tracked alongside performance indicators in results frameworks. They provide a broader view of certain conditions and external factors that may influence the ability of an agency, an intervention or a national government to achieve its goals (Steinhardt 2011, 53). Contextual indicators can be used not only to monitor potential risks or enabling factors that may affect achievements, but also to capture potential unwanted side-effects (Steinhardt 2011, 53; Binnendijk 2000, 24). Moreover, they can provide information on general economic, political, social, structural or environmental trends against which outcomes or impacts can be evaluated (European Commission Directorate-General for Agriculture and Rural Development 2006, 8).

Hence, contextual indicators tracked in a results framework include both very general indicators capturing trends (e.g., economic or political conditions), as well as more specific indicators identifying critical risk factors. For example, an intervention aiming to increase farmers’ productivity should track rainfall and temperature data to detect extreme weather phenomena that may lead to harvest losses and hence impinge upon the outcomes of a development programme.

11 CIDA (2008a, 10) defines an immediate outcome as “*a change that is directly attributable to the outputs of an organization, policy, program, or initiative. In terms of time frame and level, these are short-term outcomes, and are usually at the level of an increase in awareness/skills of... or access to... among beneficiaries*”.

Efficiency, effectiveness and sustainability indicators

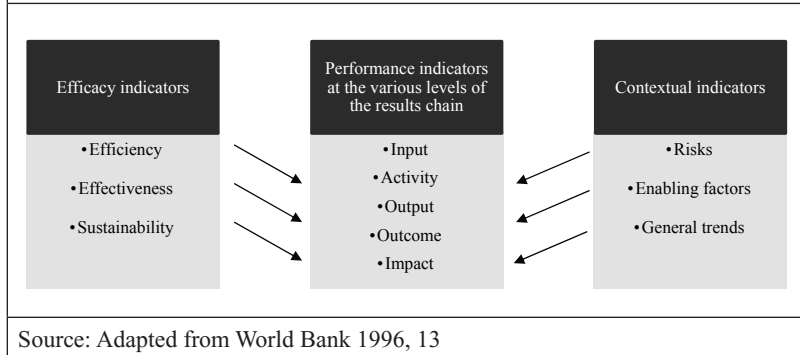
Indicators can also be used to show how well the changes at one level of the results chain translate into changes at the next level(s). Hence, they do not measure results, but look at the efficacy of an intervention or organisation in achieving its objectives (World Bank 1996, 14-15).¹² The World Bank (1996, 14-15) differentiates between efficiency, effectiveness and sustainability indicators:

- Efficiency indicators represent the ratio of inputs needed per unit of output produced.
- Effectiveness indicators show the ratio of outputs (or the resources needed to produce the outputs) to produce one unit of outcome or impact (or the degree to which outputs affect outcomes and impacts).
- Sustainability indicators measure the persistence of outcomes or impacts over time after an intervention has ended.

Efficiency indicator	Effectiveness indicator	Sustainability indicator
<ul style="list-style-type: none"> – Amount of funding needed to train one teacher – Units of labour needed to produce one kilometre (km) of road 	<ul style="list-style-type: none"> – Number of insecticide nets distributed per unit of decline in malaria prevalence rate – Number of rice farmers trained in new practice per farmer adopting the new practice 	<ul style="list-style-type: none"> – Malaria prevalence rate five years after the distribution of insecticide nets was terminated – Farmer organisations still in existence after their establishment
Source: Based on World Bank 1996, 14-15		

Figure 2 shows the interrelationship between efficiency, performance and contextual indicators to assess progress and performance.

¹² In certain cases, increased efficacy could be a desired result (World Bank 1996, 14).

Figure 2: Indicator system for assessing performance

Standard and custom indicators

In addition, one can distinguish between standard and custom indicators, which are defined in this study as follows. Standard indicators¹³ have a common definition, method of measurement and interpretation. They produce data that can be aggregated and compared across interventions, countries or regions, for example. Custom indicators, on the other hand, are not standardised. They are formulated to describe a specific phenomenon or to estimate a distinct change under unique circumstances.

Custom and standard indicators fulfil distinct and complementary functions. Custom indicators are used to reflect specific information needs, priorities and conditions against a unique intervention, country or organisational background. Custom indicators are therefore particularly useful for monitoring or evaluating the performance of specific interventions or development strategies in unique circumstances.

Standard indicators are used by development agencies to report on development results at an aggregate level and to inform high-level decision-making. The purpose of standard indicators differs depending on whether they are defined at output, immediate outcome, intermediate outcome or impact level. At intermediate outcome and impact level, standard indicators

13 Some development agencies (e.g. the European Commission and the Millennium Challenge Corporation) prefer the term “common indicator” to “standard indicator”. Standardised key indicators for different sectors (e.g. education, infrastructure and climate change) are often referred to as “core sector indicators” (see World Bank 2013b, 5).

can be used to compare medium-term to long-term development progress between countries and to present development progress at an aggregate level (e.g. among certain groups of countries or at a regional or global level). Moreover, since they provide comparable data for a range of countries, standard indicators can be used to inform broad-based strategic budget and resource allocation decisions as well as planning decisions. At output and immediate-outcome level, standard indicators allow for results to be aggregated across a number of interventions in different countries. This means that they can be used as a tool by donor agencies, groups of donor agencies or partner country governments to provide a snapshot of their contributions to higher level development objectives. As such, they are particularly useful for meeting external reporting requirements.

Both custom and standard indicators can be used in results frameworks,. However, since only a limited number of indicators can be chosen for inclusion in results frameworks, there is often a trade-off between very generic standard indicators applying to a variety of contexts and custom indicators that best reflect the changes resulting from an intervention, a country development strategy or an organisational strategy.

As an example, Table 2 shows selected custom and standard indicators at the different levels of the results chain for a hypothetical intervention aimed at giving small-scale mango farmers in Indonesia better access to more profitable, high-value markets.¹⁴ In the example, outcome-level changes, for instance, could be measured either by broad standard indicators such as “value of exports of targeted agricultural commodities” or by custom indicators which better reflect the specificities of the intervention (e.g. “share of mango exported from Indonesia to high-value markets”).

In general, it is easier to find standard indicators that are also useful for monitoring and evaluation purposes at the impact and outcome levels of the results chain than at the output or activity stage. The objectives at the outcome and impact levels of results frameworks often refer to the MDGs and hence MDG indicators can be used to measure changes at these levels. In addition, since outcome and impact objectives are often relatively general in nature and broadly defined (e.g. significant improvement in the standard

14 The intervention is hypothetical and has never been put into effect. Ideas for project objectives and indicators have been taken from project documents and indicator guidelines (see Danida 2006a; GTZ 2010).

of living of the target population), there are many other well-established standard indicators (e.g. the World Development Indicators)¹⁵ that can be used to measure changes.

At output and activity levels, however, more specific custom indicators are usually needed because the approaches adopted to achieve longer-term objectives can be very different. At the same time, standard indicators can also be used at these levels. For example, some development agencies define limited sets of standard output indicators for their main intervention areas. Programme managers are then advised to choose appropriate indicators from these sets for inclusion in results frameworks. Outputs can then be aggregated at agency level in order to demonstrate contributions towards higher development outcomes and impacts.

Objectives	Standard indicators	Custom indicators
Impact: Standard of living of small-scale farmers sustainably improved	<ul style="list-style-type: none"> – Value of agricultural production by commodity – Per capita net income – Per capita expenditure – Percentage of population living on less than USD 1.25 per day – Percentage of population malnourished – Percentage of households that are food-secure throughout the year 	

15 The World Development Indicators (WDI) are a collection of development indicators compiled by the World Bank from officially recognised international sources. They are organised around six themes: world view, people, the environment, the economy, states and markets, and global links (World Bank 2013a).

Table 2 (cont.): Examples of standard and custom indicators (project for GlobalGAP certification in Indonesia)		
Objectives	Standard indicators	Custom indicators
<p>Outcome:</p> <p>Small-scale mango farmers have better access to more profitable high-value markets</p>	<ul style="list-style-type: none"> – Gross margin per hectare of selected products – Value of exports of targeted agricultural commodities 	<ul style="list-style-type: none"> – Share of mango exports from Indonesia to high-value markets (i.e. Europe, USA and Japan) – Share of mango exports from Indonesia that are GlobalGAP certified
<p>Output 1: Farm advisers are qualified to provide training in GlobalGAP requirements</p>	<ul style="list-style-type: none"> – Number of individuals qualified to provide training related to agricultural production 	<ul style="list-style-type: none"> – Number of farm advisers qualified to provide training in GlobalGAP requirements to farmers and exporters
<p>Output 2: Small-scale mango farmers trained in good agricultural practices</p>	<ul style="list-style-type: none"> – Number of individuals trained in topics related to agricultural production 	<ul style="list-style-type: none"> – Number of small-scale mango farmers trained in GlobalGAP requirements – Satisfaction of participants with GlobalGAP training courses
<p>Output 3: Small-scale mango farmers certified as compliant with GlobalGAP standard</p>	<ul style="list-style-type: none"> – Number of farmers certified as compliant with a standard – Number of hectares certified as compliant with a standard 	<ul style="list-style-type: none"> – Number of hectares under mango certified as compliant with GlobalGAP standard – Number of small-scale mango farmers certified as compliant with GlobalGAP standard – Share of programme participants certified as compliant with GlobalGAP standard

Table 2 (cont.): Examples of standard and custom indicators (project for GlobalGAP certification in Indonesia)		
Objectives	Standard indicators	Custom indicators
<p>Activity level:</p> <ul style="list-style-type: none"> – Translate the GlobalGAP documents into Indonesian – Develop a “Smallholder Manual” on GlobalGAP group certification systems – Qualify farm advisers to provide training and consultancy services in relation to GlobalGAP – Develop new training materials and methods – Provide training to farmers on GlobalGAP requirements 	<ul style="list-style-type: none"> – Number of training courses given – Number of farm advisers qualified – Number of new training materials and methods developed 	<ul style="list-style-type: none"> – Smallholder Manual developed – GlobalGAP documents translated into Indonesian – Number of GlobalGAP training courses conducted – Number of farm advisers qualified to provide training and consultancy services in relation to GlobalGAP
<p>Input level:</p> <ul style="list-style-type: none"> – USD 100,000 	<ul style="list-style-type: none"> – Percentage of budgeted funds actually disbursed 	
Source: Own data based on Danida (2006a) and GTZ (2010)		

Contextual indicators can also be either standard or custom indicators. For example, in some cases, standard indicators such as GDP per capita are very helpful as contextual indicators. In other cases, very specific customised contextual indicators may also be useful. For example, a project which aims to inform farmers about new technologies by means of text messages is based on an assumption that farmers regularly use their phones and read text messages. Therefore, information on mobile phone usage may be relevant to explain the success or failure of such a programme. Similarly, efficiency, effectiveness and sustainability indicators can be custom or standard indicators.

Key and composite indicators

Key and composite indicators fulfil a similar function and can be used to reflect relatively broad phenomena or developments through one parameter value. This study distinguishes the two types of indicators as follows. Key indicators are defined as measures of one specific phenomenon and are interpreted on a “*pars pro toto*” basis, i.e. they are used as proxies to reflect broader developments in fields such as health or education. Composite indicators, by contrast, are compiled from a variety of indicators and can be used to measure multidimensional phenomena (e.g. human development or sustainability) (OECD 2008a, 13).

Key indicators¹⁶ are indicators chosen as proxies from a larger set of indicators because they are expected to be highly correlated with other indicators in the same field. The under-five mortality rate, for instance, is often used as a key indicator for the provision of and access to basic healthcare services in a country or region. Similarly, GDP per capita is a key indicator of the overall state of a country’s economic development. Due to their characteristics, key indicators are commonly used to provide essential information in condensed form to policy-makers, researchers, the media and the public (i.e. as descriptive indicators).

Key indicators are also useful for communicating information on performance to external stakeholders and the general public (i.e. as performance indicators). Development actors in particular often operate in a large number of countries and carry out many different interventions in different sectors. These conditions make it especially difficult to present performance data at an aggregate level. In such cases, donors can use key indicators as proxies for their overall contributions to longer-term development goals. For instance, the Asian Development Bank (ADB) uses indicators defined as “the number of students benefiting from new or improved educational facilities”, “students educated and trained under improved quality assurance systems” and “number of teachers trained with quality or competency standards” as proxies for its overall contributions to higher level strategic objectives in the field of education (ADB 2013d).

16 Some organisations distinguish between core indicators and key indicators. Core indicators are a larger set of indicators from which a reduced set of key indicators is selected (see OECD 2008b, 35).

The use of key indicators is not unproblematic, however, where they are used to compare developments at or the performances of different entities. For example, the maternal mortality rate may be a good key indicator for the overall status of a healthcare system in one country, while life expectancy at birth may be a better indicator in another country. As a result, if the state of the healthcare system is compared with the aid of just one key indicator, one country may be assessed as performing better than another, even though the latter's overall performance may be better.

Composite indicators are compiled from several indicators which are aggregated and weighted according to an underlying theoretical model (OECD 2008a, 13). The Human Development Index (HDI) is a good example of a composite indicator. Used to measure human development, its components include health (i.e. life expectancy at birth), schooling (i.e. mean and expected years of schooling) and income (i.e. gross national income per capita) (UNDP 2011, 127-130).

Composite indicators come with certain advantages and disadvantages. On the one hand, it is often easier to interpret a composite indicator measuring a complex phenomenon than to identify common trends across a variety of indicators. On the other hand, they may present an overly simplistic model of a complex concept (OECD 2008a, 13-14). Furthermore, serious failings in one dimension may be masked by positive developments in others (Schirnding 2002, 22; OECD 2008a, 14).

Moreover, the construction of composite indicators is challenging because it requires the identification of components that adequately represent a multidimensional phenomenon. In addition, appropriate weighting and aggregation procedures have to be selected that reflect the relative importance of the individual components, as well as the data properties (OECD 2008a, 13). This is also one of the main criticisms of composite indicators, since the choice of components, as well as the assignment of weights and the selection of aggregation procedures, are often subjective (Schirnding 2002, 22; OECD 2008a, 31-33).

There are a number of possible weighting techniques. Some derive weights from statistical models,¹⁷ while others use expert opinions to decide which

17 Among the statistical methods that can be used are factor analysis, data envelopment analysis and the unobserved components models (OECD 2008a, 31).

components should have a greater weighting (OECD 2008a, 31). However, weights represent a value judgement regardless of the technique used.

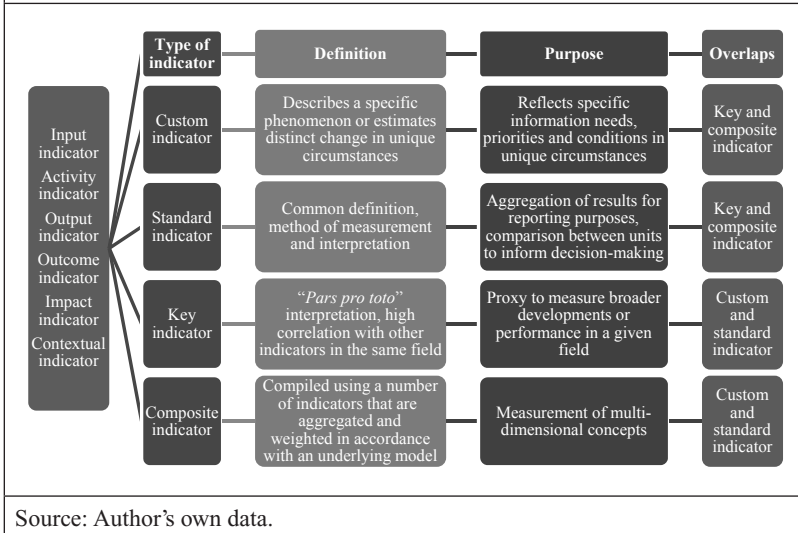
The methods chosen to aggregate variables to compile composite indicators also influence the relative importance of their individual components. If a linear method of aggregation is used, compensability between components is constant. This implies that a deficit in one dimension can be compensated by a surplus in another dimension, and that the extent of compensation is the same regardless of the score of individual components. If geometric aggregation is used, however, compensability is lower for composite indicators with lower values. Hence, a low score in one dimension has to be compensated by a much higher value in another dimension to improve the overall score (OECD 2008a, 32-33).

Interrelations between different types of indicator

Figure 3 shows interrelations between different types of indicator. The indicators used at the different levels of the results chain, as well as contextual indicators, can be either custom or standard, and key or composite indicators. For example, the indicator defined as “percentage of the population living on less than USD 1.25 per day” is a standard indicator that allows development progress to be compared between countries. At the same time, the indicator is often said to be a key indicator that can be used as a proxy to measure overall changes in poverty levels.

Similarly, many composite indicators are standard indicators at the same time. The HDI, for instance, is a composite indicator that is monitored in a relatively large number of countries.

Customised key and composite indicators are also often formulated to measure changes within the context of unique interventions or strategies. For example, a programme manager could choose to compile a wealth index that is specific to the target group so as to measure changes in beneficiaries’ living standards. Alternatively, a key indicator such as net household income could be identified, reflecting changes in the target group’s living standards as closely as possible.

Figure 3: Interrelations between different types of indicator

3.3 Typology based on how parameter values are measured

The phenomena and results captured by the types of indicators presented above can be measured in different ways. For example, indicators can measure a phenomenon or change in a direct or indirect way, and in a qualitative or quantitative manner. Moreover, parameter values can be expressed as absolute values, percentage changes, rates, ratios or as progress on a milestone scale.

Direct indicators

Direct indicators *"refer directly to the subject they have been developed for"* (MDF training & consultancy 2005, 4). For example, an indicator defined as "the number of children vaccinated" is a direct measure of the output of a child vaccination programme.

Indirect indicators

Indirect or proxy indicators measure “*something (slightly or very) different from the result itself, nevertheless thought to paint a reasonably good picture of the degree to which the result has been achieved*” (Danida 2006b, 11). Proxy indicators are often used when collecting data on direct indicators is unreasonably expensive or not feasible (USAID 2010b, 5). For example, the intelligence quotient can be used as a proxy for ability, which itself is not measurable. In general, proxy indicators should be used only if it is sufficiently clear that there is a strong correlation between the proxy indicator and the subject of interest (USAID 2010b, 5). Some proxy indicators are widely known, such as the construction of a wealth index of household assets and housing characteristics as an indirect measure of households’ living standards. More direct measures of living standards are household income, expenditure and consumption (O’Donnell et al. 2008, 69-72).

Quantitative indicators

Quantitative indicators measure results in terms of numerical values that are objective or independently verifiable, such as absolute values, percentages, rates and ratios (World Bank 1996, 16; UNDP 2009, 63; Binnendijk 2000, 28). The following are examples of quantitative indicators:¹⁸

- number of teachers trained;
- people with access to improved sanitation;
- proportion of population living on less than USD 1.25 a day;
- under-five mortality rate per 1,000 live births;
- poverty gap ratio at USD 1.25 a day.

Qualitative indicators

Not all phenomena and results can be expressed in numerical terms, however. For example, the outcomes of interventions fostering democracy, good governance or institutional capacity-building are often qualitative in

18 The indicators defined as “proportion of population living on less than USD 1.25 a day”, “under-five mortality rate per 1,000 live births” and “poverty gap ratio at USD 1.25 a day” are MDG indicators (UN 2013c).

nature and hence can usually better be measured by qualitative indicators (Binnendijk 2000, 29). Qualitative indicators can be

subjective descriptions or categories, such as whether or not a law has been passed or an institution has been established; beneficiaries' assessment of whether a project's services are excellent, satisfactory or poor; or simply a narrative describing change. (Binnendijk 2000, 28)

Qualitative indicators can be expressed by nominal or ordinal variables. Nominal variables do not have a natural ordering, but are mutually exclusive (e.g. local anti-corruption law passed/not passed). Ordinal variables have a natural order, but the distance between values cannot be quantified (e.g. satisfaction with a job training programme is low, medium or high) (UCLA 2013).

4 Limitations

Before discussing the different purposes of indicators in development cooperation, we first need to describe some of their limitations. First, indicators only measure change, but do not explain why a change has occurred (UNDP 2002). Hence, results measured by indicators cannot automatically be attributed to individual interventions or stakeholders if they are influenced by a number of different factors (Leeuw / Vaessen 2009, 21-23; Schacter 2001, 9-10). Second, it is often difficult to express qualitative changes and complex phenomena in indicators.

4.1 The attribution problem

The attribution problem is the difficulty of assessing the extent to which changes in outcome variables are caused by specific interventions or individual stakeholders contributing to an intervention (Leeuw / Vaessen 2009, 21-23; Schacter 2001, 9-10; Flint 2003, 41-42). Up to the level of outputs, it is fairly easy to attribute changes to specific interventions because inputs, activities and outputs are under the control of the stakeholder performing the intervention. Similarly, immediate outcomes – which are the changes arising directly from an intervention's outputs (e.g. improved access to clean water among project beneficiaries) – are fairly easy to attribute to individual actors or interventions.

By contrast, intermediate outcomes and long-term development impacts are influenced by many external factors, such as the economic and political environment and the activities of other development agencies. These make attribution difficult (GTZ 2004, 8-9; Prennushi / Rubio / Subbarao 2002, 108-110). For example, the number of schools built is an output that can be attributed to an intervention defined as “building schools”. The enrolment rate in the region where the schools are built is an indicator for measuring change at the intermediate outcome level. While a development intervention can help to raise the enrolment rate, it is hard to measure the precise extent to which the intervention helped in this process.

The attribution of changes at impact level is even more challenging. One example of an impact-level indicator is a country’s literacy rate. Although certain development interventions may seek to enhance this, any rise in the literacy rate is affected by many external factors. Rigorous impact evaluations are required in order to identify the contributions made by a specific intervention to development¹⁹ (Leeuw / Vaessen 2009, 22; White 2006, 2). These address the attribution problem by establishing the counterfactual, i.e. “*what would have occurred in the absence of an intervention*” (Leeuw / Vaessen 2009, ix) and comparing it with what happened as the result of the intervention (Leeuw / Vaessen 2009, 23). However, impact evaluations are expensive, technically complex and time-consuming and hence cannot be conducted for all interventions (Baker 2000, 6).

The attribution problem becomes increasingly complex as development agencies shift from a traditional project approach towards programme-based approaches (PBA)²⁰ (Schacter 2001, 9-11; Flint 2003, 41-44). With PBAs, donors make funds or other inputs available to an – ideally coherent – programme of development activities across a particular sector or area led by the partner country (OECD 2011a). Hence, because donors pool their resources and work together to achieve development goals, there is no direct link between the inputs provided by a particular donor and the results delivered by the donors’ joint efforts (Schacter 2001, 9). Nevertheless,

19 A variety of experimental methods (e.g. randomised control trials) or quasi-experimental methods (e.g. regression analysis and propensity score matching) can be used to establish the counterfactual (Leeuw / Vaessen 2009, 23-28).

20 The Paris Agenda for Aid Effectiveness stipulates that, until 2010, 66% of aid flows should be spent on PBAs (OECD/DAC 2005/2008, 10). However, the target was not met: only 45% of aid flows in 2010 were part of PBAs (OECD 2011b, 19).

donors often try to establish attribution in PBAs because they want to be able to demonstrate the results of their contributions so as to raise their visibility in the international community and satisfy reporting requirements (Vähämäki / Schmidt / Molander 2011, 23; Vollmer 2012, 53).

4.2 Measuring qualitative change and complex phenomena

A further limitation of indicators is that they cannot be applied equally well in all fields. A variety of widely accepted quantitative indicators exist in certain fields, such as health and education (e.g. “maternal mortality rates” and “school enrolment rates”). In others (such as governance), change is often qualitative and more difficult to assess. This makes it very hard to find suitable indicators (Vielajus et al. 2009, 62-63; Binnendijk 2000, 29; Pereira / Villota 2012, 24). Because progress has to be measured, less than ideal, subjective indicators are often used. For example, Ghana’s performance assessment framework (PAF) includes a binary indicator defined as “the enactment of an anti-corruption law” to measure progress in combating corruption. This does not tell us, however, whether the law is being enforced and whether any progress has been made in combating corruption (Pereira / Villota 2012, 24).

Likewise, in certain fields and sectors, indicators are of greater use and are easier to apply for some interventions than for others (Vielajus et al. 2009, 62-63; Binnendijk 2000, 29). Taking the example of the education sector in Senegal, Vielajus et al. (2009, 63) showed that the effectiveness of many development programmes, projects and sector policies can easily be measured by widely accepted quantitative indicators which can be aggregated for comparison purposes (e.g. school enrolment rates, dropout and completion rates and gender parity).

However, such universally accepted indicators are not equally available for all interventions in the same field. The results of programmes focusing on long-term capacity-building and institution-building (e.g. to increase the quality of education and teacher training, or to enhance the competence of local authorities) are often qualitative and can take relatively long to unfold. Indicators measuring such qualitative changes are difficult to define. Furthermore, if they are used, they are not as universally applicable as many quantitative indicators. They often cannot be aggregated and are therefore less suitable for reporting purposes. One possible solution would be to use

quantitative indicators also for measuring qualitative results. For example, a programme focusing on long-term capacity-building in education may also have an effect on quantitative indicators such as the “school enrolment rate”. However, the effect is likely to be less direct and to take longer to unfold than the effect of building schools or training additional teachers (Vielajus et al. 2009, 63).

5 The use of indicators for strategic planning

The life cycle of results-based management begins with a planning stage in which resources are allocated and development strategies and interventions formulated. By informing decision-making, indicators play an important role during the planning process. This is the subject of the following two sections.

5.1 Aid allocation based on indicators

Indicators can be used by donors as a basis for allocating aid to partner countries (i.e. inter-recipient aid allocation). They are equally helpful for allocating resources in partner countries at sub-national, sector and sub-sector levels (i.e. inter-sectoral aid allocation).²¹ Aid allocation decisions are often made on the basis of indicators assessing countries’ needs²² (e.g. income per capita, population size) and performance (e.g. world governance indicators) (Guillaumont 2008, 9-12). Indicators used for allocating aid must be standardised, since this is the only way of guaranteeing comparability among countries or regions.

The practice of allocating aid based on countries’ needs and performances is related to the principles of equity and effectiveness which have been suggested as guiding principles for resource allocation decisions (Guillaumont 2008, 5). Equity implies that resources should be allocated

21 Theoretically, aid can be allocated first to sectors and then to countries. However, this does not happen in practice because it is very difficult to compare needs and performances between different sectors. For instance, it is difficult to find objective criteria that could be used to compare the performance of the healthcare sector with that of the education sector.

22 These can also be regional or sectoral.

with the aim of promoting equal opportunities among and within countries. Hence, countries, regions and sectors with greater needs than others should receive more aid. Effectiveness is about the allocation of aid to those countries, regions and sectors where it has the biggest impact on poverty reduction and economic growth (Guillaumont 2008, 5-8).

There are two main sets of determinants of the effectiveness of aid. The first is related to countries' performance in terms of good governance and the presence of a sound policy and institutional environment. For instance, Svensson (1999) and Kosack (2003) have shown that aid is most effective in democratic countries, while Burnside and Dollar (2000), and also Collier and Dollar (2001) identified a positive relationship between aid and growth in countries with sound institutions and good fiscal, monetary and trade policies.²³

The second set of factors is related to countries' needs. For example, aid has been found to be especially effective in post-conflict situations (Collier / Hoeffler 2004) and in countries that are particularly vulnerable to external or climatic shocks²⁴ (Guillaumont / Chauvet 2001; Chauvet / Guillaumont 2004).

However, performance-based and needs-based approaches to aid allocation may also lead to conflicting allocation patterns. For example, several studies point to a positive correlation between per capita income and levels of good governance (see Gradstein 2004; Kaufmann / Kraay / Mastruzzi 2006). As a result, while many countries should receive large shares of donors' aid budgets viewed from the perspective of a needs-based approach, the same countries would only qualify for a small amount of aid on the basis of a purely performance-based approach. Moreover, although there is a broad consensus that aid allocation decisions should be based on the principles of effectiveness and equity, aid allocation patterns today are still largely

-
- 23 Several studies have challenged the results reported by Burnside and Dollar (2000). For example, using the same methodology as Burnside and Dollar, Easterly, Levine and Roodman (2004) extended the sample by a number of years. They no longer found that aid had a positive impact on growth in good policy environments. Their study raised new doubts about the effectiveness of aid in favourable policy conditions. Policy-makers should therefore proceed with caution in conditioning aid on policy performance.
- 24 Vulnerability may be defined as *“the likelihood of negative and durable effects of shocks on poverty reduction, either due to their effect on growth or to a direct effect on poverty”* (Guillaumont 2005, 8).

influenced by political or commercial interests and by past colonial ties (see Allesina / Dollar 2000; Berthélemy 2006; Dollar / Levin 2004).²⁵

5.1.1 Inter-recipient allocation of aid

As regards the inter-recipient allocation of aid, a number of standard indicators (both composite and key) have been proposed for assessing countries' needs and performance. Some of these are shown in Table 3. A minus sign (-) means that the lower the value, the greater the needs or the higher the performance. A plus sign (+) indicates the opposite.

Table 3: Indicators for assessing countries' needs and performance	
Needs	Performance
<ul style="list-style-type: none"> - GDP or GNI per capita (USD, PPP) (-) - Poverty headcount index, poverty gap, squared poverty gap (+) - Human Development Index (-) - Child mortality rate (+) - Human Asset Index (-) - Economic Vulnerability Index (+) - Land-locked developing country (+) - Small island developing state (+) - Post-conflict country (+) - Magnitude of societal-systemic impact (+) - Oil and natural gas reserves (-) - Population size (-) 	<ul style="list-style-type: none"> - Recent growth in GDP per capita (+) - Recent reduction in child mortality (+) - Recent improvements in girls' enrolment rate (+) - Worldwide Governance Indicators (+) - Country Policy and Institutional Assessment (+) - Post-Conflict Performance Indicators Framework (+) - Public spending on education as percentage of GDP (+) - Public spending on health as percentage of GDP (+)
<p>Sources: Anderson (2008, 13); Guillaumont (2008, 16-18); Collier / Dollar (2001, 1489); IDA (2001, 7-9); Marshall (2002, 1)</p>	

25 For instance, Allesina and Dollar (2000) found that US aid allocation decisions were strongly influenced by the country's strategic interests in the Middle East. They also found that Japan's allocation pattern was greatly influenced by UN voting patterns (i.e. countries which sided with Japan in the general assembly received more aid), while France strongly favoured its former colonies.

Indicators for assessing countries' needs

The indicators of countries' needs shown in Table 3 relate to five main factors:

- the level of deprivation of the population;
- the level of economic vulnerability;
- the level of affectedness by past conflicts;
- the ability to obtain revenue sources besides aid;
- population size.

Either income-based or non-income-based measures can be used to measure countries' level of deprivation (Anderson 2008, 13). Among the income-based deprivation indicators that can be used are gross domestic product (GDP) per capita or the gross national income (GNI) per capita, the poverty headcount index,²⁶ the poverty gap²⁷ and the squared poverty gap²⁸ (Verme / Ceriani 2013; Collier / Dollar 2001, 1489; Guillaumont 2008, 4). The figures for GDP and GNI per capita are widely available and provide a useful and simple approximation of the average level of prosperity in a country (Guillaumont 2008, 15; Verme / Ceriani 2013). Critics have, however, claimed that they do not take account of the distribution of income among the population, which is often highly unequal in developing countries (Matteis 2013, 55). For this reason, poverty indicators may be better suited for capturing the level of deprivation in a country. Critics also argue that income-based measures are only an insufficient approximation of the many dimensions of human development and that non-income measures such as the Human Asset Index (HAI) should therefore also be included in aid allocation formulae (Guillaumont 2008, 16).

26 The poverty headcount index is defined as *"the share of the population whose income or consumption is below the poverty line, that is, the share of the population that cannot afford to buy a basic basket of goods"* (Coudouel / Hentschel / Wodon 2002, 34).

27 The poverty gap *"provides information regarding how far off households are from the poverty line. This measure captures the mean aggregate income or consumption shortfall relative to the poverty line across the whole population"* (Coudouel / Hentschel / Wodon 2002, 34).

28 The squared poverty gap *"takes into account not only the distance separating the poor from the poverty line (the poverty gap), but also the inequality among the poor. That is, a higher weight is placed on those households further away from the poverty line"* (Coudouel / Hentschel / Wodon 2002, 34).

There are also many different ways of accounting for economic vulnerability in aid allocation decisions. For example, economic vulnerability could simply be captured by binary indicators such as whether or not a country is landlocked or a small island state.²⁹ Alternatively, composite indicators such as the Economic Vulnerability Index (EVI) can be used. The latter encompasses various factors related to the risk of exposure to external shocks and the resilience to shocks³⁰ (UN DESA 2011; Guillaumont 2008, 16).

Similarly, as regards assessing countries' additional needs resulting from past conflicts, either a binary indicator simply capturing whether or not a country has experienced a conflict in recent years or an indicator which also assesses the magnitude of past conflicts³¹ could be used. A variety of indicators could be selected to account for countries' ability to obtain additional revenue sources besides aid (such as the existence or extent of natural resource deposits).³²

Finally, some commentators argue that "population size" correlates negatively with countries' per capita need for development aid. First, larger countries can make use of economies of scale in running aid programmes. Second, they are considered to be more resilient to external shocks (Anderson 2008, 13). In addition, although not directly related to countries' needs or performance, donors argue that aid should not be given almost exclusively to a few very

29 Small island states are particularly vulnerable to external forces outside their control because of their small size, insularity, remoteness and proneness to natural disaster (Briguglio 1995, 1616-1618). The vulnerability of landlocked countries results from their limited access to markets and high dependence on neighbouring countries (Faye et al. 2004, 32).

30 The EVI is a composite indicator consisting of two indices: for shock and exposure. The shock index incorporates the following indicators: "remoteness", "merchandise export concentration", "share of agriculture", "forestry and fisheries" and "share of population in low elevated costal zones". The exposure index is made up of the following indicators: "instability of exports of goods and services", "victims of natural disasters" and "instability of agricultural production" (UN DESA 2011).

31 For example, the "magnitude of societal-systemic impact" indicator expresses the magnitude of a conflict on the society or societies directly affected by it, on a scale from one (smallest) to ten (largest) (Marshall 2002, 1).

32 One indicator suggested by Anderson (2008, 13) is "oil and natural gas reserves", which is regarded as correlating negatively with countries' needs. Countries with large oil and gas reserves are likely to have a greater potential for increasing their domestic revenue and to have better access to international capital markets than countries without such reserves.

big countries because this conflicts with principles of international equity (Anderson 2008, 13). Related to this, Baulch (2006) found that donors allocated less aid per capita to the most populous countries, which also happen to be the most deprived countries in terms of shares of global poverty.

Indicators for assessing countries' performance

There are three ways of assessing the performance of partner countries:

1. by quantitative measures of improvements in outcome variables;
2. by qualitative assessments of their policies, institutions and level of governance (Anderson 2008, 13);
3. by means of indicators measuring public expenditure in sectors that are crucial to development such as healthcare and education.

Examples of quantitative indicators which measure improvements in outcome variables are “reduction in the child mortality rate” or “improvements in girls’ enrolment rate”. In order to compare countries’ performances, the period during which changes are measured has to be specified (e.g. improvements made during the past five years). The assumption is that the greater recent improvements in outcome variables, the better the performance of governments or other development actors, and thus the higher the chance that aid is used effectively. Following this logic, a country posting a rapid decline in the child mortality rate should receive more aid than a country where the decline is less steep (Kanbur 2004, 19). However, changes in outcome variables are influenced by many factors and may therefore be a poor proxy for aid effectiveness (Kanbur 2004, 21). For example, a country in an economic crisis may show only a slow improvement in girls’ enrolment rate despite substantial government efforts.

Examples of qualitative indicators measuring country performance are the Country Policy and Institutional Assessment (CPIA)³³ rating conducted

33 The CPIA is a composite indicator which evaluates a country’s policy and institutional performance. It is based on 16 criteria grouped into four equally weighted clusters: economic management, structural policies, policies on social inclusion and equity, and public sector management and institutions (IDA 2011, 1).

by the International Development Association (IDA)³⁴ and the Worldwide Governance Indicators (WGI)s.³⁵ Both sets of indicators provide a subjective assessment of a country's performance in fields considered to influence aid effectiveness. The CPIA is produced by the World Bank and evaluates policy and institutional performance (IDA 2011, 1). The WGI)s report aggregate and individual indicators in six governance fields and combine the views of a large number of survey respondents (enterprises, citizens and experts) in both developed and developing countries (World Bank 2013c).

Indicators measuring public expenditure in sectors such as healthcare and education can also be used as proxies for the commitment of partner country governments to fostering economic, social and human development. However, researchers do not agree on whether an increase in public spending alone leads to better development outcomes. While some studies have found that spending has a positive impact on outcomes (Bidani / Ravallion 1997; Gupta / Verhoeven / Tiongson 1999), others have not found a significant influence or have identified only a very small impact (Filmer / Pritchett 1999; Rajkumar / Swaroopa 2008). Moreover, several studies have suggested that the effects of higher public spending are positively and significantly influenced by the quality of governance and levels of corruption (see Rajkumar / Swaroopa 2008; Baldacci et al. 2004).

5.1.2 Allocation of aid within countries

The principles of equity and effectiveness can also be applied to the allocation of aid within countries at sub-national or sector level. Yet donors have only a limited degree of influence on aid allocation decisions taken within countries. There are two reasons for this (Pietschmann 2014, 73-74):

34 The IDA is the World Bank's fund for the poorest countries. Countries are eligible for the IDA if they meet the following two criteria: relative poverty defined as GNI per capita below an annually updated threshold (2012: USD 1,175); lack of creditworthiness to borrow on market terms and therefore a need for concessional resources to finance the country's development programme (World Bank 2012b).

35 The WGI)s report aggregate and individual indicators in six governance fields: voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption. They are produced by Daniel Kaufmann (Brookings Institution), Aart Kraaz (World Bank Development Research Group) and Massimo Mastruzzi (World Bank Institute) (World Bank 2013c).

1. Donors have agreed, under the Paris Declaration on Aid Effectiveness, to align their support with partner countries' national priorities (OECD/DAC 2005/2008, 3).
2. Aid has been found to be fungible. Hence, the allocation of aid to one region or sector may lead to a decrease in government resources allocated to the latter (Feyzioglu / Swaroop / Zhu 1998, 54).

Nonetheless, it is important to note that needs-based and performance-based approaches can be used by donors not just to allocate aid. They are equally useful to national governments in allocating resources across regions and sectors and in identifying national priorities for their development strategies.

Sub-national allocation of aid

Since allocating resources at sub-national level is also a decision on the distribution of aid between regional entities, similar indicators can be used as for the cross-country allocation of aid. However, disaggregated data at sub-national level are needed in order to compare the needs and performance of different regions within countries. For instance, data could be disaggregated between rural and urban areas, administrative units or between geoclimatic units (Prennushi / Rubio / Subbarao 2002, 111-112).

While needs are fairly easy to assess at sub-national level and, provided that disaggregated data are available, many of the indicators proposed for the assessment of needs at country level can also be used (e.g. GDP per capita and the child mortality rate), it is more difficult to assess performance at a sub-national level. Indicators such as the CPIA and the WGIs are only measured at country level and suitable indicators that paint a picture of the performance of sub-national governments may not always be available. Similarly, it may be difficult to find indicators that can be used as proxies to assess differences in the development orientation of sub-national authorities (such as "public spending on education as percentage of GDP" at country level). Moreover, since most budgetary decisions are taken at a national level, this type of indicator may not provide helpful information. However, to compare quantitative improvements in outcome variables, the same indicators could be used as for inter-recipient aid allocation.

Inter-sectoral allocation of aid

It is not easy to apply the principles of equity and effectiveness to the inter-sectoral allocation of aid because it is not possible to directly compare indicators measuring the needs and performance of different sectors. For instance, from an effectiveness perspective, it is difficult to assess how much improvement in school enrolments equals a 10% decrease in the child mortality rate. One possibility is not to directly compare different sectors within countries, but instead to compare the needs and performance of individual sectors in one country relative with those of other countries. From the perspective of a needs-based approach, more aid would then be allocated to those sectors in which the partner country, compared with other countries and relative to other sectors in the same country, has comparatively large deficiencies (Kasuga 2008, 8). If a performance-based approach is followed, aid would be allocated primarily to those sectors showing relatively high improvement rates in outcome indicators in recent years and to sectors with better institutional and policy environments. Kasuga (2008, 8-9) shows that, in practice, inter-sectoral aid allocation rarely reflects partner countries' needs and that the efficiency of aid allocation between sectors depends on the quality of partner countries' governments.

It is also difficult to factor performance data into inter-sectoral aid allocation decisions, which is why it rarely happens in practice. It is often impossible to compare the performance of different sectors based on improvements in outcome indicators. Similarly, it is difficult to judge which sector is performing better in terms of good governance, policies and institutional environment. In addition, there may be spillover effects across sectors, i.e. the results achieved in one sector may influence the results in another sector. This means that a lack of support for sectors where aid is considered to be less effective may produce less progress in other sectors (Pietschmann 2014, 65).

By way of example, Table 4 shows a selected set of standard indicators proposed by Kasuga (2008) that can be used to assess countries' needs in selected sectors (i.e. healthcare, transport and storage, communications, energy and education).³⁶ The lower the indicator values, the greater the needs of the sector in question. To compare needs between sectors within a given

36 The indicators presented here to assess countries' sectoral needs are part of the WDIs collected by the World Bank.

country, Kasuga (2008, 6-8) first creates categorical variables to compare the need between countries in different sectors. The variables range from 1 (i.e. the minimum need among the partners) to 20 (i.e. the maximum need among the partners). As a second step, he uses the values for the categorical variables to rank sectors within a given country. For example, if a country scores 13 points in transport and storage, 10 in education and 2 in food, then the first priority would be transport and storage, the second education and the third food (Kasuga 2008, 8).

A similar approach could be used to compare the performance of different sectors within a country. However, standard indicators are not likely to be available when assessing sectoral performance in terms of policies, institutions and governance. It is very hard to collect comparative data on the latter because each country uses a unique form of sector governance.

Table 4: Standard indicators assessing countries' needs in selected sectors	
Sector	Needs
Health	<ul style="list-style-type: none"> – Births attended by skilled health staff (% of total) – Immunisation, measles (% of children aged 12-23 months)
Transport and storage	<ul style="list-style-type: none"> – Roads, paved (% of total roads) – Railways, goods transported (million tonne-km)
Communications	<ul style="list-style-type: none"> – Fixed line and mobile phone subscribers (per 1,000 people) – Telephone mainlines (per 1,000 people)
Energy	<ul style="list-style-type: none"> – Electric power consumption (kWh per capita) – Electric power transmission and distribution losses (% of output)
Education	<ul style="list-style-type: none"> – School enrolment, primary (% gross) – Persistence to grade 5, total (% of cohort)
Source: Kasuga (2008, 19-20)	

5.2 Formulating development strategies and planning interventions

By providing information on key development challenges and trends, indicators are useful for policy-makers and officials in both partner and donor countries for planning development strategies and setting strategic goals. They can also be used for identifying and formulating development interventions that are most likely to help achieve the goals set. In addition, the use of indicators within results frameworks is an important element of strategic planning and management. The selection of indicators at the different levels of the results chain helps to clarify the logic of a strategy or intervention, i.e. what inputs, activities, outputs and outcomes are needed in order to achieve the overall objective (Roberts / Khattri 2012, 14). Setting targets for indicators helps to specify the nature of the objectives and the timeframe within which results are planned to be achieved (Binnendijk 2000, 16; MDF training & consultancy 2005, 3). In general, the better grounded the analysis of the cause-effect relationship between inputs, activities, outputs, outcomes and impacts, the greater is the likelihood of the intervention or strategy having a successful outcome (Roberts / Khattri 2012, 7-10).

Depending on the organisational level (i.e. agency, country or programme/project level), different context conditions have to be observed during the planning process, which means that different indicators are useful. These will be explained separately in the following three paragraphs.

At agency level

Most development agencies have formulated strategic frameworks and strategies that include a mission statement, the development goals to which they seek to contribute and the priority areas on which their development efforts will concentrate (Binnendijk 2000, 81). Some agencies have also formulated agency-level results frameworks for monitoring the implementation of their strategies. In formulating a strategic framework, donor agencies usually take account of various factors such as the development challenges and constraints in partner countries, as well as the general framework conditions in international development cooperation.

A number of internationally agreed key and standard indicators (e.g. the MDG indicators, the Paris Declaration indicators and the indicators of the

Global Monitoring Framework)³⁷ are helpful in this respect. The MDGs are an overall strategic framework and reference point to which development agencies worldwide aim to contribute (UN 2013c). The indicators measuring progress towards the MDGs are useful for identifying areas in which the need for assistance is greatest and for defining strategic goals and priority areas for development cooperation. In addition, several other standard indicators such as the WDIs provide information on development outcomes in partner countries. The Paris Declaration on Aid Effectiveness's indicators and the indicators of the Global Monitoring Framework provide guidance on how to organise and coordinate development cooperation so as to increase aid effectiveness (OECD/DAC 2005/2008; GPEDC 2013).

At country level

At country level, indicators help both donor agencies and partner country governments in formulating development strategies at country, sub-national, sector or sub-sector level. More specifically, indicators provide important information on key development challenges and constraints in a given country. In addition, tracking indicators over longer periods enables likely future trends to be identified and incorporated into planning (Cook et al. 1995, 1305). For example, a sharp decline in child mortality may suggest a future lower need for assistance in primary healthcare services. Based on this information, partner countries can devise development strategies that target the challenges identified. Moreover, country-level development cooperation strategies can be formulated that are agreed between donors and partner countries. As part of the Paris Declaration on Aid Effectiveness, partner countries pledged to “*exercise leadership in developing and implementing their national development strategies*”³⁸ and to “*translate these national development strategies into prioritised results-oriented operational programmes*” (OECD/DAC 2005/2008, 3), while donors promised to “*base their overall support — country strategies, policy dialogues and development co-operation programmes — on partners’ national development strategies*”

37 The indicators of the *Global Monitoring Framework track progress on the commitments and actions agreed at the Fourth High Level Forum of Aid Effectiveness in Busan (UNDP 2013)*.

38 The term “national development strategies” as used in this study, and also in the Paris Declaration on Aid Effectiveness (see OECD/DAC 2005/2008, 3), includes poverty reduction strategies, sector and thematic strategies and similar overarching strategies.

(OECD/DAC 2005/2008, 3). Taking the indicators and goals defined by partner countries in their national development strategies as a starting point helps donors to formulate country strategies that best support development in partner countries. However, the evaluation of the Paris Declaration showed that, in 2011, only 37% of the countries participating in the survey had put an operational development strategy in place (OECD 2011b, 30).

A variety of indicators can be used to identify the main challenges that should be addressed by development strategies,³⁹ and to identify areas where the need for assistance is greatest. Indicators measuring country progress in key performance areas provide an overview of the general situation of a country. The ADB, for instance, collects standardised key indicators for all ADB member countries in the fields of poverty, human and economic development, regional cooperation and integration, access to basic infrastructure, finance, governance and environment (ADB 2012a, 2-6). These can be used to make an initial assessment of the challenges in different sectors.

Monitoring MDG indicators is similarly helpful for identifying areas in which assistance is needed most urgently (UN 2004, 6). After making an initial assessment of a country's general situation, it is often advisable to undertake a more detailed analysis at sector and sub-national level to find out how widespread the problems are and who is most affected (UN 2004, 11). In particular, it may be helpful to account for regional disparities, gender inequalities and differences between social groups in development strategies. To this end, separate indicators should be compiled, for example for different geographic regions or social groups,⁴⁰ in order to identify those groups that are especially vulnerable, excluded or disadvantaged, and those regions that are neglected or which lag behind in terms of social and economic development (Human Rights Education Association 2007, 16; UN 2004, 11).

39 A "development strategy" is either a national development strategy formulated by a partner country or a donor's country strategy that has been agreed with partner countries.

40 For example, data produced by indicators can be disaggregated by sex, urban and rural regions, as well as by geographical region or administrative unit.

At programme or project level

The indicators used for country, sub-national, sector or sub-sector level development strategies, as well as the key indicators used to devise these strategies, provide a good starting point for identifying and formulating development programmes and projects. As agreed at the four High Level Fora on Aid Effectiveness, planned interventions should contribute to achieve the results set out in partner countries' development strategies. In addition to the information provided by indicators in country strategies and programmes, a more detailed assessment of the strengths and weaknesses of the targeted sector, the problems that have to be addressed, and the specific context conditions is often needed (EU 2012, 92; MDF training & consultancy 2005, 2). For this reason, additional data on very specific indicators often also have to be collected to analyse the intervention context. For example, an agency planning an HIV/AIDS intervention may use indicators on HIV prevalence rates to identify target regions and/or groups of beneficiaries. This type of outcome information can also be used later during the implementation stage as baseline information (MDF training & consultancy 2005, 2).

6 The use of indicators for monitoring, evaluation and reporting

Indicators in results frameworks can be used for monitoring, evaluating and reporting on performance. Different strategies and challenges for performance measurement and reporting can be identified, depending on whether indicators are used at agency, country or programme and project level. These are analysed in the following sections at the three organisational levels.

6.1 At agency level

Indicators play an important role in agency-level performance measurement. They are useful for measuring and aggregating results across interventions and countries, for assessing progress in implementing a strategy or strategic framework, and for monitoring an organisation's operational and organisational effectiveness. By providing information on a variety of

factors, agency-wide performance measurement systems can help not only to satisfy external reporting requirements, but also to improve organisational learning and internal management (Lehtinen 2002, 18).

However, Binnendijk (2000, 80) notes that, due to the nature of international development cooperation, measuring and aggregating results to measure performance at agency level is very challenging for a number of reasons:

- First, donor agencies usually work in several countries. Hence, it is not possible to obtain information on performance from a single national source. Although international statistical databases exist that provide data on a variety of standard indicators in a number of countries, data comparability is generally weak. Moreover, the statistical capacity in many developing countries is insufficient, which means that problems with the frequency, timeliness and coverage of data are common.
- Second, most development agencies are active in a number of sectors and carry out very diverse interventions. As a result, it is extremely difficult to establish a performance measurement system at agency level for all sectors and fields covered by the agency.
- Third, development outcomes in partner countries are influenced by a variety of factors. Hence, collecting data on outcome or impact indicators and attributing them to the activities of a single agency is highly questionable.
- Fourth, many development interventions do not have any real impact until several years have elapsed. Yet, in order to meet accountability requirements, results have to be reported in the short term. For example, many parliaments demand annual reports on the results delivered through official development assistance (Schacter 2001, 13).
- Last, development agencies are moving away from service delivery towards capacity-building and institution-building in developing countries, which can only hardly be captured by performance indicators (Binnendijk 2000, 80).

Development agencies have pursued various strategies to address the problems of agency-wide performance measurement. By comparing the experiences of 12 selected agencies (see Table 5), this section provides an overview of the variety of approaches and attempts to identify best practices. The agencies reviewed in this section were selected because they

have considerable experience in agency-level performance measurement. They include seven multilateral agencies and five bilateral agencies.⁴¹

Table 5: Donor agencies reviewed: use of indicators for agency-wide performance measurement	
Multilateral agencies	Bilateral agencies
<ul style="list-style-type: none"> – African Development Bank (AfDB) – Asian Development Bank (ADB) – European Commission (Development and Cooperation Directorate-General – EuropeAID) – International Finance Corporation (IFC) – Inter-American Development Bank (IDB) – United Nations Development Programme (UNDP) – World Bank 	<ul style="list-style-type: none"> – Australian Agency for International Development (AusAID) – Department for International Development (DFID) – Millennium Challenge Corporation (MCC) – Ministry of Foreign Affairs of Denmark (Danida) – US Department of State / United States Agency of International Development (USAID)

This section is structured as follows. Since the majority of development agencies reviewed for this study use indicators to measure agency-wide performance as part of results frameworks, section 6.1.1 starts by comparing the structure and purpose of the frameworks used by the development agencies reviewed. Two approaches to measuring and reporting on development results achieved at the agency level are then discussed. The first approach, followed by the majority of agencies reviewed, is to use standard indicators for measuring development progress in partner countries and for aggregating intervention outputs and outcomes delivered at agency level. The second approach, which has been adopted by a growing number of agencies as an alternative or complementary to standard indicators, is to publish the results of the interventions they support on-line. Finally, section

41 The experiences of German development cooperation agencies will not be discussed here since their initiatives undertaken to aggregate results at the agency-level are still in a piloting phase. For example, the Kreditanstalt für Wiederaufbau (KfW) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) have only recently started piloting standard indicators for agency-level performance measurement (see Table 24 in the appendix).

6.1.4 deals with the question of how donor agencies use indicators for measuring their organisational and operational effectiveness.

6.1.1 Results frameworks

Of the development agencies reviewed for this study, the World Bank, ADB, AfDB, IDB, DFID, AusAID, UNDP and the IFC have already adopted results frameworks,⁴² or “corporate scorecards”, at agency level. In accordance with the EU development strategy entitled *Agenda for Change*, EuropeAid is also in the process of developing a corporate results framework, known as the “EU development and cooperation results framework”, for measuring and communicating development results delivered by EU-funded projects and programmes managed by EuropeAid (EC 2011, 11; EuropeAid 2013, 3; EC 2013a).

The structure of the results frameworks used by the agencies reviewed is similar. Most use indicators to measure performance at four levels (see Table 6).⁴³ At level 1, development agencies commonly measure development outcomes and impacts in partner countries to which they seek to contribute. At level 2, they measure their key contributions (i.e. intervention outputs and outcomes) to these higher level development outcomes. Indicators at levels 3 and 4 measure issues of operational and organisational effectiveness.

Some donor agencies use a slightly different structure. AusAID, for instance, measures both operational and organisational effectiveness at one level, i.e. level 3 (AusAID 2012, 20). The IDB measures lending programme targets at level 3 and operational effectiveness and efficiency indicators at level 4 (IDB 2012, 20). UNDP measures development results at three levels (i.e. impacts at level 1, outcomes at level 2 and outputs at level 3), while organisational effectiveness and efficiency indicators are monitored at

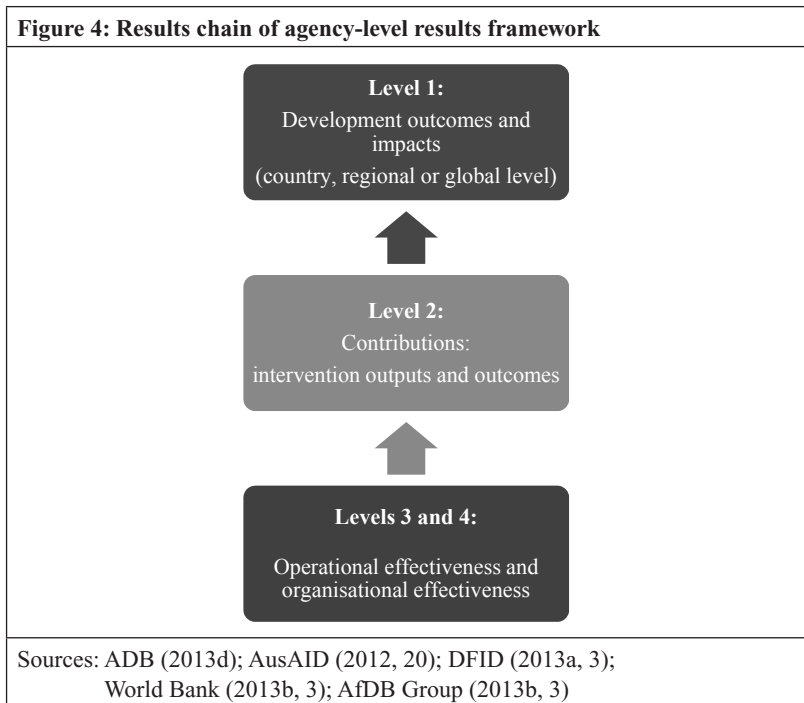
42 USAID and MCC do not have agency-level results frameworks and hence their experiences cannot be compared in this chapter. Although Danida has also introduced a results framework at agency level, it does not include different levels for measuring performance. Instead, it specifies the five steps for managing development results used by Danida. These are: (1) setting goals, (2) allocating resources, (3) monitoring and evaluating results, (4) reporting results, (5) feeding back information (Danida 2011, 3).

43 EuropeAid (Directorate-General for Development and Cooperation – EuropeAid) is the Directorate-General of the European Commission that is responsible for designing development policies and delivering aid (EC, 2013b).

Table 6: Comparison of donor agencies' results frameworks							
Level	ADB	AfDB	AusAID	DFID	IDB	UNDP	World Bank
1	Development progress in Asia and the Pacific	What development progress is Africa making?	Progress in terms of the MDGs	Progress on key development outcomes	Regional development goals (<i>data on long-term development progress</i>)	Development impact	Development context (<i>development progress in the bank's client countries</i>)
2	ADB contributions to development results	How well is AfDB contributing to development in Africa?	The contribution of Australian aid	DFID's contributions (<i>bilateral and multilateral programme results</i>)	Output contributions	Development outcomes	Country results supported by the bank
3	ADB operational management	Is AfDB managing its operations effectively?	Operational and organisational effectiveness	Operational effectiveness	Lending programme targets	UNDP outputs (<i>changes resulting directly from UNDP's products and services</i>)	Development outcomes and operational effectiveness
4	ADB organisational management	Is AfDB managing itself effectively?		Organisational effectiveness	Operational effectiveness and efficiency	UNDP's organisational effectiveness and efficiency	Organisational effectiveness and modernisation
Sources: World Bank (2013b, 3); ADB (2013d); DFID (2013a, 3); AusAID (2012, 20); UN (2013a, 1); IDB (2012, 20); AfDB Group (2013b, 3)							

level 4 (UN 2013a, 1). The IFC's Corporate Scorecard is not divided into different levels. It only includes aspects of operational and organisational effectiveness⁴⁴ (IFC 2012, 98).

The results chain of agency-level results frameworks is shown in Figure 4. Improvements in operational and organisational effectiveness are expected to result in better delivery and higher quality of intervention outputs and outcomes. These, in turn, are expected to contribute to improvements in development outcomes and impacts at country, regional or global level.



The donor agencies reviewed do not simply use corporate results frameworks as a tool for reporting on performance. Results frameworks are regarded

44 The IFC monitors corporate performance in four goal areas: (1) greater development impact, (2) financial sustainability, (3) greater client satisfaction, (4) high quality, diverse and engaged employees (IFC 2012, 98).

as an important managerial tool within the wider field of results-based management and are used for four main purposes:⁴⁵

1. to monitor and manage progress in pursuing strategic objectives;
2. to strengthen a culture of results-based management in the organisation;
3. to improve internal performance;
4. to report on results and organisational and operational effectiveness in order to meet external reporting requirements.

The indicators at each level of the results frameworks fulfil a distinct purpose, however. These are discussed in more detail in sections 6.1.2 (for levels 1 and 2) and 6.1.4 (for levels 3 and 4).

6.1.2 Measuring development results by means of standard indicators

Standard indicators that measure results can be used by development agencies for two main purposes: to monitor development outcomes and impacts in partner countries (i.e. level 1 of agency-level results frameworks) and to measure their contributions (i.e. intervention outputs and outcomes) to higher level development objectives (i.e. level 2 of agency-level results frameworks). Of the agencies reviewed for this study, the World Bank,⁴⁶ AfDB, ADB, IDB, UNDP, DFID and AusAID use standard indicators to track development results at both levels as part of their corporate results frameworks. Similarly, EuropeAid has already defined an extensive menu of standard indicators for the two levels (EuropeAID 2013). This will be refined and reduced to a limited set for the purpose of the EU development and cooperation results framework (EuropeAID 2013, 3).⁴⁷ The US Department of State and USAID⁴⁸ have jointly developed an even bigger

45 A list of donor agencies' statements about the purpose and use of corporate results frameworks is given in Table 23 of the appendix.

46 The World Bank uses the term "Corporate Scorecard" for its corporate results framework (World Bank 2013b).

47 Interview with Milena Reinfeld, Statistics Adviser at the Quality of Delivery Systems Unit (A2), DG DevCo, EuropeAid, on 29 May 2013.

48 Although technically an independent agency, USAID operates under the "*direct authority and foreign policy guidance of the Secretary of State*" (US Department of State 1998).

menu of standard indicators than EuropeAid, covering the two results levels, for measuring the results of US government foreign assistance (US Department of State / USAID 2013a). However, they have not drawn up an agency-level results framework within which a selected set of the indicators is monitored. The MCC and the IFC only use standard indicators to measure intervention outputs and outcomes.

The donor agencies' experiences with standard indicators are explored separately in the following subsections for the two levels of the agency results chain that measure development results:

1. development outcomes and impacts in partner countries;
2. contributions: intervention outputs and outcomes.

The analysis describes the purpose for which standard indicators are used, the sectors they cover and how they are linked to agencies' strategic priorities. I also explore the possibilities for aggregating results, identify the levels at which changes are measured by standard indicators, and discuss how donor agencies deal with the question of contribution vs. attribution of development results. Finally, by comparing the sets of indicators used by donor agencies, I identify frequently used indicators.

6.1.2.1 Standard indicators for measuring development outcomes and impacts

The majority of agencies reviewed state that the main purposes of using standard indicators for measuring longer-term development outcomes and impacts are:

- to provide information on the overall development context in partner countries;
- to provide a strategic orientation for their work;
- to monitor the relevance of their development strategies over time (see Table 7).

Most donor agencies also agree that standard indicators measuring country-wide outcomes and impacts cannot be used to assess the performance of their work. The indicators measure high-level development changes that are a product of the joint efforts of partner countries, donors and other

influencing factors and cannot be attributed to the support provided by individual agencies.

Another important goal of specifying outcome and impact indicators as part of results frameworks is to align programmes and projects with agency-level strategies. For instance, the IDB ensures alignment by stipulating that all project and programme proposals have to show how project results contribute logically to the regional development goals measured at level 1 of the results framework.

Some organisations, however, use indicators for more than just a strategic orientation. The US Department of State and USAID, for instance, state that outcome and impact indicators can be used to inform strategic planning and budget decisions, to determine priorities and to allocate resources better. They also argue that positive trends may demonstrate a positive impact of US government assistance (US Department of State / USAID 2013a).

	For what purposes are the indicators used?
ADB	Standard outcome indicators are used to monitor the relevance of the ADB's Strategy 2020. The ADB states explicitly that the outcome indicators are not used to assess its performance.
AfDB	The indicators track Africa's overall development progress and are used to monitor progress against the bank's two overarching strategic goals, i.e. inclusive growth and transition towards green growth.
AusAID	AusAID does not specify a purpose of monitoring global progress towards the MDGs. It may be assumed, however, that the MDGs provide a strategic orientation for AusAID's work.
DFID	DFID tracks outcome indicators in partner countries since it needs to know what results are being achieved in each country from all development funding combined.

Table 7 (cont.): Purpose of monitoring development outcomes and impacts in partner countries	
	For what purposes are the indicators used?
EuropeAid	Level 1 indicators of the planned EU development and cooperation results framework will describe the global operating context and provide an overview of long-term development progress.
IDB	The regional development goals tracked by the standard outcome indicators selected provide metrics for each of the five selected institutional priorities.
UNDP	UNDP monitors a set of impact indicators to measure progress towards UNDP's long-term vision of helping countries achieve the combined objectives of eradicating poverty and significantly reducing inequalities and exclusion. To this end, UNDP has organised its work around a set of development outcomes. The outcome indicators included in the results framework capture development changes to which UNDP will contribute.
US Department of State and USAID	Standard outcome indicators inform broad-based strategic budget and planning decisions and demonstrate the basis on which allocations are made. In addition, positive trends in standard indicators may demonstrate a positive impact of USG assistance.
World Bank	The purpose of the outcome indicators selected is to monitor aggregate progress in partner countries so as to provide a context and direction for the bank's work.
Sources: DFID (2013a, 2); IDB (2011, 20); AfDB Group (2013b, 3: 7); US Department of State / USAID (2013a); ADB (2013d); AusAID (2012, 20); EC (2013, 7; 20); UN (2013d, 3-4); UN (2013a); World Bank (2013b, 6)	

Types of indicator, sectors covered and linkages to strategic priorities

As regards the types of outcome and impact indicators used to monitor development progress in partner countries, the sectors covered and their linkages to strategic priorities, two main approaches are currently in use.

The first approach is that followed by DFID and AusAID, who use MDG indicators exclusively to monitor development progress in partner countries. DFID has selected between one and four MDG indicators to monitor progress towards each of MDGs 1 to 7 (DFID 2013a, 4). AusAID has not made a selection of indicators, but generally monitors progress towards the MDGs at level 1 of its results framework (AusAID 2012, 20). While DFID monitors changes only for its partner countries (DFID 2013a, 3), AusAID measures global progress (AusAID 2012, 20).

The second approach is that followed by the World Bank, ADB, IDB, AfDB, UNDP, the US Department of State and USAID. This involves selecting a set of standard outcome and impact indicators for each strategic priority area (see Table 8). These can be MDG indicators or other publicly available indicators, as well as indicators for which data have to be newly collected. EuropeAID also plans to follow this approach in its envisaged results framework.

The agencies reviewed pursue different strategies in presenting the links between strategic priorities and outcome/impact indicators. The IDB has listed indicators under five subheadings corresponding with the five sector goals in its main strategy document entitled “Report on the Ninth General Increase in the Resources of the Inter-American Development Bank” (IDB 2010, 8-10). Similarly, the AfDB has chosen indicators that reflect progress against the bank’s two strategic objectives of inclusive growth and transition towards green growth (AfDB Group 2013b, 7-10).

The US Department of State and USAID have formulated a set of indicators for each of their five objective areas⁴⁹ and for five cross-cutting themes⁵⁰ (US Department of State / USAID 2013b). Most of the indicators are also in

49 The five objective areas correspond to the strategic plan adopted by the US Department of State and USAID for fiscal years 2007-2012 (US Department of State / USAID 2007). The new strategic plan for fiscal years 2012-2013 (US Department of State / USAID 2012g) lists seven new goals.

50 These are (1) capacity-building, (2) gender, (3) multilateral contributions, (4) public/private partnerships, and (5) science, technology and innovation/research (US Department of State / USAID 2013b).

accordance with the foreign assistance standardised programme structure⁵¹ (US Department of State / USAID 2013a). EuropeAid has defined menus of standard indicators for 16 sectors that are aligned with priorities outlined in the *Agenda for Change* and other key policy documents (EuropeAID 2013, 1). UNDP uses four impact indicators measuring progress towards its long-term vision of eradicating poverty and reducing poverty, inequality and exclusion as specified in its Strategic Plan. UNDP has also selected outcome indicators in seven priority areas for its long-term vision (UN 2013d, 3-4; UN 2013a). The World Bank also makes an explicit link between indicators and strategic priorities. All outcome and impact indicators at level 1 of its Corporate Scorecard are assigned a link to at least one of the five strategic priorities⁵² identified in the bank's Post-Crisis Direction Paper (PCDP).⁵³ The sectors for which indicators are defined do not, however, correspond directly with the strategic priorities in the PCDP (World Bank 2013b, 7).

The link between indicators and strategic priorities is less explicit in the results framework adopted by the ADB. The ADB monitors aggregate development progress in Asia and the Pacific by means of two groups of indicators (ADB 2013d). The first is a group of mainly MDG indicators (i.e. income and non-income measures of poverty) associated with the ADB's core operational areas.⁵⁴ The second group of indicators measures development outcomes in a variety of fields, i.e. infrastructure, water and

51 The foreign assistance standardised programme structure is a method for consistently categorising and accounting for aid provided by the US Department of State and USAID. For example, it gives a common definition of a "democracy programme" (US Department of State / USAID 2010).

52 These are: (1) target the poor and vulnerable, (2) create opportunities for growth, (3) promote global collective action, (4) strengthen governance, and (5) manage risks and prepare for crises (World Bank 2010, 12).

53 The PCDP "*describes the strategic directions that will guide the WBG [World Bank Group] in meeting the global challenges over the next decade and beyond*" (World Bank 2010, 1). The PCDP "*outlines the salient features of the changing landscape and their implications for multilateral development institutions, describes the WBG's comparative advantage, discusses how the group contributes to the establishment of modernized multilateralism and identifies priority areas that will shape WBG's focus in the coming years. It concludes by outlining key elements of the WBG's plan for reforming itself to more effectively carry out its development role in the post-crisis world*" (World Bank 2010, 1).

54 The ADB's five core operational areas are: (1) infrastructure, (2) the environment, (3) the development of the financial sector, (4) regional cooperation and integration, and (5) education (ADB 2013a).

sanitation, the business environment, governance, regional cooperation and integration, and the environment (ADB 2013d).

Table 8: Sectors/priority areas for which standard outcome and impact indicators have been selected	
Institution	Sectors/priority areas
AfDB	<ul style="list-style-type: none"> – Inclusive growth (economic inclusion: reducing poverty and income inequality, spatial inclusion: expanding access to basic services, social inclusion: ensuring equal opportunities for all, political inclusion: securing broad-based representation, sustaining growth: building competitive economies) – Transition towards green growth (building resilience and adapting to a changing environment, managing natural assets efficiently and sustainably, promoting a sustainable infrastructure, and reducing waste and pollution)
EuropeAid	<ul style="list-style-type: none"> – Human rights, democracy and good governance (democracy and human rights, rule of law and access to justice, corruption, conflict prevention, peace-building and security, public financial management and macroeconomic management, environmental and climate change governance) – Inclusive and sustainable growth for human development (social protection, health, education, employment, migration and asylum, sustainable agriculture, growth, food and nutrition security, energy, natural resources, water, low-carbon development and green economy, transport, private-sector development, trade and regional integration) – Cross-cutting issues (gender, environment & climate change, fragile states, resilience)
IDB	<ul style="list-style-type: none"> – Social policy for equity and productivity – Infrastructure for competitiveness and social welfare – Institutions for growth and social welfare – Competitive regional and global integration – Protecting the environment, responding to climate change, promoting renewable energy and enhancing food security

Table 8 (cont.): Sectors/priority areas for which standard outcome and impact indicators have been selected	
Institution	Sectors/priority areas
UNDP	<ul style="list-style-type: none"> – Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded – Citizens’ expectations for voice, development, the rule of law and accountability are met by stronger systems of democratic governance – Countries have strengthened institutions to progressively deliver universal access to basic services – Faster progress is achieved in reducing gender inequality and promoting women’s empowerment – Countries are able to reduce the likelihood of conflict and lower the risk of natural disasters, including from climate change – Early recovery and rapid return to sustainable development pathways are achieved in post-conflict and post-disaster settings – Development debates and actions at all levels prioritise poverty, inequality and exclusion, consistent with our engagement principles
US Department of State and USAID	<ul style="list-style-type: none"> – Peace and security – Governing justly and democratically – Investing in people – Economic growth – Humanitarian assistance – Cross-cutting issues
World Bank	<ul style="list-style-type: none"> – Growth, jobs and poverty – Institutions and governance – Human development and gender – Sustainable development – Finance, private-sector development and trade
Sources: IDB (2012, 21); AfDB Group (2013b, 9-10); World Bank (2013b, 7); US Department of State / USAID (2013b); EuropeAID (2013); UN (2013a)	

Aggregation of results

The outcomes and impacts in partner countries measured by standard indicators are usually presented at an aggregate level for a region or a group of countries. For example, the World Bank provides aggregated data on outcomes in IDA/IBRD eligible countries (World Bank 2013b, 7), while the AfDB measures development progress in Africa and in the smaller group of African Development Fund (ADF) countries (AfDB Group 2013b, 9-10). Data are usually weighted before being aggregated, so as to take account of the size of countries' reference populations. For example, the ADB (2012c, 2-8) calculates weighted averages for most indicators before the data are aggregated, using the appropriate reference population as a weight (e.g. the total number of live births is used as a weight for the "under-five mortality rate"). Where the size of the population is more or less irrelevant to the indicator (e.g. "time to start business" and "governance and public-sector management"), unweighted averages are used. Simply aggregating results across countries may not, however, fully reflect the needs and challenges of a diverse set of countries (IEG 2011, xxvi). For this reason, data are often also presented in disaggregated form for individual countries. For example, the World Bank presents data on level 1 indicators by country, by region and by lending eligibility. Many indicators are further disaggregated by sex or location (urban/rural), for example.

Indicators frequently used by the agencies reviewed

Several standard impact indicators are frequently used by the donor agencies reviewed to monitor development progress in partner countries. These are mainly MDG indicators (see Table 25 in the appendix for a detailed list of the indicators used). For example, in relation to healthcare, the agencies focus on the following three MDG indicators: "under-five mortality rate", "prevalence of underweight children under-five years of age" and "maternal mortality ratio". Similarly, in education, frequent use is made of MDG indicators defined as the "ratio of girls to boys in primary and secondary schools" and "primary school completion rate".

In sectors where MDG indicators are not available (e.g. governance and institutions, regional integration and trade, finance and private-sector development), the indicators are less harmonised. However, in sectors where outcomes can easily be quantified and are captured by other well-known standard indicators, several donor agencies use the same indicators.

For instance, donor agencies make frequent use of the following WDIs: “the household electrification rate”, “paved roads (% of total roads)” and “time required for business start-up”. As an example of the degree of harmonisation in relation to outcome and impact indicators, Table 9 lists standard indicators used by the agencies⁵⁵ for measuring results in the infrastructure sector.

6.1.2.2 Standard indicators for measuring intervention outputs and outcomes

Standard indicators for measuring intervention outputs and outcomes (i.e. level 2 of agency-level results frameworks) can be used by donor agencies for two main purposes (see Table 10 for details of how the indicators are used by the donor agencies reviewed):

1. They can be used to aggregate results across interventions and countries in order to report on contributions to higher-level development goals. In this sense, they play an important role in meeting accountability requirements.
2. They can be used to monitor the progress of individual interventions and for portfolio management.

The majority of the donor agencies reviewed mainly use the indicators for reporting purposes (i.e. ADB, AfDB, AusAID, DFID, IDB, MCC and the World Bank). When selecting standard indicators to report on an agency’s contributions, there is always a tension between capturing the complexity of an aid portfolio and preserving a snapshot character. Definitions of hundreds of different standard indicators would have to be produced in order to report on all results. This would overwhelm the target audience (Weiers 2012). For this reason, donor agencies usually only use a limited number of standardised key indicators to report on aggregate results. These tend to be broadly defined and applicable to a diverse set of interventions. For example, many standard indicators that are used for reporting on contributions are reach indicators capturing the number of beneficiaries (e.g. the number of students benefiting from education projects or the number of farmers trained).

55 AusAID is not listed in Table 9. The agency uses the MDGs at Level 1 of its results framework and has not specifically selected indicators.

Table 9: Standard outcome and impact indicators used by the agencies in relation to the infrastructure sector						
ADB	AfDB	DFID	EuropeAid	IDB	US Department of State and USAID	World Bank
<i>Population using an improved drinking water source (%)</i>	<i>Access to improved water source (% of population)</i>	<i>Proportion of population using an improved drinking water source</i>	<i>Proportion or number of persons with access to improved drinking water source</i>		<i>Percentage of population using an improved drinking water source</i>	<i>Access to an improved water source (% of population)</i>
					Percentage of a drinking water utility's supply that is non-revenue	
<i>Population using an improved sanitation facility (%)</i>	<i>Access to improved sanitation facilities (% of population)</i>	<i>Proportion of population using an improved sanitation facility</i>	<i>Proportion or number of persons with access to improved sanitation</i>		<i>Percentage of population using an improved sanitation facility</i>	<i>Access to an improved sanitation facility (% of population)</i>
Electrification rate (%)	Access to electricity (% population)		Number of people with access to electricity from a grid	Households with electricity (% of households)		Household electrification rate (% of households)

Table 9 (cont.): Standard outcome and impact indicators used by the agencies in relation to the infrastructure sector						
ADB	AfDB	DFID	EuropeAid	IDB	US Department of State and USAID	World Bank
			Number of people with secure access to modern energy services			
Paved roads (km per 10,000 people)	Road density (km roads per km ² of land area)		Access to all-season roads (% of rural population)	Paved road coverage (km/km ²)		Paved roads (% of total roads)
			Transport cost reduction (€/100km x tonne) per corridor			
				Proportion of urban population living in dwellings with hard floor		
	Access to telephone services (per 1000 people)					<i>Mobile cellular telephone subscriptions (per 100 people)</i>
* Indicators printed in italics are MDG indicators.						
Sources: World Bank (2013b, 7); ADB (2013d); AfDB Group (2013b, 9-10); IDB (2012, 21); DFID (2013a, 4); EuropeAID (2013, 72; 74; 80-81); US Department of State / USAID (2013b)						

Most agencies that have defined standardised key indicators monitor these in their corporate results frameworks and only use a few selected indicators. For instance, the ADB, AfDB AusAID, IDB, DFID and the World Bank⁵⁶ use between 18 and 36 indicators at level 2 of their results frameworks. By contrast, UNDP uses with 92 indicators a relatively large set of indicators. The MCC does not have a corporate results framework in place and reports on-line on a selected set of 18 standard indicators (MCC 2013c). The IFC has formulated six IFC Development Goals (IDGs)⁵⁷ for the purpose of reporting on its contributions to development. The IDGs are high-level targets for incremental reach and progress towards each goal is monitored by just one standard indicator⁵⁸ (IFC 2013b). For example, progress towards IDG 2 (“improve health and education services”) is measured by an indicator defined as the “number of people receiving access to new or improved health and education services” (IFC 2013d).

While the main purpose of formulating standardised key indicators is to report on results, some agencies also aim to use aggregated results data for management purposes. For example, DFID states in its results framework that by *“measuring results we get a much better idea of what works and what does not, so we can refine our programmes accordingly. We are also able to manage our resources to deliver these results”* (DFID 2013a, 1). Similarly, the IFC aims *“to use the IDGs to drive implementation of strategy and influence operational decision-making, alongside volume targets”* (IFC 2013b). Given the broad definition of many standardised key indicators as well as the high level of aggregation, it is, however, questionable whether they can indeed be used for learning and decision-making. Chapter 8.4 explores the limitations of standard indicators measuring donor agencies’ contributions in more detail.

56 The total number of standard indicators used by the World Bank is 135 (World Bank 2012a). Of these, only a selected set is included at level 2 of the Corporate Scorecard (World Bank 2013b, 9).

57 The six IDGs are: (1) increase or improve sustainable farming opportunities, (2) improve health and education services, (3a) increase access to financial services for micro/individual clients, (3b) increase access to financial services for *small and medium-sized business* clients, (4) increase or improve infrastructure services, (5) contribute to economic growth (value added), and (6) reduce greenhouse gas emissions (IFC 2013b).

58 To date, only two of the IDGs have moved from testing to implementation. These are IDG 2 (“improve health and education services”) and IDG 3 (“increase access to financial services”) (IFC 2013c).

Some of the donor agencies reviewed (i.e. IFC, US Department of State and USAID and EuropeAid) have formulated more extensive menus of standard indicators. Apart from being used to report on contributions, they also play an important role in monitoring individual interventions. The US Department of State and USAID, for instance, have formulated standard indicators for all interventions within the foreign assistance standardised programme structure. They have defined a total of 278 output indicators in addition to a large set of standardised outcome indicators (US Department of State / USAID 2013b).

Similarly, EuropeAID has formulated a large number of standardised output and outcome indicators for 16 sectors and intervention areas (EuropeAID 2013). Defining a large number of standard indicators has the advantage that more results, as well as more specific results, can be captured, thus raising the value of standard indicators for monitoring at intervention level. EuropeAID, for example, states that the aim of its guidance note on indicators is to support Delegations in the process of specifying indicators and developing results frameworks by providing options of indicators to draw from (EuropeAID 2013, 1). Nevertheless, USAID points out that not all standard indicators meet both agency as well as programme or project reporting needs. There is often a trade-off between using a standard indicator so as to aggregate results across interventions, and using a custom indicator that better reflects the specific results of an intervention (USAID 2010b, 3). For this reason, and since it is not possible to adequately measure all possible results with the aid of standard indicators, the US Department of State, USAID and EuropeAid also use custom indicators for monitoring projects and programmes (USAID 2010a, 3; EuropeAID 2013, 1).

The most intensive user of standard indicators is the IFC. This development finance institution has developed a systematic indicator framework, known as the Development Outcome Tracking System (DOTS), which is used to compare performance across projects and to assess and report on the IFC's contributions to development (IFC s.a., 1). The IFC discourages the use of custom indicators and has defined between 16 and 27 standard indicators for each of the 22 sectors in which it is active (IFC 2010).⁵⁹ The indicators are mapped in four performance areas for assessing projects: financial performance, economic performance, environmental and social performance,

59 However, many of the indicators are cross-sectoral indicators used in a number of different sectors.

and private-sector development (IFC s.a., 1). Several of the standard indicators are mandatory, which enables the IFC to compare the performance of projects and companies (IFC s.a., 1; IFC 2010). The information can also be used for portfolio management and for identifying what does and does not work. For example, based on the information in DOTS, the IFC found that the majority of projects funding small manufacturers in Africa were not successful. It was therefore decided to adopt a different approach, based on reaching out to small manufacturers through financial intermediaries, who have a better picture of local conditions.⁶⁰ The data available in DOTS also feed into the IDGs. Data on reach indicators are aggregated across projects to inform the indicators measuring progress towards the IDGs.

Institution	What do the indicators measure and what is their main purpose?
ADB	The standard indicators measure the core operational results outlined in ADB's Strategy 2020. The indicators measure project outputs and beneficiaries as a proxy for sector outcomes.
AfDB	The bank assesses its contribution to advancing Africa's development by aggregating results from projects completed in the last three years.
AusAID	The indicators articulate the contribution made by Australian aid to development outcomes in partner countries. By reporting on headline results, AusAID aims to provide a snapshot of its aid programme, which is an indicator of its effectiveness.
DFID	The indicators at level 2 of the results framework measure DFID's contribution to development results. The indicators measure outputs that can be directly linked to DFID programmes and projects – whether delivered through bilateral country programmes or through contributions to multilateral organisations.

60 According to an interview with Ugo Amorett, IFC, on 22 July 2013.

Table 10 (cont.): Purpose of standard indicators measuring intervention outputs and outcomes	
Institution	What do the indicators measure and what is their main purpose?
Europe-AID	The planned EuropeAid results framework will include output and outcome indicators that monitor the direct contribution of EU operations to country-level results. The purpose of the menu of standard indicators defined in the “ <i>Sector Indicator Guidance for Programming</i> ” document is to support EU Delegations in developing their multi-annual indicative programming documents for the forthcoming programming period (2014-2020) by providing options of indicators to draw from.
IDB	Outputs measure the bank’s direct contribution to regional development goals.
IFC	DOTS: The indicator framework helps to make comparisons across projects and companies supported by the IFC. In addition, the framework helps to assess and report on the contributions made by IFC clients and the IFC itself to development. IDGs: The indicators are used to monitor and report on progress towards the IDGs. The IDGs are used to drive the implementation of strategy and to influence operational decision-making.
MCC	The MCC uses common indicators (i.e. standard indicators) to aggregate results across countries in a selected number of sectors. The information is used to report on results to external stakeholders.
US Department of State and USAID	Standard indicators at output level measure results that can be attributed directly to US government programmes, projects, and activities. While all indicators are tracked on a regular basis, the use of standard indicators allows the US Department of State and USAID to aggregate certain key results to present a snapshot to Congress and the general public of how US foreign assistance has contributed to development.
World Bank	The standard indicators tracked at level 2 of the World Bank’s Corporate Scorecard highlight the development results that countries have achieved with the bank’s support. They are intended to explain how the bank is helping countries to achieve results.
Sources: IDB (2011, 22); AfDB Group (2013b, 10); DFID (2013a, 4); ADB (2013d); ADB (2010, 2-3); World Bank (2013b, 2-3); IFC (s.a., 1); MCC (2012, 1); US Department of State / USAID (2013a); IFC (2013b); EuropeAID (2013, 1-3); EC (2013, 20)	

Sectors covered and linkages with strategic priorities

The majority of the donor agencies reviewed for the purpose of this study (i.e. AusAID, ADB, AfDB, DFID, IDB and UNDP) have defined a limited set of standard output and outcome indicators only for sectors and interventions that fall within their priority areas (see Table 11). The IDB⁶¹ and UNDP have defined indicators under the same subheadings as the standard indicators measuring aggregate longer-term development progress at country and regional level. The ADB has selected indicators that measure results in the five areas of operations covered by the bank's strategy for the period to 2020, i.e. infrastructure, finance and education, environment and regional integration (ADB 2010, 2-3; ADB 2008b, 11-13; ADB 2013d). Likewise, the AfDB has defined indicators for the five operational priority areas that are identified in its 2013-2022 strategy (AfDB Group 2013b, 10) and DFID measures key outputs and outcomes in areas highlighted in DFID's strategy entitled "Changing Lives, Delivering Results" (DFID 2011). Similarly, AusAID has defined a set of standard indicators under its five strategic goals (AusAID 2012, 22).

EuropeAid, IFC, the US Department of State, USAID and the World Bank measure core results in a variety of sectors and intervention areas that are not always covered by their strategic priority areas (see Table 11). The World Bank, for instance, measures a selected set of indicators within priority areas at level 2 of its Corporate Scorecard (World Bank 2013b, 9). In addition, the bank has formulated sets of standard indicators for 24 sectors or themes (World Bank 2012a) that are used mainly for reporting at sectoral level.⁶² The MCC differs from the other agencies, since it has not defined strategic priority areas for its assistance but requires selected countries to identify their priorities (MCC 2013a). It then supports those investments in country priority areas that are most conducive to economic growth and poverty

61 However, the IDB notes in its mid-term evaluation of IDB-9 commitments that the indicators used at level 2 of its results framework are not consistently aligned with sector strategies. This is even though the strategies refer to the indicators (IDB 2013b, 30).

62 According to Gisu Mohadjer and Lisandro Martin (both of the World Bank, interviewed on 4 June 2013).

reduction (Lucas 2011, 3-4).⁶³ Standard indicators have been defined for sectors on which most of the supported interventions focus (MCC 2012).⁶⁴

Table 11: Sectors/priority areas for which standard indicators measuring intervention outputs and outcomes have been defined

Institution	Sector/priority area	
ADB	<ul style="list-style-type: none"> – Infrastructure (energy, transport and water) – Finance – Education 	<ul style="list-style-type: none"> – Environment – Regional cooperation and integration
AfDB	<ul style="list-style-type: none"> – Infrastructure development – Regional integration – Private sector development 	<ul style="list-style-type: none"> – Governance and accountability – Skills and technology
AusAID	<ul style="list-style-type: none"> – Saving lives – Promoting opportunities for all – Sustainable economic development 	<ul style="list-style-type: none"> – Effective governance – Humanitarian and disaster preparedness and response
DFID	<ul style="list-style-type: none"> – Wealth creation – Poverty and vulnerability – Nutrition and hunger – Malaria 	<ul style="list-style-type: none"> – Reproductive, maternal and neo-natal health – Water and sanitation – Humanitarian and emergency response – Governance and security

63 The MCC uses three tools to decide which investments are most conducive to economic growth and poverty reduction. First, it asks countries to carry out a constraints analysis to identify the main barriers to private investment and economic growth. Based on the findings of this analysis, project proposals are drawn up by partner countries addressing the constraints identified. Second, the proposed projects are subjected to a cost-benefit analysis which estimates the expected increase in local income. Third, based on the results of the cost-benefit analysis, the economic rate of return is calculated for each project reflecting the economic viability of each investment (Lucas 2011, 3-4).

64 These are (1) agriculture and irrigation, (2) land, (3) roads, (4) water supply, sanitation and hygiene, and (5) education (MCC 2012).

Table 11 (cont.): Sectors/priority areas for which standard indicators measuring intervention outputs and outcomes have been defined		
Institution	Sector/priority area	
Europe-AID	<ul style="list-style-type: none"> – Cross-cutting issues (gender, environment and climate change, fragile states and resilience) – Human rights, democracy and good governance (democracy and human rights, rule of law and access to justice, corruption, conflict prevention, peace-building and security, public financial management and macroeconomic management, and environmental and climate change governance) 	<ul style="list-style-type: none"> – Inclusive and sustainable growth for human development (social protection, healthcare, education, employment, migration and asylum, sustainable agriculture, growth, food and nutrition security, energy, natural resources, water, low-carbon development and green economy, transport, private-sector development, trade and regional integration)
IDB	<ul style="list-style-type: none"> – Social policy for equity and productivity – Infrastructure for competitiveness and social welfare – Institutions for growth and social welfare 	<ul style="list-style-type: none"> – Competitive regional and global integration – Protecting the environment, responding to climate change, promoting renewable energy, and enhancing food security
IFC	<ul style="list-style-type: none"> – Agriculture and forestry – Oil, gas and mining – Utilities – Construction and real estate – Transportation and warehousing – Food and beverages – Chemicals – Non-metallic mineral product manufacturing – Primary metals – Pulp and paper – Textiles, apparels and leather 	<ul style="list-style-type: none"> – Plastics and rubber – Industrial and consumer products – Information – Finance and insurance – Collective investment vehicles – Wholesale and retail trade – Professional, scientific and technical services – Healthcare – Education services – Accommodation and tourism services – Electric power

Table 11 (cont.): Sectors/priority areas for which standard indicators measuring intervention outputs and outcomes have been defined		
Institution	Sector/priority area	
MCC	<ul style="list-style-type: none"> – Agriculture and irrigation – Land – Roads 	<ul style="list-style-type: none"> – Water supply, sanitation and hygiene – Education
UNDP	<ul style="list-style-type: none"> – Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded – Citizen expectations for voice, development, the rule of law and accountability are met by stronger systems of democratic governance – Countries have strengthened institutions to progressively deliver universal access to basic services – Faster progress is achieved in reducing gender inequality and promoting women’s empowerment 	<ul style="list-style-type: none"> – Countries are able to reduce the likelihood of conflict and lower the risk of natural disasters, including from climate change – Early recovery and rapid return to sustainable development pathways are achieved in post-conflict and post-disaster settings – Development debates and actions at all levels prioritise poverty, inequality and exclusion, consistent with our engagement principles
USAID	<ul style="list-style-type: none"> – Peace and security – Governing justly and democratically – Investing in people 	<ul style="list-style-type: none"> – Economic growth – Humanitarian assistance – Cross-cutting issues
World Bank	<p><i>Priority areas within the scorecard</i></p> <ul style="list-style-type: none"> – Growth, jobs and poverty – Institutions and governance – Human development and gender – Sustainable development – Finance, private-sector development and trade and technology 	<ul style="list-style-type: none"> – Hydropower – Information, communications and technology – Irrigation and drainage – Land administration and management – Micro- and small/medium enterprise finance – Other renewable energy – Participation and civic engagement

Table 11 (cont.): Sectors/priority areas for which standard indicators measuring intervention outputs and outcomes have been defined		
Institution	Sector/priority area	
World Bank	<p><i>All sectors:</i></p> <ul style="list-style-type: none"> – Access to urban services and housing for the poor – Agricultural extension and research – Biodiversity – Conflict prevention and post-conflict reconstruction – Education – Forestry – Health 	<ul style="list-style-type: none"> – Pollution management and environmental health – Roads – Sanitation – Social inclusion – Social protection – Thermal power generation – Transmission and distribution of electricity – Water collection and transportation – Wastewater treatment and disposal – Water supply
<p>Sources: World Bank (2013b, 9); IDB (2012, 22-23); DFID (2013a, 5-6); ADB (2013d); AfDB Group (2013b, 12-13); AusAID (2012, 20); MCC (2012); World Bank (2012a); EuropeAID (2013); UN (2013a); US Department of State / USAID (2013b)</p>		

Aggregation of results

To report on development results at agency level, donor agencies simply aggregate outputs and outcomes across interventions and countries and do not use weights to account for the size of countries or interventions. This can lead to unintended effects, however.

Most standard indicators currently used by donor agencies to assess their contributions measure the quantity of outputs delivered or are reach indicators that measure the number of beneficiaries. One of the problems when using such indicators is that they are influenced more by larger countries and projects (IEG 2011, 112). Hence, their use may lead to an increased focus on larger projects that have a greater reach at the expense of smaller projects. Moreover, it may result in a shift to projects that operate in more favourable environments (IFC 2013c). The Independent Evaluation Group (IEG) states, for instance, that the World Bank and the IFC could

only work with India and China (rather than all member countries) if they wished to influence the results measured by standard indicators (IEG 2011, 112).⁶⁵ The IFC is currently trying to solve this problem by experimenting with a system of assigning weights to smaller projects in poorer countries (IFC 2013c). In addition, to give an indication of who benefits from interventions, it is important to also present disaggregated data for groups of beneficiaries (e.g. by sex, location or age). Disaggregation of results by countries and interventions may also help to paint a more balanced picture of who benefits from what type of intervention.

Attribution or contribution

One of the main questions when using standard indicators to aggregate intervention outputs and outcomes at agency level is whether the results may be attributed⁶⁶ directly to an individual agency's funding (e.g. "We have trained one million teachers") or whether they are a product of various factors, i.e. an agency is only one of several actors contributing to the results (e.g. "Together with other development partners, we helped to provide 40 million people with access to improved water sources").⁶⁷ As described in section 4.1, attribution is still manageable at output level and becomes harder as the level of the results rises, i.e. the more factors influence the results. It is particularly difficult to attribute results in projects and programmes that are supported and operated jointly by a variety of development actors (e.g. PBAs and budget support).

Moreover, donor agencies disagree as to how the results of interventions co-financed by several actors should be counted:

65 To mitigate this problem, the IEG proposes not just using reach indicators, but also reporting on the number of countries that have achieved a certain degree of progress (e.g. the number of countries in which x percent of the population lives on less than USD 2 a day or the number of countries with household electrification rates above x percent) (IEG 2011, 112). However, such indicators measure country-wide and longer-term changes. It is impossible to assess whether they are influenced by individual stakeholders.

66 Attribution may be defined as "that which is to be credited for the observed changes or results achieved. It represents the extent to which observed development effects can be attributed to a specific intervention or to the performance of one or more partners, taking account of other interventions, (anticipated or unanticipated) confounding factors, or external shocks" (OECD/DAC 2009, 21).

67 "Contribution analysis aims to demonstrate whether or not the evaluated intervention is one of the causes of observed change" (EuropeAID 2006).

- *Full attribution/contribution*: The full results of projects and programmes are counted and reported, even if they are co-financed by several actors.
 - The rule: Among donor agencies that follow the contribution approach.
 - The exception: Among donor agencies that follow the attribution approach.
- *Proportional attribution/contribution*: Only a share of the overall results of a project or programme is counted and reported where the project or programme is co-financed by a number of development actors. To calculate the share of results, a contribution factor is applied to the total intervention results. This is often, but not always, equal to the share of the total programme costs paid by the reporting donor agency. For example, if an agency contributes 10 million to a multi-donor-funded programme out of an overall programme cost of 100 million, it applies a contribution factor of 10% and reports on 10% of the programme results.
 - The rule: Among donor agencies that follow the attribution approach.
 - The exception: Among donor agencies that follow the contribution approach.

Each approach has its own advantages and disadvantages. Attribution is often favoured because it allows an agency to report on the results that its assistance has brought about. The EC (2013, 10) states that, the greater the demand from taxpayers to account for the use of public funds, the more inclined agencies are to attribute results to their support. For instance, when confronted with calls for greater transparency and value for money at a time of economic crisis and fiscal austerity, DFID decided to follow the attribution approach and presents results aggregated at level 2 of its results framework under a banner headed “*What results has DFID financed?*” (DFID 2011a, 3). While attribution is a powerful instrument for strengthening public support for development cooperation, it should be viewed critically because of the methodological challenges of attributing results. Agencies that follow the full attribution approach generally argue that their contribution is so substantial that the intervention would not have taken place without their support. This completely disregards the contributions of other development actors, however. While the proportional attribution approach may be viewed less critically, it is based on an assumption that contribution factors are sufficient for establishing attribution. However, results may be

clearly attributed only if rigorous impact evaluations are conducted for all interventions that use standard indicators. This is not possible, however, for reasons of cost.

The contribution approach is less problematic since no claims are made about the precise quantity of results that may be attributed to an individual agency. The World Bank is one of the organisations that follow the contribution approach. It describes the results measured at level 2 of its corporate scorecard as “*Country Results Supported by the World Bank*” (World Bank 2013b, 9). According to da Costa (2009, 10-12), reporting on contributions is more consistent with the principle of country ownership because it makes a big difference whether donor agencies claim to have “built schools” or to have “helped partner countries to build schools”. However, the practice of full contribution⁶⁸ and leads to the problem of double counting (see section 10.3), i.e. the same results are measured and counted by many different organisations. Any attempt to aggregate outputs and outcomes across the corporate results frameworks of different agencies would therefore lead to greatly inflated figures. The practice also creates difficulties for bilateral agencies in reporting on the results delivered through their core funding of multilateral organisations. In order to solve the problem of double counts and to give an indication of the extent of their contributions to results, some donor agencies calculate their average share of funding of interventions that delivered the reported results. For instance, the ADB states in its Development Effectiveness Review published in 2012 that it paid 35% of the total cost of operations that programmed the outputs presented (ADB 2013b, 14).

Table 12 shows which of the four approaches are followed by the donor agencies reviewed for this study (some donor agencies follow more than one approach at the same time). Unfortunately, the document review did not make clear which approaches AusAID and UNDP follow in reporting on aggregate results. UNDP states that output indicators in the strategic plan measure “*only those results from schemes, services, plans, actions, etc. which are specifically supported by UNDP*”. However, there is no information on whether UNDP attributes these results to its support and whether full or proportional results are counted. Similarly, AusAID states that indicators “*measure the contribution of Australian aid to development outcomes in [...] partner countries*” (AusAID 2012, 20), without providing any further

68 The full attribution approach leads to the problem of double counting as well.

information. In general, there is a lack of transparency, in particular on whether full or proportional results are reported and what contribution factors are used. Missing or incomplete information is indicated by question marks in Table 12.

Table 12: How are results counted and reported? Differences between donor agencies				
	Full attribution	Proportional attribution	Full contribution	Proportional contribution
ADB	–	–	✓	✓
AfDB	–	✓	–	–
AusAID	?	?	?	?
DFID	–	✓	✓	–
EC	?	?	?	?
IDB	✓ ?	✓ ?	–	–
IFC	✓	✓	–	–
MCC	–	✓	–	–
UNDP	?	?	?	?
US Department of State and USAID	✓ ?	✓ ?	✓ ?	–
World Bank	–	–	✓	✓ ?
Sources: ADB (2013c, 5); AfDB Group (2013b, 10); DFID (2013a, 4-7); EC (2013a, 10); IDB (2012, 22-23); IFC (2013d; 2013e); MCC (2012, 2-3); US Department of State / USAID (2013a); World Bank (2013b, 9)				

Only two of the donor agencies reviewed, i.e. the ADB and the World Bank, exclusively follow the contribution approach when reporting on aggregate results. Both agencies generally report on the full results of projects supported,⁶⁹ but make certain exceptions where only a share of the total intervention results is counted. For example, the ADB counts the results of project components financed by other actors only if the project is administered by the ADB. In the case of parallel co-financing and if ADB does not administer the project, only ADB output and outcome targets are counted, but not the results of other financing sources (ADB 2013c, 5). Interviews with World Bank staff revealed that the World Bank follows a similar approach. However, information on when this is the case is not publicly available. EuropeAID is also planning to follow a contribution approach for its results framework. It will, however, also consider the attribution approach if results can be identified that can be directly linked to EU support (EC 2013a, 10).

The majority of the aid agencies studied, i.e. the AfDB, IDB, MCC, the US Department of State and USAID, IFC and DFID, at least partly claim attribution of results. Following the introduction of its new results measurement framework for 2013-2016, the AfDB has just switched from a full contribution to a proportional attribution approach (AfDB Group 2013b, 10). The reason given by the AfDB for the change is that reporting on overall results leads to double counting and that the link between the inputs provided by the bank and the results reported is not sufficient (AfDB Group 2013b, 10). The IDB aims to attribute results to its support as well, but its results framework does not provide information on whether full or proportional attribution is used (see IDB 2012, 22-23).

The MCC attributes outputs to its support while recognising that it may be difficult to attribute changes measured at outcome level to the MCC's investments (MCC 2012, 2). This is why outcomes have not been aggregated at agency level to date (MCC 2013c). In its guidance document on common indicators, the corporation states that it will make clear which outcome

69 For example, the ADB explains as follows in its guidance document on the use of results framework indicators (RFIs): *“Do RFIs apply to the entire project? Yes. The key outputs and outcomes of the entire project are counted. Projects include those operations that are financed in total or in part by loans, ADF grants, or equity investments. They include sovereign and non-sovereign loans. Most ADB-supported projects are financed from multiple sources; all outputs and beneficiaries are to be counted towards RFIs, irrespective of the size of ADB’s contribution”* (ADB 2013c, 4)

changes are likely to be the direct result of MCC assistance and which changes could be results of both MCC investments and other external factors and interventions (MCC 2012, 2). With regard to results delivered jointly with other organisations, Millennium Challenge Accounts⁷⁰ (MCA) are advised to report only on the contribution of MCC investments. However, MCC recognises that this is challenging and often not exact and that calculations should therefore be documented in the M&E plan (MCC 2012, 2).

Similarly, the US Department of State and USAID state that standard indicators measure outputs attributed to US government (USG) assistance, as well as outcomes and impacts that are influenced by many factors and to which the US government has contributed together with other development partners (US Department of State / USAID 2013a). The US Department of State and USAID have formulated methodological *guidance notes that specify what results should be counted and reported on for each standard indicator*.⁷¹ *The guidance notes show, however, that the US Department of State and USAID also claim credit for results that are not in practice solely attributable to USG assistance. First, many output indicators measure results that are delivered jointly with other development partners. Second, standard indicators that count the number of beneficiaries are often defined to measure both direct and indirect beneficiaries.*⁷² While direct beneficiaries are those reached with assistance funded in part or in whole by the USG, indirect beneficiaries are those reached by means of a follow-up or an indirect effect (e.g. partner countries scaling-up a USG pilot intervention with no additional USG funding) (see for example US Department of State / USAID 2012d, 185). *A number of exceptions are also made for standardised outcome indicators, where the indicator guidelines specify that results measured are directly attributed to USG assistance. For instance, when using the indicator defined as the “value of exports of targeted agricultural commodities as a result of USG assistance”, only trade that is attributable*

70 When countries are awarded a compact by the MCC, they set up a local MCA. The MCA is a local accountable entity that manages and oversees all aspects of implementation (MCC 2013a).

71 See *US Department of State / USAID (2012a); US Department of State / USAID (2012b); US Department of State / USAID (2012c); US Department of State / USAID (2012d); US Department of State / USAID (2012e) and US Department of State / USAID (2012f)*.

72 One example is the indicator defined as the “number of administrators and officials successfully trained with USG support” (US Department of State / USAID 2012d, 185).

to USG assistance is measured (US Department of State / USAID 2012e, 123-124).

Both the IFC and DFID have formulated more detailed rules for calculating what results are attributed to their support. The IFC applies a contribution factor to claim credit for results measured by standard indicators and used to report on progress towards the IDGs. The contribution factor is a function of the type of intervention (i.e. advisory services or equity and loan investments) and IFC's stake in a project. For advisory services, the IFC claims credit for 100% of the results of projects, based on an assumption that the transaction in question would not have been completed without its advisory services (IFC 2013d). In the case of equity and loan investments, only *pro rata* incremental reach is counted as long as the equity provided by IFC is below 10% of total equity or if IFC loans are worth less than 20% of the total project cost. If the equity or loans exceed these percentages, however, 100% of incremental reach is measured (IFC 2013e; IFC 2013d).⁷³

DFID reports in its results framework not only on bilateral results, but also on multilateral results to which it has contributed by providing core funding (DFID 2013a, 4-7). When reporting on multilateral results, DFID follows the principle of full contribution and reports on overall results delivered by multilateral partners. To provide an indication of the extent of DFID's contributions to results, the UK share of overall funding is presented alongside the results (DFID 2013a, 6). In the case of bilateral results, the attribution approach is followed. For instance, where programmes are carried out jointly with other partners, results attributed to DFID are calculated as a share of total results that is proportionate to the share of the programme cost paid for by DFID (DFID 2013c, 10).⁷⁴ Similarly, when

73 The contribution rules used by the IFC for the IDGs are presented here in simplified form. See IFC (2013d) and IFC (2013e) for more detailed explanations of the contribution rules for IDG 2: Health and Education and IDG 3: Financial Services.

74 Four of the indicators included at level 2 of DFID's results framework under bilateral indicators also capture results delivered through multilateral channels (DFID 2013a, 6). However, only those results of multilaterals are captured under bilateral results in relation to which DFID provides specific sector support to multilaterals at country level (other results of multilaterals are assessed at global level and proportioned according to DFID's overall share of the allocation to the organisations in question) (DFID 2013e, 1-2). Results of multilateral programmes attributed to DFID are based on the proportion of their sector spend supported by DFID (DFID 2013e, 4).

budget or sector support⁷⁵ is provided, the total results are based on DFID's share of total or sector (government) spending⁷⁶ (DFID 2013c, 10-11). A number of examples of how DFID calculates the share of results that can be attributed to its support are presented in Table 13.

The attribution practices followed by DFID can be criticised because DFID attributes not only results at output and immediate-outcome level to its engagement, but also results that are captured by intermediate-outcome indicators that measure country-wide changes. Indicators such as the "number of people achieving food security through DFID support" (DFID 2013a, 5) are influenced by a variety of external factors and hence rigorous evaluations would be needed to establish causality. However, these are expensive to perform and DFID therefore makes a variety of assumptions to establish causality.

For example, the "number of people achieving food security through DFID support" is calculated as follows. First, country offices use the Integrated Food Security Phase Classification (IPC)⁷⁷ to report on the annual number of people becoming food-secure. Second, the number of people who have achieved food security through DFID support is calculated based on the percentage of DFID funding in the overall funding for food security (at national or sub-national level) (DFID 2013b). At a country or sub-national level, however, it is very difficult to assess DFID's share of overall funding for food security. Moreover, whether or not people move into food security is influenced by a variety of factors that are not related to the amount of funding available. These factors include domestic food prices, natural disasters and the economic situation in the country in question.

75 See <https://www.gov.uk/government/publications/indicator-methodology-notes>.

76 Apart from government expenditure, other material expenditure by civil-society organisations and others should also be considered where this is stated in indicator methodology notes (see for example DFID 2013d, 3).

77 *"The IPC is an innovative tool for improving food security analysis, international status comparison, and decision-making. It is a standardised scale that integrates food security, nutrition and livelihood information into a clear statement about the food security status as well as the nature and severity of a crisis and implications for strategic response"* (DFID 2013b).

Table 13: Examples for how DFID calculates results that are attributed to its support: hypothetical return on DFID-supported cash transfer coverage					
Country	Programme	Month	Total programme beneficiaries (i.e. people in households receiving transfers)	DFID share of costs (programme) or total / sector government spending (budget support)	DFID-supported coverage
A	Public works	August (highest monthly coverage in past 6 months)	590,000 (peak monthly coverage in past 6 months was 100,000 households (hh); on average 5.9 people in each household)	85 %	501,500
B	Pension	June	66,250 (15,000 transfers; average 1.2 pensioners per household; therefore 12,500 hh; average 5.3 people per hh)	100 %	66,250
C	Child grant (only)	June	114,750 (total hhs receiving child grant: 25,000, based on figures from management information system (MIS), minus hhs receiving child grant and pension: 10%, based on survey findings; multiplied by average hh size of 5.1)	50 %	57,375
	Pension (only)	June	40,000 (total hhs receiving pension: 15,000, based on MIS figures, minus hhs receiving child grant and pension: 10% of child grant partner hhs, based on survey findings; multiplied by average hh size of 3.2)	100 %	40,000
	Child grant and pension	June	14,750 (survey shows 10% of hhs receiving child grant also receive pension; MIS shows 25,000 hhs receive child grant; multiply by average hh size of 5.9)	100 %	14,750
TOTAL COUNTRY C					112,125

Table 13 (cont.): Examples for how DFID calculates results that are attributed to its support: hypothetical return on DFID-supported cash transfer coverage					
Country	Programme	Month	Total programme beneficiaries (i.e. people in households receiving transfers)	DFID share of costs (programme) or total / sector government spending (budget support)	DFID-supported coverage
D	Disability grant	May (highest monthly coverage in past 6 months)	31,650 (total number of people in hhs receiving the disability grant, based on MIS figures)	100%	31,650
E	Child grant		115,000 (35,000 grants; average of 1.4 eligible children in a hh with at least 1 eligible child; multiply by average hh size of 4.6)	100%	115,000
	Multi-donor co-financed public works		1,762,930 (based on MIS, which records number of people in partner hhs, and only one claim per hh)	30%	528,879
TOTAL COUNTRY E					643,879
Source: DFID (2013c, 11)					

At what levels of the results chain are standard indicators defined?

The terminology presented in Chapter 3.2 will be used to identify the levels of the results chain at which standard indicators measuring donor agencies' contributions are defined. It is important to note, however, that not all of the agencies use the OECD/DAC results terminology, and that commonly agreed definitions of immediate and intermediate outcomes do not exist. As a result, the classification of indicators as used in this study is not necessarily consistent with the classifications used by the agencies themselves.

Table 14 shows that most of the donor agencies studied have defined standard indicators at all levels of the results chain, i.e. at input and activity level, at output level, at immediate-outcome level and at intermediate-outcome and impact level. This is surprising, since most donor agencies state that indicators measure intervention outputs and outcomes, and not inputs, activities or impacts.

That said, the majority of indicators are (as expected) defined at either output or immediate-outcome level. These levels are best suited for reporting on contributions to longer-term development in partner countries since they measure results and have a strong and direct link to inputs provided by the reporting donor agency. Interventions that aim to support policy reform or to build institutions and capacity in partner countries, however, do not usually produce tangible outputs or immediate outcomes. To capture the contributions of this type of intervention, donor agencies have to resort to input and activity indicators or alternatively to indicators that measure medium-term to long-term changes in partner countries (i.e. intermediate outcome or impact indicators).

Input and activity indicators measure the number of people, projects or countries supported in a specific intervention area or sector (e.g. “the number of countries where adaptation programmes have helped to reduce their vulnerability to climate change”). They are less suitable, however, for reporting on results because they do not provide information on what was achieved with the assistance provided. Intermediate-outcome and impact indicators are also not ideal. They measure results (e.g. “quality of public administration”) that are a product of various factors and do not enable a clear link to be established between the inputs provided by one agency and the results measured.

Recent revisions of results frameworks have revealed several trends in the use of indicators at the different levels of the results chain. First, several donor agencies have introduced “mini-results chains” at level 2 of their results frameworks and have stepped up the use of immediate-outcome indicators. The AfDB, for instance, now makes more use of immediate-outcome indicators (e.g. “people benefiting from better access to education”) in its new results framework for assessing how outputs (e.g. “classrooms and educational support facilities constructed”) have benefited the population (AfDB Group 2013b, 11-13; AfDB Group 2011, 22-23). Moreover, some donor agencies are making greater use of indicators at intermediate-outcome or impact level despite the problem of attributing results at these levels. The World Bank, for instance, has replaced several input and activity indicators in the category of “support to institutions and governance” (e.g. “countries with bank-supported programmes in public expenditure and financial management”) by intermediate-outcome indicators (e.g. “countries with strengthened public management systems in public financial management”) (World Bank 2013b, 9; World Bank 2011, 18).

Table 14: Examples of standard indicators defined by the donor agencies reviewed for different levels of the results chain

	Inputs and activities	Outputs	Immediate outcomes	Intermediate outcomes and impacts
ADB	–	Water supply pipes installed or upgraded (length of network in km)	Use of roads built or upgraded (average daily vehicle-km in the first full year of operation)	–
AfDB	–	Classrooms and educational support facilities constructed/ rehabilitated (number)	People benefiting from better access to education (number)	Quality of public administration (share of countries)
AusAID	Countries assisted with adaptation programmes to reduce vulnerability to climate change (number)	Children vaccinated (number)	Poor people with increased access to financial services (number)	Increase in crop value as a result of farmers' accessing new technologies (AUD)
DFID	Number of children supported by DFID in primary education (per annum)	Insecticide treated bed-nets distributed with DFID support (number)	Women and girls with improved access to security and justice services through DFID support (number)	Number of malaria specific deaths per 1000 persons per year
Europe-AID	Electoral processes and democratic cycles supported, observed and followed (number)	Staff / social workers trained (number)	Number of smallholders and traders i) with access to price information ii) who make use of price information	Quality and availability of regular crime statistics
IDB	Number of cross boarder and transnational projects supported (infrastructure, customs, etc.)	Teachers trained (number)	Farmers given access to improved agricultural services and investment (number)	–

	Inputs and activities	Outputs	Immediate outcomes	Intermediate outcomes and impacts
IFC (IDGs)	–	–	People receiving access to new or improved health services (number)	–
MCC1	Value of signed water and sanitation feasibility and design contract (USD)	People trained in hygiene and sanitation best practices (number)	Access to improved sanitation (% of households in project area)	Incidence of diarrhoea (% of individuals)
UNDP	Schemes which expand and diversify the productive base based on the use of sustainable production technologies (number)	Jobs and livelihoods created through management of natural resources, ecosystem services, chemicals and waste (number)	People who have access to HIV and related services (number)	Quality (to be defined) of civil society engagement in critical development and crisis related issues
US Department of State and USAID	Children under five reached by USG-supported nutrition programs (number)	Person-hours of training completed in fiscal policy and fiscal administration supported by USG assistance (number)	Hectares of biological significance and/or natural resources under improved natural resource management as a result of USG assistance (number)	Value of incremental sales (collected at farm level) attributed to Feed the Future (USD)
World Bank	Countries supported on natural disaster management (number)	Transmission and distribution lines constructed or rehabilitated (km)	People provided with access to a basic package of health care services (number)	Countries with strengthened national statistical systems (number)
Sources: World Bank (2013b, 9); ADB (2013d); IDB (2012, 22-23); AfDB Group (2013b, 12-13); US Department of State / USAID (2012e); MCC (2012); DFID (2013a, 5-6); AusAID (2012, 22); EuropeAID (2013); IFC (2010)				

Harmonisation of standard indicators measuring donor agencies' contributions

It is difficult to harmonise standard indicators among donor agencies since each agency pursues a different strategy and wants to formulate standard indicators which best reflect its portfolio (see Table 26 in the appendix for a detailed list of indicators used by the agencies).

Nevertheless, in sectors on which a number of the development agencies reviewed focus, some indicators are already harmonised and many indicators have similar definitions (see Table 15). The current level of harmonisation of standard indicators is more a result of an informal than a formal coordination process. When introducing standard indicators, donor agencies often choose indicators that are already used by other development agencies or multilateral development banks.

Recently, however, a number of Development Finance Institutions (DFIs) decided to formally harmonise standard indicators in a variety of sectors. The initiative resulted in the harmonisation of indicator definitions, units of measurement and reporting standards for 28 indicators in 12 sectors (EDFI 2013).⁷⁸ The multilateral development banks (i.e. the ADB, AfDB, the European Bank for Reconstruction and Development, IDB and the World Bank Group) joined forces with a number of multilateral finance institutions (i.e. the International Fund for Agricultural Development, the Islamic Development Bank, the European Investment Bank) to launch a process of indicator harmonisation in February 2014.

The harmonisation of standard indicators can have many benefits. For example, the European Development Finance Institutions (EDFI) stated in a press release that harmonisation would allow them to use common data sets to assess development results and would make impact assessment more consistent across institutions. Moreover, harmonisation allows for the aggregation of results across institutions and makes it possible to compare sector and regional results. Finally, both the reporting burden and the cost for clients that receive investments from different development institutions are likely to be reduced (EDFI 2013).

78 A memorandum entitled “*IFIs Harmonized Development Results Indicators for Private Sector Investment Operations*” was signed by 12 members of the European Development Finance Institutions (EDFI) and 13 other international financial institutions (IFIs) (EDFI 2013).

Table 15: Comparison of selected infrastructure indicators (transport, water, sanitation and energy)

	Transport	Water	Sanitation	Energy
ADB	<ul style="list-style-type: none"> – Roads built or upgraded (km) – Use of roads built or upgraded (average daily vehicle-km in the first full year of operation) 	<ul style="list-style-type: none"> – Households with improved water supply (number) 	<ul style="list-style-type: none"> – Household with new or improved sanitation (number) 	<ul style="list-style-type: none"> – Transmission lines installed or upgraded (km) – Distribution lines installed or upgraded (km) – Installed energy generation capacity (of which renewable) (megawatts)
AfDB	<ul style="list-style-type: none"> – Roads constructed, rehabilitated or maintained (km) – Staff trained/recruited for road maintenance (number) – People educated in road safety and HIV transmission (number) – People with improved access to transport (number) 	<ul style="list-style-type: none"> – People with new or improved access to water and sanitation (number) – Drinking water capacity created (m³/day) – Workers trained in maintenance of water facilities (number) 	<ul style="list-style-type: none"> – People with new or improved access to water and sanitation (number) 	<ul style="list-style-type: none"> – Cross-border transmission lines constructed or rehabilitated (km) – Power capacity installed (of which renewable) (megawatts) – Staff trained/recruited in the maintenance of energy facilities (number) – People benefiting from new or improved electricity connections (number)

Table 15 (cont.): Comparison of selected infrastructure indicators (transport, water, sanitation and energy)				
	Transport	Water	Sanitation	Energy
AusAid	– Roads constructed, rehabilitated or maintained (km)	– People with increased access to safe water (number)	– People with increased access to basic sanitation (number)	
DFID		– People with sustainable access to clean drinking water sources with DFID support (number)	– People with sustainable access to an improved sanitation facility through DFID support (number)	– People with improved access to clean energy as a result of DFID funding (number)
Europe-Aid	– Roads constructed/ maintained (km) – People benefiting from new road connection (number)	– Sites monitored for pollution prevention and protected against pollution (number) – Pollution sources and of polluted sites respectively avoided and cleaned (number)		
IDB	– Interurban roads built or maintained/ upgraded (km)	– Household with new or upgraded water supply (number)	– Household with new or upgraded sanitary connections (number)	– Electricity transmission and distribution lines installed or upgraded (km) – Renewable power output capacity installed (megawatts)

Table 15 (cont.): Comparison of selected infrastructure indicators (transport, water, sanitation and energy)				
	Transport	Water	Sanitation	Energy
MCC ⁷⁹	– Roads completed (number)	– Water points constructed (number)		
US Department of State and USAID	<ul style="list-style-type: none"> – Roads constructed or repaired with USG assistance (km) – Person-hours of training completed in transportation technical fields supported by USG assistance – Number of days of USG-funded technical assistance in transportation technical fields provided to counterparts or stakeholders 	<ul style="list-style-type: none"> – People gaining access to an improved drinking water source (number) – People receiving improved service quality from existing improved drinking water sources (number) 	<ul style="list-style-type: none"> – People gaining access to an improved sanitation facility (number) – Improved toilets provided in institutional settings (number) 	<ul style="list-style-type: none"> – Clean energy generation capacity installed or rehabilitated as a result of USG assistance (megawatts) – Beneficiaries with improved energy services due to USG assistance (number)
World Bank	– Roads constructed or rehabilitated (km)	– People with access to improved water source (number)	– People with access to improved sanitation (number)	<ul style="list-style-type: none"> – Transmission and distribution lines constructed or rehabilitated (km) – Generation capacity of conventional and renewable energy (megawatts)
Sources: ADB (2013d); AfDB Group (2013, 12-13); IDB (2012, 22-23); AusAID (2012, 22); US Department of State / USAID (2013b); EuropeAID (2013, 77; 80-81); World Bank (2013b, 9); DFID (2013a, 5-6)				

79 The MCC does not yet use indicators at intermediate outcome/impact level to aggregate results at agency level, due to the attribution problem (MCC 2013c).

6.1.3 Aid transparency: publishing the results of individual aid activities

In addition or in parallel with the use of standard indicators and against the backdrop of a more general trend towards open government and aid transparency (McGee 2013, 108-109), a growing number of development agencies are publishing on-line information at individual intervention level on the results of the projects and programmes funded by them. This information is published either as part of the international common standard for reporting on individual aid activities, the International Aid Transparency Initiative (IATI) standard,⁸⁰ or in the form of reports (e.g. the World Bank) or on-line databases (e.g. MCC).

While the amount of information provided when reporting on results at an individual intervention level is much greater than that captured by a limited set of standard indicators, the former is less suited for presenting a snapshot of an agency's development results to the general public. Results cannot as easily be aggregated and, given the high diversity and multitude of the information presented, it is difficult for users to build up a picture of the complete set of activities of a donor agency.

However, this is not the main purpose of publishing the results of individual projects and programmes. First, the obligation to publish results information may incentivise project and programme managers to become more results-oriented and hence help to institutionalise a results culture in development cooperation. Second, it can be used to inform the public about the types of activities undertaken, as well as the progress and success of programmes and projects in different countries and regions. Most importantly, the public in both donor and developing countries can use the information to hold donor agencies accountable for their activities. It could also be argued that publishing the results of individual aid activities on-line is sufficient to inform the public about the effects of development cooperation. If the

80 The IATI is a voluntary, multi-stakeholder initiative consisting of donor countries, developing countries, civil-society organisations and other experts. The aim of the initiative is to improve the transparency of aid in order to boost the effectiveness of aid for poverty reduction. The initiative was launched in 2008 as part of the Third High Level Forum on Aid Effectiveness in Accra. The IATI has developed a common standard for reporting aid information. Over 160 organisations have already set up accounts to publish to the IATI Registry and 22 partner countries have endorsed the IATI (IATI 2013b).

information is presented in an easily searchable manner, standard indicators may become superfluous.

Despite this, the publication of development results of individual aid activities is a relatively recent phenomenon. While the accountability and transparency commitments made by donors in the Paris Declaration on Aid Effectiveness included aid flows only (OECD/DAC 2005/2008, 8),⁸¹ the Accra Agenda extended the commitments to include results of development expenditure, if available (OECD/DAC 2005/2008, 20). The Busan Partnership has made a full commitment to publishing results, stating that the “*full range of information on publicly funded development activities, their financing, terms and conditions, and contribution to development results*” should be made publicly available (Fourth High Level Forum on Aid Effectiveness 2011, 6).

Today, most aid transparency initiatives, including the International Aid Transparency Initiative (IATI), aidinfo⁸² and Publish What You Fund (PWYF),⁸³ still focus mainly on the transparency of aid flows. The IATI’s activity standard, which is designed for reporting on individual aid activities such as programmes or projects, is also suited for publishing information on results (IATI 2013b). Nevertheless, of the more than 160 organisations that have set up accounts for publishing information to the IATI registry (IATI 2013b), only a minority – and none of the donor agencies reviewed for this study – publish results data as it is not mandatory (IATI 2013a, 18-39). A growing number of organisations have, however, pledged to publish results as part of the activity standard in the future. These include the AfDB, the IDB and UNDP (IATI 2013a, 116-117).

Moreover, several of the reviewed agencies, i.e. AfDB, ADB, IDB, World Bank, DFID, Danida and MCC, already publish results information in

81 Under the Paris Declaration on Aid Effectiveness, donors committed to “*provide timely, transparent and comprehensive information on aid flows so as to enable partner authorities to present comprehensive budget reports to their legislative and citizens*” (OECD/DAC 2005/2008, 8).

82 Aidinfo seeks to (1) to improve the access to aid information for different stakeholders, (2) increase the use of information in order to increase accountability and enhance the effective use of resources, and (3) provide evidence on the benefits of increased transparency and increased use of information (aidinfo 2013).

83 *Publish What You Fund* was launched at the 2008 Accra High Level Forum on Aid Effectiveness by a coalition of organisations working in the fields of governance, aid effectiveness and access to information. The campaign aims to increase aid transparency and calls on donors to publish information about aid (PWYF 2013).

other formats. The World Bank, IDB, DFID and the MCC are the most progressive in this regard, regularly publishing progress reports as well as completion reports of aid activities on-line. These include data on indicators within project or programme results frameworks and include information on baseline values, current values and target values. The MCC also reports on progress in all indicators included in a country's M&E plan every quarter in an on-line database known as the Indicator Tracking Tables (MCC 2011, 2).⁸⁴ The IDB has recently started an on-line platform called MapAmericas, which allows users to view and track results of development interventions funded by the bank. The platform uses geo-mapping technology and shows users where individual projects are located. By clicking on individual projects, users can access a variety of information, including the money invested and results attained (IDB 2013a). The ADB and the AfDB also publish results information as part of completion reports, but do not publish on-line progress reports on ongoing interventions.

Danida publishes information on each intervention it funds in a Danida Project and Programme Overview (PPO),⁸⁵ which can be accessed through its website. The database provides information on the objective, status and risks of interventions, as well as giving financial information and key results indicators. It is updated annually (Danida 2011, 14). Information on results is not yet available for all programmes and projects and not all indicators from results frameworks are shown. However, Danida is hoping to have information on all indicators available in the database in future. It is also planning to publish results as part of the IATI activity standard (Danida 2012b). Danida is the only one of the agencies reviewed that has decided against using standard indicators. Danida argues that raising transparency by publishing results of interventions on-line is sufficient to inform the public about results, particularly if results information is easily searchable. Standard indicators are not used for reporting on contributions as their use is considered to have a adverse effect on alignment with partner countries' priorities.⁸⁶

84 These are published on the MCC's website (<http://data.mcc.gov/>) and show the following: indicator definition, the level of indicator (process, output, outcome), baseline value, actual current value, performance target at the end of the compact, and the percentage of target completed to date (MCC 2013b).

85 Available in Danish only (Danida 2012a).

86 According to Frank Wissing Madsen (Danida, interviewed on 23 May 2013).

6.1.4 Measuring operational and organisational effectiveness

In addition to indicators measuring development results, several of the donor agencies reviewed have introduced indicators of operational and organisational effectiveness as part of their corporate results frameworks. Improvements in operational and organisational effectiveness are expected to result in better delivery of intervention outputs and outcomes and ultimately to contribute to long-term development progress in partner countries (see Figure 4). There are many differences between the issues addressed and the indicators used by the donor agencies (see Table 27 in the appendix). Nevertheless, some of the most common indicators are explained in brief in the following paragraph, in which separate descriptions are given of indicators of operational and organisational effectiveness.

6.1.4.1 Indicators of operational effectiveness

As part of efforts to measure their operational effectiveness, several donor agencies have introduced development outcome rating systems for assessing an agency's overall success in achieving its development objectives. Operational effectiveness indicators also often measure progress in implementing results-based management, disbursement ratios, corporate strategies and international commitments.

1) *Development outcome ratings*

Development outcome rating systems can be used as proxies to assess the overall effectiveness of an agency's operations and strategies. Binnendijk (2000, 52) defines rating systems as "*instruments or structures for judging performance and results [...] by using a standardized set of criteria for such judgement and a standardized rating scale*". One of the main advantages of such systems is that ratings can be aggregated across very different types of interventions and strategies and can thus be used to report on performance at an aggregate level (Binnendijk 2000, 52-53). Hence, they can be used in parallel with or as an alternative to standard indicators measuring donor agencies' contributions to higher level development objectives. The ADB, for instance, has recently moved up the indicators assessing the quality of completed operations from level 3 of its results framework to level 2, to complement the standard indicators measuring the quantity of outputs and outcomes resulting from ADB's interventions (ADB 2012b, 4).

Rating scales and performance assessment criteria vary among donor agencies (Binnendijk 2000, 52-53). The IFC, for example, divides its rating scale into the following categories: “highly successful,” “successful,” “mostly successful,” “mostly unsuccessful,” “unsuccessful,” and “highly unsuccessful” (IFC 2013a). The performance of investments on the rating scale is assessed by the extent to which targets set for indicators have been achieved in the following four categories:

1. financial performance;
2. economic performance;
3. environmental and social performance;
4. private-sector development impact (IFC s.a.).

Overall outcome ratings of ongoing or completed strategies or interventions are also used by ADB, AfDB, DFID, IDB and the World Bank (in addition to the IFC) as indicators in their corporate results frameworks.

2) Implementation of results-based management

Several agencies measure progress in implementing results-based management. With respect to the planning stage, indicators measure the quality of strategies and interventions at entry and the quality of their monitoring and evaluation frameworks. Indicators also often measure disbursement ratios, whether interventions are progressing as planned, and whether results are reported by interventions and at agency level.

3) Implementation of corporate strategies and international commitments.

The strategies and strategic frameworks of the donor agencies reviewed differ. Hence, different indicators are used to report on their implementation. The ADB, for instance, measures the percentage of operations promoting the drivers of change identified in its Strategy 2020 (ADB 2013d), while DFID reports on the progress in implementing its structural reform plan, which sets out six objectives for the department for the next four years (DFID 2013a, 9). Several organisations also measure progress in mainstreaming cross-cutting issues in their operations. These are issues that they regard as being strategically important, such as gender, capacity development and climate change. Indicators related to the aid effectiveness agenda are often used for tracking the implementation of international commitments

(e.g. indicators of the Paris Declaration on Aid Effectiveness or the Global Partnership for Effective Development Cooperation).

6.1.4.2 Indicators of organisational effectiveness

Organisational effectiveness indicators used in the donor agencies' results frameworks focus mainly on internal aspects such as human resources, financial commitments and budget efficiency, business processes, transparency and the implementation of reforms.

1) Human resources

All of the donor agencies reviewed for this study have included in their corporate results framework indicators that monitor the management of human resources. Indicators which are frequently used relate to the proportion of women on their professional staff, staff diversity, employee engagement and mobility. Some agencies also monitor progress in terms of decentralisation. The World Bank (2013b, 17), for instance, measures the percentage of client services managed by staff based in client countries, while the AfDB Group (2013a, 17) monitors the percentage of operational staff based in field offices and the percentage of projects managed from field offices.

2) Financial commitments and budget efficiency

Two other important issues that are often monitored in order to assess an agency's organisational effectiveness are financial commitments and budget efficiency. With respect to financial commitments, the World Bank, for instance, monitors lending commitments, financial intermediary funds commitments, and partner executed fund commitments (World Bank 2013b, 17). Similar indicators are used by the IFC (IFC 2012, 98) and the IDB (IDB 2012, 24). To increase budget efficiency, indicators are often monitored that measure the share of administrative costs in total costs or per unit disbursed⁸⁷ and the average cost of preparing interventions or supporting project implementation.⁸⁸ DFID monitors the cost and size of its assets, as well as travel costs and air miles (DFID 2013a, 10). Similarly, the

87 See AfDB Group (2013b, 17); ADB (2013d); IDB (2012, 26); UN (2013a, 19).

88 See World Bank (2013b, 17).

UNDP monitors the percentage of total UNDP expenditure on management activities that goes towards travel costs (UN 2013a, 19).

3) *Business processes*

The optimisation of business processes is another vital aspect of organisational effectiveness. To monitor progress in this area, indicators are often used that measure cycle times. For instance, the IDB measures the period from the inauguration of country strategies to delivery. For loans, it measures the preparation time from profile to approval and the disbursement period from eligibility to first disbursement (IDB 2012, 26).⁸⁹

4) *Transparency*

The donor agencies reviewed also often monitor transparency commitments. AusAID, for example, has included several binary indicators in its results framework, such as “transparency charter released” and “all independent evaluations listed in the annual evaluation plan will be published” (AusAID 2012, 23). DFID tracks its efficiency in processing enquiries by members of parliament and the public (DFID 2013a, 10).

6.2 At country level

Results frameworks that define indicators at the different levels of the results chain are useful for managing the implementation of a development strategy at national, sub-national, sector or sub-sector level and for monitoring the progress made towards predefined goals. Indicators can be used to see whether the strategy is proceeding as planned and to inform decisions on potential adjustments to the strategy. Indicators can also be used to measure and assess progress towards strategic objectives, and if necessary to re-evaluate targeted objectives or the assumptions underlying a development strategy (Roberts / Khattri 2012, 14-15). Finally, indicators have to be monitored in order to report on development results and meet accountability and transparency requirements.

89 The AfDB uses two indicators for this purpose: “time to first disbursement (months)” and “time for approving operations (months)” (AfDB Group 2013a, 15). The ADB uses indicators defined as “operation processing time” and “processing time for procurement contracts” (ADB 2013d).

It is important to note that the focus of monitoring at country level is not on single projects, but rather on a broader country programme embracing many projects implemented by different donor agencies, the national government and other development actors. As such, it is a very broad approach to performance measurement that focuses on the achievement of long-term development objectives through the contributions of several development actors. Due to the long-term perspective, the emphasis is on monitoring development outcomes and impacts rather than on inputs, activities and outputs (Binnendijk 2000, 58).

Ideally, country-level performance monitoring systems should be in the hands of partner countries and used as a basis for performance measurement by all development actors concerned (Fourth High Level Forum on Aid Effectiveness 2011, 5). However, partner countries' performance monitoring systems for development cooperation have long been described as weak and have generally lacked performance data in any particular field (Vähämäki / Schmidt / Molander 2011, 26). The objectives of development cooperation tend to be defined externally and monitoring of activities has traditionally been done at project level rather than at sectoral or national level. Moreover, there has not tended to be much domestic demand for performance information and for the analysis and use of performance data (Vähämäki / Schmidt / Molander 2011, 26).

The Paris Declaration on Aid Effectiveness addressed partner countries' lack of ownership of development policies and strategies and sought to foster results-based management at country and sector level. Partner countries undertook to develop their own national development strategies (OECD/DAC 2005/2008, 3) and to establish results frameworks for monitoring progress in implementing their strategies (OECD/DAC 2005/2008, 7). Donors, in turn, pledged to base their support on partner countries' priorities (OECD/DAC 2005/2008, 3), to align country programming and resources with their partners' results frameworks, and to refrain from introducing additional performance indicators that are not consistent with partner countries' national development strategies (OECD/DAC 2005/2008, 7).

An evaluation of the implementation of the Paris Declaration on Aid Effectiveness (OECD 2011b) revealed that partner countries have made major progress in establishing and using results frameworks to monitor their development strategies. Starting from a very low base of 5% in 2005, the percentage of partner countries that have adopted relatively strong

frameworks, i.e. characterised by (1) clear institutional responsibilities and coordination, (2) comprehensive data coverage and frequent data collection, (3) quality and reliability of data, (4) good and improving stakeholder access to information, and (5) use of reports produced by policy-makers, rose to 21 % by 2010 (OECD 2011b, 86).

Improvements can be explained mainly by the fact that a number of countries adopted new national development strategies in 2010. These have now better results frameworks and use monitoring and evaluation to inform policy decisions (OECD 2011b, 86). However, the 2010 target of the Paris Declaration of a one-third reduction in the proportion of countries without transparent and monitorable frameworks has not been fully met (OECD 2011b, 86)⁹⁰ and many challenges remain.

Although the availability of data on indicators has improved in recent years, it continues to be a problem. Statistical capacities in developing countries are still often inadequate for producing reliable data (OECD 2011b, 88-89). As long as this is the case, donor agencies continue to have incentives to set up and use their own parallel monitoring systems (OECD 2011b, 89). Having a single performance assessment framework that is used jointly by a partner country government and its development partners as the primary basis for monitoring progress is, however, crucial for building a full picture of activities undertaken, progress made and challenges remaining in a given country (IHP+Results 2010, 27). Moreover, this may enable partner countries to take better informed decisions on what results to prioritise (da Costa 2009, 13). At the same time, the experience in practice is that, even if a partner country does have a single national performance framework, donors still often ask for data on additional indicators (IHP+Results 2010, 27).

6.3 At programme and project level

At programme and project level, indicators used as part of results frameworks generate valuable information for managing the implementation process and for monitoring and evaluating the performance of interventions. During the implementation stage, indicators serve to monitor programme or project implementation. They are useful not only for seeing whether an

90 The target translates into a goal of 36 % of partner countries having largely developed results-oriented frameworks (OECD 2011b, 86).

intervention is proceeding as planned, but also whether it is contributing towards the preset goals and targets (UNDP 2009, 8; USAID 2010b, 2). Hence, managers have to answer the following questions (UNDP 2009, 82):

- Are the planned activities being performed on time?
- Are the desired outputs being delivered according to plan?
- Will the outputs help to achieve the desired outcome?
- Will the outcomes bring about the envisaged development impact?

Based on the information obtained, managers can identify areas where corrective action has to be taken and suggest solutions for improving the intervention (Cook et al. 1995, 1305). The contextual indicators tracked alongside performance indicators in results frameworks can also provide important information on changes in context conditions that may affect the outcome of the development intervention. If necessary, the information obtained can be used to adapt the implementation strategy to the changed context conditions. It is also important to review the critical assumptions and risks underlying a development intervention to see whether they still apply or have to be modified (UNDP 2009, 82).

The use of indicators as part of project-level or programme-level results frameworks has, however, also been criticised. Many problems have arisen during monitoring. Results frameworks are often seen more as an additional requirement and add-on for assessing performance than as an instrument for learning and management. As a result, not enough use is made of the information available from indicators for managing project implementation (Vähämäki / Schmidt / Molander 2011, 24-25). On the contrary, since the emphasis is on upward accountability to a donor agency, too much emphasis may be placed on achieving indicator targets at the expense of the overall objective (Bakewell / Garbutt 2005, 10-11).

Indicators selected to monitor the progress of an intervention are also important for evaluations. While monitoring⁹¹ provides descriptive information on the progress of an intervention over time in relation to the targets set, evaluation also explores causality and thus provides a

91 Monitoring may be defined as a “*continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds*” (OECD/DAC 2009, 35-36).

more rigorous assessment of an intervention's performance (Görgens / Kusek 2009, 2; UNDP 2009, 8). More specifically, evaluation provides a “*systematic and objective assessment of an ongoing or completed project, programme or policy, its design, implementation and results*” (OECD/DAC 2009, 27). Evaluations can help to identify components of interventions that either work well or do not work, and provide explanations for successes or failures. In addition, they identify unintended results or consequences of development measures that are not routinely captured by monitoring (UNDP 2009, 82). The overall aim of evaluations is to provide information and lessons learned on what does and does not work. These lessons can be incorporated into decision-making and planning processes among both partner countries and donors (OECD/DAC 2009, 28).⁹²

Different performance criteria can be assessed in evaluations, such as “*the relevance and fulfilment of objectives, development efficiency, effectiveness, impact and sustainability*” (OECD/DAC 2009, 27-28). Depending on the criteria applied, different indicators may be of use. For example, indicators at input, output, outcome and impact level are important for evaluating the efficiency and effectiveness of an intervention (see the efficiency and effectiveness indicators defined in section 3.2). Indicators measuring high-level change at outcome and impact level are crucial for assessing the impact of an intervention and for evaluating the sustainability of impacts (see the sustainability indicators defined in section 3.2). Finally, contextual indicators provide important information since these influence the impact and sustainability of impacts of programmes, projects or policies (MDF training & consultancy 2005, 4).

92 In some cases, indicators could also be used to generate information for future planning purposes. For example, indicators could be used to compare performance between different units delivering the same service. The idea is to identify good performers, to learn from their experiences and to incorporate their success factors into future interventions (Cook et al. 1995, 1305). For example, the performance of schools can be compared by an indicator measuring student test scores. Once the best-performing schools have been identified, the factors influencing their success can be analysed. The information obtained can be used to improve the performance of similar schools.

7 Use of indicators in results-based approaches

Indicators can also be used for taking decisions on the disbursement of aid or other forms of funding. This is not the rule, however, and applies only to results-based approaches,⁹³ which are relatively new instruments in development cooperation. In traditional aid approaches, aid allocations depend on the amount of inputs needed to finance the desired results (e.g. funding of training of healthcare personnel to increase the quality of healthcare services). Results-based approaches differ in this respect, as payments are made only after certain predefined results (outputs or outcomes) have been delivered (Klingebiel 2012, 5).

Indicators are used to measure and verify the achievement of results. Hence, the selection and formulation of appropriate indicators is crucial to the success of results-based approaches (Savedoff / Martel 2011, 3). If indicators are poorly defined or incomplete, the results may not be fully measurable, which makes it difficult to pay for performance. In addition, if the intended results are not clearly defined in advance, the service-provider may not have enough incentive to deliver.

The types and levels of indicators used vary greatly across the different results-based approaches. Some approaches use indicators at output level, while others focus on higher-level changes at outcome level, such as infant mortality rates. Some emphasise qualitative aspects of outputs and outcomes, while others focus on quantitative changes (Pearson 2011, 4; Pereira / Villota 2012, 24). Results can also be defined by input indicators, for example where an increase in the healthcare budget is the desired result (Pearson 2011, 4). Standard indicators can be used in results-based approaches if they adequately reflect the result that is to be measured. However, caution

93 Result-based approaches fall into one of two categories: result-based aid (RBA) and results-based finance (RBF) (see Pearson 2011, 2; Klingebiel 2012, 6). Both approaches use contracts in which the desired results are defined, and link funding to the achievement of results, but they differ in terms of who provides the funding and who is the agent responsible for delivering results (Pearson / Johnson / Ellison 2010, 2-3). Whereas RBA takes the form of a partnership between a donor and a government, RBF is a form of domestic funding using a contractual arrangement between a government or a sub-national entity (i.e. a government or non-governmental organisation) as the funder and an implementing agency. There are also RBF and RBA hybrids, for example where an arrangement is made between a donor and a non-governmental agency or service-provider to deliver certain results in exchange for payment (Pearson / Johnson / Ellison 2010, 3).

has to be taken since it is even more important in results-based approaches than in traditional aid approaches that the indicators measure the expected results as accurately as possible. Since the objectives of interventions using a results-based approach differ widely, standard indicators are not likely to be available for all expected outputs and outcomes. This means that custom indicators will have to be formulated which are capable of accurately measuring the expected results.

The use of standard indicators has many advantages, however, particularly if outcome-level changes are measured. Collecting data on outcome indicators is expensive since surveys are usually needed. If standard indicators are used, data on outcomes may already exist and plans may be in place for collecting data on the indicator in question at regular intervals. This can significantly reduce the cost of collecting and monitoring data.

Four results-based approaches (see Table 16) are briefly discussed in the following sections to show how indicators can be used for aid disbursements. These are:

- GAVI's immunisation services support (ISS) programme;⁹⁴
- Output-Based Aid (OBA);
- Cash on Delivery (COD) Aid;
- the EU's MDG Contract.

The first two focus on outputs, while the latter two disburse aid based on the achievement of development outcomes.

7.1 Approaches that specify output indicators

GAVI's ISS programme, which aims to extend the coverage of immunisations in developing countries, uses a very narrow definition of results. In eligible partner countries, it makes an initial investment to improve the standard and availability of immunisation services over a two-year period. Further assistance is then provided, depending on the volume of outputs delivered, i.e. a country is paid USD 20 for each additional child reached with three doses of diphtheria-tetanus-pertussis (DTP3) vaccine (Pearson 2011, 4).

94 GAVI stands for Global Alliance for Vaccines and Immunisation.

The Output-Based Aid approach also makes the disbursement of funds conditional on outputs. OBA is a much broader concept than GAVI's ISS programme and is aimed at improving the access of the poor in developing countries to basic services such as infrastructure, healthcare and education (GPOBA s.a.). In addition to linking the payment for services to the volume of outputs, OBA also takes the quality of outputs into account (Pereira / Villota 2012, 24). Performance is assessed on the basis of pre-agreed quantitative or qualitative indicators for measuring the volume and quality of outputs (e.g. kilometres of roads constructed or maintained, user comfort of the roads constructed or maintained)⁹⁵ (see for example Mumssen / Johannes / Kumar 2010, 40-42).

7.2 Approaches that specify outcome indicators

Another family of results-based approaches (e.g. Cash on Delivery Aid and the MDG contract) addresses higher-level development changes at outcome level. Performance is measured at outcome level in terms of a medium-term objective (e.g. enrolment rate) rather than in terms of the volume and quality of outputs delivered (Adam et al. 2004, 1060). The idea behind such approaches is to increase partner countries' ownership of reforms by placing the instruments or policies for achieving outcomes in their hands (Adam et al. 2004, 1060). However, development outcomes are influenced by many factors outside the control of governments, which makes attribution difficult.

Cash on Delivery Aid is one example of an outcome-focused results-based approach. At its core is a contract between a donor and the partner of funds (usually a national or provincial government), which specifies mutually agreed desired outcomes and payment details for each unit of progress made. COD Aid takes a "hands-off approach" and leaves full responsibility for the achievement of results to the partner government⁹⁶ (Savedoff / Martel 2011, 1-2; Birdsall et al. 2011, 17-18). Besides providing greater ownership for partner countries, the approach has the potential advantage of increasing transparency and making both funders

95 User comfort of roads is often measured by an International Roughness Index (Mumssen / Johannes / Kumar 2010, 42).

96 Moreover, the partner can use the payment received for outcomes delivered in any way, i.e. there are no restrictions on how the money should be spent (Birdsall et al. 2011, 19).

and partner countries more accountable to their citizens. Donors pay only for outcomes delivered, which makes it easy to communicate the results of aid to the general public. Moreover, COD Aid requires outcomes to be publicly reported. Hence, the information can be used by NGOs or civil-society groups in partner countries to hold their governments accountable (Birdsall et al. 2011, 21-22).⁹⁷

COD Aid can be used only if suitable indicators for measuring outcomes can be found (Savedoff / Martel 2011, 1). Indicators should be related to the mutual objective as closely as possible so as to generate the right incentives and to avoid unintended consequences and distortions. In general, a broad outcome measure such as the child mortality rate is less likely to lead to distortions than measures which are more narrowly defined and relate to a specific intervention. For example, increasing the use of bed nets in malaria risk areas may be an effective way of lowering the child mortality rate. However, an outcome measure such as “increased use of insecticide-treated bed nets” may lead to resources being reallocated from other, potentially more effective programmes towards a programme aimed at increasing the use of bed nets. Another advantage of a relatively broad outcome indicator is that it may contribute to capacity-building by encouraging the long-term development of public policies and institutions rather than to the implementation of one specific measure which may have only a short-term effect (Savedoff / Martel 2011, 3-4).

The European Union’s MDG Contract for the general budget support (GBS) programme⁹⁸ is similar to COD aid in that aid is disbursed depending on the progress made as measured by a set of mutually agreed outcome indicators (Birdsall et al. 2011, 38). The MDG Contract does not make all aid conditional on performance, however. Rather, it provides general budget

97 Another crucial element of COD Aid is that progress towards agreed outcomes has to be independently verified by a third party, who may not be either the funder or the partner (Birdsall et al. 2011, 19).

98 The European Commission has decided not to continue with the MDG Contract, which was provided to eight good-performing countries as part of the 10th European Development Fund (EDF) (EC 2012, 12). The principles of the MDG contract may, however, be applied to two of the three new budget support programmes, i.e. Good Governance and Development Contracts (GGDCs) and Sector Reform Contracts (SRCs). In GGDCs, support is provided to a national development or reform policy and strategy, while SRCs are designed to promote sector reforms and improve service delivery (EC 2012, 12).

support to eligible countries,⁹⁹ consisting of a fixed tranche of 70 % and a variable tranche of 30 % (EC 2008, 1-2). The variable tranche is divided into an MDG-based tranche (of at least 15 %) and an annual performance-based tranche of up to 15 %¹⁰⁰ (EC 2008, 1-2).

Only the disbursement of the MDG-based tranche is based on indicators. Performance is assessed against MDG-related outcome indicators (notably in the healthcare, education and water sector) and indicators chosen to measure progress in public financial management (PFM) reforms. The indicators used for assessing performance are selected at country level. They are locally and jointly agreed and drawn from a country's performance assessment framework (PAF) (EC 2008, 10-11). While the MDG-related outcome indicators are usually quantitative and taken from the MDG framework¹⁰¹ (e.g. net enrolment rate, infant mortality rate, proportion of population using an improved drinking water source), qualitative indicators are often selected for measuring progress in public financial management (Pereira / Villota 2012, 24-25).

99 *"Eligible countries are those with GBS programmed under the 10th EDF, that have a successful track record in implementing budget support, show a commitment to monitoring and achieving the MDGs and to improving domestic accountability for budgetary resources, and have active donor coordination mechanisms to support performance review and dialogue."* (EC 2008, 2)

100 The annual performance-based tranche (APT) can be withheld if there are specific and significant concerns about performance with respect to the implementation of the poverty reduction strategy paper (PRSP), performance monitoring (notably data availability), progress with PFM improvements, and macroeconomic stabilisation. The assumption is that this tranche is disbursed in full. However, the APT allows for an annual assessment of a country's performance in the areas specified above during the joint annual review of a country's PRSP, typically using a jointly agreed performance assessment framework (EC 2008, 11).

101 Indicators do not necessarily have to be taken from the MDG framework. The only requirement is that they measure performance in areas that are crucial for attaining the MDGs (EC 2008, 10).

	Short description	Indicator(s) used	Level of indicator(s)	Type of indicator(s)
GAVI's ISS	Aims to increase immunisation coverage. It makes an initial investment in a partner country's immunisation services over a two-year period. Performance is then rewarded based on the achieved output.	Number of additional children immunised with three doses of diphtheria-tetanus-pertussis (DTP3) vaccine.	Output	Quantitative
Output-Based Aid	OBA links the payment of aid to the volume of outputs (e.g. connections to electricity grids, water and sanitation systems) and to the quality of service delivery.	Examples: ¹⁰² <ul style="list-style-type: none"> – Km of road constructed or maintained – Number of community access points delivered (public internet access). 	Output	Quantitative and qualitative
COD Aid	Donors pay partner governments a fixed sum for each additional unit of progress towards a common goal.	Example of indicators for reducing child mortality: <ul style="list-style-type: none"> – Under-five mortality rate – Child stunting (height-for-age) – Low birthweight 	Outcome	Quantitative

102 For OBA projects and indicators used, see <http://www.oba-data.org/>.

Table 16 (cont.): Indicators used in results-based approaches				
	Short description	Indicator(s) used	Level of indicator(s)	Type of indicator(s)
MDG Contract	<p>Form of general budget support with a 70% base payment and a variable tranche of 30%.</p> <ul style="list-style-type: none"> – MDG-based tranche (at least 15% of total commitment) following a mid-term contract review. – Annual performance tranche (of up to 15% of annual allocation) may be withheld if there are specific and significant concerns about performance with respect to implementation of the poverty reduction strategy paper, performance monitoring (notably data availability), progress with PFM improvements, and macroeconomic stabilisation. 	<p>The indicators for the MDG-based tranche are selected at country level. Outcome indicators are locally and jointly agreed and drawn from the country's agreed performance assessment framework.¹⁰³ Performance is assessed against MDG-related outcome indicators (notably in healthcare, education and water sectors) and PFM reforms.</p>	Outcome	Quantitative and qualitative
Sources: GAVI Alliance (2013); GPOBA (s.a.); Birdsall / Savedoff / Mahgoub (2010, 17-18); Savedoff / Martel (2011, 8); EC (2008, 10-11)				

103 See EC (2008, 10-11).

8 Costs, risks and adverse effects of using indicators

While indicators serve many different purposes and generate important information for planning, managing, monitoring, evaluation and reporting on development measures, there are certain costs, associated risks and adverse effects that have to be considered as well.

First, there is the cost of setting up and maintaining an indicator-based performance measurement system. This cost has been criticised by many as exceedingly high and as crowding out the resources and time available for planning and implementing development interventions (Vähämäki / Schmidt / Molander 2011, 24; Natsios 2010, 5). In addition to these more or less obvious costs, there are potential adverse effects resulting from the use of indicators. These may lead to unintended and often undesirable outcomes (Pidd 2005, 483). For example, distortions may arise because not every aspect underlying an objective can be measured and included in performance measurement schemes. Using indicators for performance measurement may also lead to resources being shifted to more easily measurable and “more productive” areas. In addition, it may encourage manipulation and cheating and may cause staff members to be more risk-averse in their behaviour. Finally, there are several risks and limitations that have to be considered when donor agencies use standard indicators to aggregate and communicate development results. These points will be discussed in more detail in the following four sections.

8.1 Distortions arising from an emphasis on measures of success and on quantified aspects of performance

According to Smith (1995), the use of quantitative indicators for measuring performance can lead to the two related problems of tunnel vision and measure fixation.¹⁰⁴ Tunnel vision is defined as an excessive “*emphasis on phenomena that are quantified in the performance measurement scheme, at the expense of unquantified aspects of performance*” (Smith 1995, 284). Measure fixation is defined as an “*emphasis on measures of success rather than the underlying objective*” (Smith 1995, 290).

¹⁰⁴ Smith also discusses the problems of suboptimisation, myopia, misrepresentation, misinterpretation, gaming and ossification. However, with the exception of misrepresentation, these are not discussed in detail in this study.

The problem of tunnel vision could arise in results-based aid approaches to development cooperation. For instance, if an outcome indicator defined as “the under-five mortality rate” is used to reward a government’s efforts in the field of healthcare, it will capture important aspects of the effectiveness of primary healthcare services. However, a focus on this specific indicator may lead to other important aspects of performance being neglected, such as raising the quality of healthcare services. There are two main reasons for the problem of tunnel vision arising from unquantified objectives:

1. Development interventions or strategies usually have a large number of diverse objectives and it is impractical or impossible to quantify all of these. Hence, a selected set of key indicators must be chosen that reflects the most important objectives. This may result in other relevant aspects being ignored, however (Smith 1995, 284).
2. There are many aspects that simply cannot be quantified adequately (Smith 1995, 284). For instance, it is difficult to find quantitative indicators which adequately measure the quality of healthcare services.

The issue of measure fixation is closely related to the problem of tunnel vision. It may arise if not all dimensions of an underlying overall objective are captured by a performance indicator. Managers may then be encouraged to pursue strategies which enhance the indicators they have to report upon rather than the associated objectives (Smith 1995, 290). For instance, if performance is measured by “share of budget allocated”, this may lead programme managers to support development interventions that are not well planned and operate in less than ideal conditions. In the end, such practices may have an adverse effect on the overall quality and effectiveness of development cooperation (Lehtinen 2002, 11). In general, the problem of “measure fixation” is inversely proportionate to the number of indicators used for evaluating performance. However, increasing the number of measures is not always advisable because it may reduce the focus of intervention managers (Smith 1995, 291).

8.2 Shifting resources to easily measurable and “more productive” areas

The focus on quantitative results may lead to those interventions, sectors and regions being neglected in which results are not as easily measurable,

take longer to unfold or are more difficult to attain. This may be to the detriment of those areas where aid is needed most or is most effective in the long term (Cook et al. 1995, 1305; Vielajus et al. 2009, 63; Vähämäki / Schmidt / Molander 2011, 38; Natsios 2010, 7-10). Natsios (2010, 3) even goes as far as to claim that

those development programs that are most precisely and easily measured are the least transformational, and those programs that are most transformational are the least measurable.

The effects of a development programme focusing on reducing corruption, for instance, may be difficult to measure. Equally, they may also unfold only slowly. As a result, resources may be shifted to sectors where the pay-off is more easily measurable, immediately visible and therefore often believed to be greater (Cook et al. 1995, 1305; Vähämäki / Schmidt / Molander 2011, 38). Similarly, if regional disparities are not taken into account, resources may be shifted, for example, from rural to urban schools because aid to schools in urban areas has been shown to be “more effective” in terms of the attainability of quantitative targets (Vielajus et al. 2009, 61-62).

Moreover, a focus on quantitative outcome indicators may lead to a neglect of long-term capacity-building in developing countries. Short-term goals, such as an increase in the net enrolment rate in primary schools, can often be achieved relatively easily by paying for the delivery of services. In the long-term, however, after donor support ends, local service-providers may lack the financial and managerial means for maintaining the services (Savedoff 2011, 7).

The risk of placing too much emphasis on short-term goals is also inherent to the MDGs. The MDGs define indicators that measure services provided (e.g. the number of children completing primary school), but do not focus on the local institutional and financial capacity needed to achieve certain goals. Such an approach generates potentially misguided incentives since it is much easier for development agencies to support interventions that focus on delivering the outputs to attain the MDGs (e.g. distributing schoolbooks and increasing immunisation coverage) than to strengthen institutions in developing countries so as to enable them to deliver the services themselves (Natsios 2010, 38). However, strengthening local institutions may be of far greater importance. For instance, Natsios (2010, 38) argues that if

a country's Ministry of Education were to achieve half of what is required in the MDGs, but took the leadership itself to accomplish this modest objective, it would be of far greater significance than if Western aid agencies or international organizations fully achieved the actual quantitative calculation. (Natsios 2010, 38)

8.3 Use of indicators for assessing staff performance

Adverse effects may also arise if indicators are used to control and reward staff performance (Danida 2006b, 12; Delorme / Chatelain 2011, 3; Natsios 2010, 35-37). Managers will then have an incentive to manipulate the data under their control so as to present themselves and their organisation or intervention in the best possible light (Smith 1995, 292). Moreover, the problem of measure fixation can become severe if excessive emphasis is placed on indicators for controlling performance (Smith 1995, 290-291). It may also cause staff to become more risk-averse in their behaviour (Natsios 2010, 35-36).

The problem of data manipulation or misrepresentation may arise if the data based on which performance is measured are under the control of staff who are being evaluated, and if the scope for external audits is limited (Smith 1995, 292-293). Smith (1995, 292-293) distinguishes two main forms of data misrepresentation: "creative reporting" and fraud. While the likelihood of fraud increases with the reliance on indicators for assessing performance, creative reporting may arise if there is some discretion about how an event or phenomenon is to be described and recorded. For instance, if some form of professional judgement is required to describe an event, the choice of how to record it is partly in the hands of the expert (Smith 1995, 292-293). Misrepresentation of data can have various adverse effects, such as the misallocation of resources (if resource allocation decisions are based on performance data) or the unequal treatment of staff (Smith 1995, 293).

There are several ways of mitigating the risk of data manipulation or misrepresentation. One possibility is to carry out regular external data quality reviews, aimed at detecting irregularities and ensuring data quality. Insisting on the documentation of indicators can also help to reduce the risk.

Using indicators for measuring and evaluating the performance of managers may also lead to increased risk aversion and to less innovation in the aid system. Natsios argues (2010, 35-36), for instance, that pressure to produce

rapid results that can be measured by quantitative indicators has created a risk-averse culture at USAID. Staff members are increasingly reluctant to innovate and experiment because a failed programme or a bad audit may end their careers. One way of preventing a risk-averse culture from permeating the aid system is not judging project and programme managers on the basis of the performance of interventions, but on how results information is used. For instance, staff appraisals could focus on management response to changes in results indicators and to changing context conditions. This would also help to instil a results culture in organisations that is focused on using information on indicators for learning and management purposes, rather than exclusively for demonstrating and communicating results.

8.4 Use of standard indicators for assessing donor agencies' contributions to development

Various limitations and risks are associated with the use of standard indicators for assessing donor agencies' contributions to development results. These relate to:

1. the limited usability of standard indicators as a measure of development effectiveness;
2. the adverse effects of using standard indicators for meeting reporting requirements;
3. the compatibility of standard indicators with commitments made in the Paris Declaration on Aid Effectiveness.

8.4.1 Limited usability of standard indicators as a measure of development effectiveness

Using standard indicators to aggregate results across interventions and countries is not an adequate way of assessing an agency's development effectiveness (ADB 2008a, 9). There are a number of reasons for this:

1. First, indicators are usually defined at output or immediate-outcome level. It is impossible to assess the extent to which the results measured contribute to longer-term development outcomes and impacts. This is also recognised by the donor agencies reviewed for this study. The IDB,

for instance, notes (IDB 2013b, 30) that the difficulty of linking outputs measured at level 2 of its corporate results framework with outcomes and impacts measured at level 1 impairs the overall usefulness of the framework. Some donor agencies have therefore become more cautious in claiming linkages. For instance, following the introduction of its new development results framework for 2013-2016 (ADB 2013d), the ADB changed the heading of level 2 indicators from “*contribution to country outcomes through key outputs*” (ADB 2008a, 1) to “*core operational results*” (ADB 2013d).

2. Not every result can be aggregated. Hence, measured results invariably present an incomplete picture of an agency’s total contributions to higher level development goals. In particular, many results of development interventions are qualitative and cannot easily be captured by quantitative standard indicators. For example, the indicators included at level 2 of the World Bank’s Corporate Scorecard do not capture the bank’s knowledge work activities (e.g. analysis, policy advice and knowledge sharing), even though knowledge work is one of the bank’s core activities and accounted for 31% of the bank’s budget in 2010 (IEG 2012, 65-66). Similarly, the ADB reports difficulties in finding standard indicators that adequately measure its contributions to sector policy reforms or to priorities that are not sector-specific (e.g. environmental management and gender equality; ADB 2008a, 10).
3. Third, the variety of objectives, approaches and circumstances inherent to development interventions is often too great to be adequately reflected by standard indicators alone (Cronin / Regan 2002, 76; Vielajus et al. 2009, 61-62). In order to measure the results of a diverse set of interventions, very broadly defined key indicators are used. However, these only provide a very rough and overly simplistic approximation of outputs and outcomes. For example, the standard indicator defined as “number of farmers trained” does not take account of the qualitative aspects of interventions and does not capture the diversity of interventions aimed at increasing farmers’ capacities.¹⁰⁵
4. As presently formulated, the standard indicators used by the donor agencies reviewed do not provide any information on the costs or

105 For example, it may make a big difference whether a farmer attended a week-long course or a two-hour training session.

adverse effects associated with the delivery of outputs and outcomes (see IEG 2011, xxvi). Building roads, for instance, is often associated with external costs such as deforestation or a loss of biodiversity (IEG 2011, xxvi).

5. Finally, standard indicators only measure the number of beneficiaries or outputs and outcomes achieved and do not provide an indication of whether the right people benefited from the right services (IEG 2011, 112-113).

The above limitations cast doubt on the overall usefulness of standard indicators for reporting on agency level performance. Reporting on a selected set of development outputs and outcomes can be misleading since only limited information is provided and not all aspects of development effectiveness are captured (IEG 2011, 113). Moreover, the limitations identified also suggest that standard indicators that measure key outputs and outcomes are not very useful for portfolio management and decision-making at agency level. In particular, since standardised key indicators are broadly defined and data are aggregated at a high level, it is difficult to identify the reasons for failure or success and hence to draw conclusions that help to improve organisational performance.

8.4.2 Potential adverse effects: using standard indicators to meet reporting requirements

A focus on a selected number of key and standard indicators for reporting on performance at agency level may lead to the following adverse effects:

1. First, the use of standard indicators for reporting on aggregate contributions at agency level may lead to a prioritisation of those projects and programmes that are designed to reach particularly large numbers of beneficiaries or to deliver large quantities of outputs and outcomes. A large number of results delivered or beneficiaries reached does not automatically imply a high level of development effectiveness because the quality of services and the extent to which beneficiaries' welfare has increased are not taken into account.
2. There is a danger that using standard indicators for reporting on quantitative achievements creates an impression that more results are always better (IEG 2011, xxvi). This is not always the case, however. For

instance, more road-building does not necessarily lead to lower transport costs (IEG 2011, xxvi).

3. The introduction of standard indicators may lead to an increase in the cost of data collection and monitoring. To be able to report on as many results as possible at agency level, project and programme managers may be pressured to include standard indicators in results frameworks even if they measure results that are not considered as important from a country or intervention perspective.
4. Fourth, a focus on standard indicators may have a distorting effect. The pressure to achieve results that are aggregated at agency level for accountability purposes tends to be higher than for results that are not captured by standard indicators. This may encourage a shift of resources from activities that are not reflected by standard indicators to activities that deliver results for which standard indicators have been defined.

8.4.3 Compatibility of standard indicators with the aid effectiveness agenda

The use of standard indicators by donor agencies to report on their key contributions to development may have an adverse effect on the fulfilment of commitments made at the four High Level Fora on Aid Effectiveness with respect to country ownership, use of country systems and harmonisation. It may also undermine the relevance and quality of the political dialogue with partner countries and other donors.

1. First, the practice of some donor agencies of attributing results directly to their own funding instead of measuring partner countries' results to which they have contributed may be regarded as being contrary of the principle of country ownership (da Costa 2009, 10).
2. The use of standard indicators may lead to a decrease in the use of partner countries' monitoring systems, since partners may not be willing or able to provide data on standard indicators that are not regarded as being relevant. This is especially the case if multiple donors require the inclusion of different standard indicators in partner countries' results frameworks.

3. Finally, standard indicators may increase transaction and monitoring costs when aid is delivered in the form of programme-based approaches and each donor agency wants to measure its contributions by applying its own set of standard indicators. On the other hand, using standard indicators may lead to efficiency gains if they are harmonised among donor agencies. Partner countries could then anticipate the demand for data on indicators and include them in their national results frameworks. This could also help to reduce coordination costs in relation to programme-based approaches. The use of harmonised standard indicators makes it easier for development partners to agree on a selected set of indicators to monitor and may lead to a reduction in the total number of indicators monitored.

9 Process of selecting indicators and defining baseline conditions and targets

This chapter deals with the process of selecting performance indicators and defining baseline conditions and targets. The careful selection of indicators is crucial in order to reduce the risks associated with the use of indicators for performance measurement. If indicators do not measure the intended effects, the data produced will be misleading, which in turn will have a negative effect on decisions taken on the basis of these indicators (UNDP 2002).

This chapter is structured as follows. First, we examine how to select indicators to monitor the performance of development interventions or strategies at country, sub-national, sector or sub-sector level. Although custom indicators are usually formulated for this purpose, standard indicators can also be used if they adequately reflect the intended results. Section 9.2 deals specifically with the process of selecting standard indicators to aggregate development results at agency level. The next section explains how baseline conditions and targets can be assessed for custom and standard indicators. The final section addresses the question of how to decide on the level of disaggregation needed and provides recommendations for documenting indicators.

9.1 Selecting indicators for measuring the performance of interventions or development strategies

The process of selecting and specifying custom indicators for measuring the performance of development interventions or strategies can be divided into several steps. Usually, the first step is to analyse the intervention or strategy for which indicators are to be selected and to clarify its objectives (Delorme / Chatelain 2011, 14). Next, an initial list of possible indicators can be drawn up for each result or phenomenon that is to be measured (Binnendijk 2000, 25). The next step is to assess the potential indicators against a variety of criteria in order to evaluate their quality, appropriateness and utility (Binnendijk 2000, 25). Once a final list of indicators is decided on, these should be documented (Delorme / Chatelain 2011, 28). Lastly, targets can be set, i.e. specific indicator values to be achieved within a given time frame (Binnendijk 2000, 32-33).

It is often advisable to choose indicators in a participatory process embracing the main stakeholders in an intervention or strategy. These may be representatives of a donor agency, partner government, implementing agency, beneficiaries or others (Binnendijk 2000, 25). A participatory process draws on different sources of expertise and facilitates greater ownership and consensus among all stakeholders (Binnendijk 2000, 25; USAID 2010b, 8).

Analysis of the intervention or strategy and clarification of objectives

Before selecting indicators, it is advisable to first undertake an analysis of the intervention or strategy in question to determine the monitoring needs (Delorme / Chatelain 2011, 14). In general, in order to monitor the progress of an intervention and measure performance, it is helpful to select indicators at all levels of the results chain and to identify appropriate contextual indicators (Danida 2006b, 8). It is usually easy to formulate indicators at input level since inputs are usually directly observed, for example the amount of funding available for an intervention (Danida 2006b, 9).¹⁰⁶ Similarly, if the formulation of planned activities and expected outputs is highly specific, these may directly translate into indicators. For example, if the planned activity is to “conduct eight teacher training workshops with 200 teachers”, then the indicators defined as “number of teacher training

106 In some cases, however, input indicators have to be formulated if an objective is associated with an input, e.g. “share of budget allocated”.

workshops conducted” (activity indicator) and “number of teachers trained” (output indicator) follow almost by definition.¹⁰⁷

However, activities and intended results are not always described in detail in project or programme proposals and results at outcome and impact level tend to be broadly defined (Danida 2006b, 9). For this reason, it is important to closely examine the formulation of objectives before selecting indicators (Delorme / Chatelain 2011, 14). Moreover, it is crucial to achieve a consensus among stakeholders about what exactly is meant by the results, what is expected to change (e.g. a situation, the level of knowledge or an attitude), and who or what are the targets of change (USAID 2010b, 9). For example, are all households targeted or only households below the poverty line? Delorme and Chatelain (2011, 14) cite the following objectives as examples: *“reducing by half the average number of people living in poverty, reducing by half the poorest section of the population and reducing the number of people living on less than USD 1 a day”*. These are related but diverging objectives, which will be represented by different indicators. In some cases, it may also be necessary to further specify objectives. For example, the result statement “improved business environment” is very broad and could be defined further as *“making it easier to do business in terms of resolving disputes, obtaining licenses from the government, promoting investments”* (USAID 2010b, 9).

The quality of results statements,¹⁰⁸ which is a precondition for the selection of appropriate indicators, can be tested against SMART criteria.¹⁰⁹ Danida (2006b, 10) defines the SMART criteria as follows:

- Specific: are you precise about what you are going to achieve?
- Measurable: are your objectives quantified?
- Achievable: can the objective be achieved with a reasonable amount of effort and application? Or are you attempting too much?
- Realistic: Do you have the resources to make the objective happen (in terms of men, money, machines, materials and minutes)?
- Time-bound: Has a completion date been clearly stated or defined?

107 If activities and outputs are not described in detail (e.g. “training”), it is helpful for the purpose of planning, implementation and the selection of indicators to clarify the expected activities and outputs and specify targets (Danida 2006b, 9).

108 Results statements refer to outputs, outcomes and impacts and not to inputs and activities.

109 The SMART goals were originally developed by Doran, Miller and Cunningham (1981).

Identifying indicators

Once the objectives and the logic of the intervention or strategy have been clarified, the next step is to identify indicators to measure progress towards the goals defined (Prennushi / Rubio / Subbarao 2002, 108). It is helpful to start the selection process by compiling a comprehensive list of potential indicators which reflect the objectives and the logic of the intervention or strategy from all perspectives. Following this, the list of potential indicators can be assessed against a variety of criteria before a shortlist is made (Binnendijk 2000, 25; USAID 2010b, 9).

Various issues and criteria need to be taken into account when selecting indicators. A few of the most important ones are explained below.

First, it is advisable to select only a manageable number of indicators which best reflect the progress made towards achieving development goals and the context in which an intervention takes place (Norad 2008, 14). Using too many indicators makes it harder to assess performance (EC 2002, 4). Moreover, focusing on the most important aspects helps managers of development agencies and external users to quickly obtain information on the performance of aid interventions (Marr 2013).

Second, indicators should capture the result or phenomenon that is to be measured as best as possible, and stakeholders should agree on what exactly is being measured (see Danida 2006b, 9-10; USAID 2010b, 11).

Third, the choice of indicators also depends on whether data are available or can be collected and monitored at a reasonable cost (USAID 2010b, 10). Prennushi, Rubio and Subbarao (2002, 111) suggest that the process of selecting indicators should start with an analysis of the available data, and that indicators should be included in a monitoring system only if it is feasible to collect, analyse and monitor data given resource and capacity constraints.

Many development agencies have come up with checklists of criteria addressing the issues described above, against which indicators can be assessed. Although the checklists differ from agency to agency, most address similar issues and there are many overlaps between them. A few examples of checklists are presented in Table 17 below.

Table 17: Checklists used by Danida, USAID and CIDA to assess the quality of indicators	
Institution	Checklist
Danida	<ul style="list-style-type: none"> – Valid: Does the indicator directly represent the result it is intended to measure? – Objective: Is the definition precise and unambiguous about what is to be measured? – Reliable: Are the data consistent or comparable over time? Practical: Can data be collected easily, on a timely basis and at a reasonable cost? – Useful: Will the data be useful for decision-making and learning? – Owned: Do partners and stakeholders agree that this indicator makes sense?
USAID	<ul style="list-style-type: none"> – Direct: The indicator clearly represents the intended result. An outsider or an expert in the field would agree that the indicator is a logical measure for the stated result. <ul style="list-style-type: none"> • Level. The indicator reflects the right level; that is, it does not measure a higher or lower level than the stated result. • Proxies. The indicator is a proxy measure. If the indicator is a proxy, note what assumptions the proxy is based upon. – Objective: The indicator is clear and unambiguous about what is being measured. – Useful for management: The indicator is useful for management decision-making. – Attributable: The indicator can be plausibly associated with USAID interventions. – Practical: <ul style="list-style-type: none"> • Time. Data are produced with enough frequency for management purposes (i.e. timely enough to correspond to USAID performance management and reporting purposes). Data are current when available. • Cost. Data are worth the cost to USAID managers. – Adequate: Taken as a group, the indicators are sufficient to measure the stated result. All major aspects of the result are measured. – Disaggregated, as necessary: The indicators are appropriately disaggregated by gender, age, location, or some other dimension that is important for programming. In particular, gender disaggregation has been considered as required.

Table 17 (cont.): Checklists used by Danida, USAID and CIDA to assess the quality of indicators

Institution	Checklist
CIDA	<ul style="list-style-type: none"> – Validity: Does the performance indicator actually measure the result? – Reliability: Is the performance indicator a consistent measure over time? – Sensitivity: When the result changes, will the performance indicator be sensitive to those changes? – Utility: Will the information be useful for decision-making and learning? – Affordability: Can the programme afford to collect the information in question?
Sources: USAID (2010b, 11); (Danida 2006b, 9-10); CIDA (2008b, 10-11)	

Binnendijk (2000, 28) notes that there are likely to be trade-offs between the criteria used for judging the appropriateness of indicators and that these have to be carefully weighted when deciding which indicators to select. For example, a direct indicator at outcome or impact level may not be available or may be impracticable to collect, which means that a proxy indicator will have to be used. Moreover, although it is desirable to measure all aspects of a result, it is usually necessary to limit the number of indicators. In addition, there are trade-offs between broadly defined standard indicators that allow for results to be aggregated across interventions and custom indicators that better reflect the true results of an intervention (Binnendijk 2000, 28).

9.2 Aggregating development results at agency level

The criteria often used by donor agencies when selecting standard indicators to measure:

1. longer-term development progress in partner countries; and
2. their contributions (intervention outputs and outcomes) to higher level development objectives,

are identified and explained in the following section. Separate analyses are made for the two levels of the agency results chain. In general, standard indicators should be selected in a participatory process that includes sector experts as well as results specialists. The criteria presented in Chapter 9.1 for

the selection of indicators for measuring the performance of interventions and strategies also apply.

9.2.1 Development outcomes and impacts in partner countries

Based on a document review, a number of criteria have been identified that are frequently applied by donor agencies when selecting standard indicators for measuring longer-term development outcomes and impacts in partner countries (see Table 18). Among the factors taken into account by donor agencies are strategic priorities and data availability and quality. The five criteria that are most commonly used in the selection process are explained in detail the following paragraphs.

1) Relevance to the agency's current and future strategic priorities

Standard indicators measuring development outcomes and impacts in partner countries are often used by development agencies to monitor the relevance of their strategic priorities and to provide information for strategic planning purposes. One of the main criteria applied when selecting indicators is therefore their relevance to the agency's current and future strategic priorities. If strategic priorities change, outcome and impact indicators should be adjusted accordingly.

2) Consistency with development priorities articulated by partner countries in their national development strategies

In signing up to the Paris Declaration on Aid Effectiveness, donors undertook to base their overall support on their partner countries' development strategies (OECD/DAC 2005/2008, 3). This means that the choice of standard indicators should reflect partner countries' strategic priorities and the results articulated in their national development plans.

3) The indicator is an MDG indicator or is linked to the MDGs

The MDGs provide the overarching framework for development cooperation until 2015. Since aid agencies aim to contribute to the MDGs, the standard indicators selected are often either MDG indicators or linked to the MDGs.

4) The indicator is used by other bilateral or multilateral development agencies

The harmonisation of standard indicators among development agencies should help to reduce the burden of data collection and monitoring placed on developing countries. For this reason, donor agencies often select standard indicators that are already used by other bilateral or multilateral development agencies.

5) Data on the indicator are available, reliable, accessible and comparable over time

When selecting standard indicators for measuring development outcomes and impacts in partner countries, donor agencies do not usually formulate additional indicators. Instead, they choose existing indicators for which data are already available from public statistical databases. Since standard indicators at outcome and impact level are used to compare developments between countries and to present development progress at an aggregated level (aggregated data are usually presented for all partner countries or for a region), it is particularly important that the data are available, reliable and comparable between countries and over time (i.e. data have been collected in accordance with international standards and methodologies). Moreover, the frequency with which estimates are published should ideally be the same in all countries. Unfortunately, underinvestment in national statistical systems means that many countries lack the capacity to produce reliable and frequent estimates for key outcome indicators from either administrative data or household surveys (IDA 2003, 7; OECD 2011b, 87-89).

Table 18: Criteria applied by donor agencies in selecting standard outcome and impact indicators	
	Criteria
ADB	– Representation of the major development outcomes that the ADB is seeking to achieve and to which ADB operations aim to contribute
AfDB	– Alignment with the bank’s future and operational priorities as summarised in the Medium-Term Strategy – Harmonisation: most of the indicators chosen are consistent with the indicators used by the bank’s development partners, having emerged through consensus within the international development community – Alignment with MDGs and associated sector goals needed to ensure poverty reduction – The result measured is among the priorities most frequently cited in ADF countries’ national Poverty Reduction Strategy Papers
AusAID	– AusAID reports on progress made towards the eight MDGs, which implies that all MDG indicators have been selected for inclusion.
DFID	– MDG indicators that are most closely aligned with DFID’s programme ¹¹⁰
IDA ¹¹¹	– Consistency with priorities articulated by countries through their PRSPs – Alignment with MDG indicators and other international monitoring efforts – Relevance to IDA’s activities, based on IDA’s comparative advantage – Reliability, accessibility, and comparability over time – Link with development effectiveness and poverty reduction
IDB	– Relevance to IDB’s priorities – The indicator is an MDG indicator or is linked to the MDGs – The indicator is used in the results frameworks of other multilateral development banks or is used by other international development agencies
UNDP	– Relevance, viability, measurability and accessibility of data – Indicators capture data points that have already been collected (where possible) – Relevant to the maximum number of country contexts – Enable aggregation across multiple countries with diverse development contexts and ambitions – Results capture the development change that is most relevant to UNDP’s contributions
Sources: IDA (2003, iii;5); AfDB Group (2010, 7); ADB (2008a, 1); ADF (2008, 1-2); UN (2013a, 1); AusAID (2012, 20); IDB (2012, 20)	

9.2.2 Agencies' contributions to development outcomes and impacts

In order to identify the criteria frequently applied by development agencies in selecting standard indicators for measuring their contributions to longer-term development progress in partner countries, I conducted interviews with representatives from a variety of organisations¹¹² and reviewed documents. The process of selecting standard indicators can be divided into two main steps as follows:

The first step taken by the majority of agencies reviewed (e.g. the World Bank, AfDB, MCC and DFID) is to draft a list of potential indicators. The list is usually compiled by identifying indicators that are frequently used in the results frameworks of programmes and projects, both ongoing and closed. Once the list is complete, those indicators can be standardised that are suitable for aggregation at agency level. As an alternative or in addition, sector experts may be consulted in order to compile a list of potential standard indicators that are in line with the agency's current and future priorities.

The second step is to assess the list of standard indicators against a variety of criteria, some of which were already applied in compiling the initial list. These are as follows:

1) Frequency of use in ongoing interventions and importance in terms of overall results

Standard indicators that measure intervention outputs and outcomes are used to present a snapshot of an agency's contributions to longer-term development objectives. This implies that only a limited number of standard

110 According to Mehdi Hussein, Senior Statistics Advisor at DFID (interviewed on 22 May 2013).

111 The World Bank's Corporate Scorecards builds on the Results Measurement System for the 13th replenishment of the IDA adopted in 2002 (World Bank 2012c). Many of the outcome and impact indicators that were used in the IDA results measurement system (IDA 2003, 9) are still included in the World Bank Corporate Scorecard (World Bank 2013b, 7). For this reason, the criteria listed in Table 18 are those initially used by the IDA to select standard indicators to measure outcomes and impacts across countries and not the criteria applied by the World Bank in selecting indicators for its Corporate Scorecard.

112 The World Bank, IDB, ADB, AfDB, DFID, EuropeAID, MCC and USAID.

indicators can be chosen if the snapshot character is to be maintained. It is therefore important that the only indicators selected are those which are frequently used in ongoing projects and programmes and which account for a significant proportion of the total results delivered by an agency.

2) Alignment with current and future strategic priorities

Standard indicators measuring an agency's contributions can also be used to monitor whether a particular strategy is being implemented as planned. For this reason, agencies usually select standard indicators that are aligned with their current strategic priorities. If possible, future strategic priorities should also be taken into account. For instance, if it becomes apparent that there is a shift in priorities away from educational infrastructure to enhancing the quality of education, this should be reflected by the choice of standard indicators. One of the challenges in this respect is that standard indicators capture results of interventions designed several years ago.¹¹³ As a result, there may not be much to report on if there has been a shift in priorities and the only indicators used are those that reflect current and future priorities. Indicators therefore need to capture the results of interventions approved a few years back, as well as the results of recently approved or planned interventions.

3) Measurability

Standard indicators should generally be easy to measure in order not to overburden project or programme staff responsible for supplying data on indicators. For this reason, the indicators chosen are often ones that represent a compromise between what an agency would like to measure and what is feasible to measure (AfDB Group 2010, 9).

4) Aggregatable across interventions

Some donor agencies choose only those standard indicators that measure quantitative outputs and immediate outcomes that can easily be aggregated across interventions. In these cases, the results of interventions focusing on qualitative changes (e.g. governance and capacity-building interventions) are not measured at corporate level, because they are far too broad to be

¹¹³ For instance, the ADB measures the results of closed interventions at level 2 of its results framework and states that operations assessed at this level were typically planned between six to ten years prior to the assessment year (ADB 2012b, 5).

reflected adequately by standardised output and immediate-outcome indicators. Other agencies have nevertheless decided to report the aggregate contributions of interventions focusing on qualitative changes, so that they can present a more balanced snapshot of the variety of interventions they have supported. As is explained in section 6.1.2.2, the indicators used for this purpose are either those that measure inputs and activities or those that measure intermediate outcomes and impacts.

9.3 Assessing baseline conditions and formulating targets

For the purpose of measuring performance, indicators are often assigned a baseline (or reference) value, a target value and a time frame for the achievement of targets (UNDP 2002). The baseline is the situation before the start of an intervention or strategy, based on which changes can be assessed (UNDP 2002). Targets are specific indicator values that are to be attained within a specific time frame (Binnendijk 2000, 32). Setting targets is useful in many respects. They serve as an orientation and motivation for those responsible for implementing interventions or strategies. They can be used to assess the performance of managers, strategies or organisations as a whole. And, they serve as guiding posts for gauging whether implementation is proceeding as planned (Binnendijk 2000, 33).

However, the usefulness of targets and baselines for standard indicators for measuring aggregate results at agency level is a matter of some debate. This section therefore also briefly discusses the advantages and disadvantages of setting baseline and target values for standard indicators.

9.3.1 Interventions and development strategies

Usually, the first critical step in the process of setting targets for individual interventions or development strategies involves assessing the baseline conditions. In some cases, existing data sources can be used to calculate a baseline, while primary data collection may be needed in others (Binnendijk 2000, 33). The baseline could be either a value measured before implementation begins or an average value of measurements conducted over longer periods of time (Delorme / Chatelain 2011, 22). Delorme and Chatelain (2011, 22) argue that the value measured in year 1 before implementation is not always an appropriate reference value for measuring

progress over time, as it is based on an implicit assumption that continuous and steady growth can be observed. Although such an assumption may be appropriate for results at output level, such as “the number of classrooms” built, it is less likely to be true for development outcomes and impacts that are influenced by many factors. For instance, the annual value of agricultural yields is not a good baseline value because yields are influenced greatly by climatic conditions. Average values for the past five or ten years (if available) are therefore preferable in such cases (Delorme / Chatelain 2011, 22).

Setting targets for indicators has often been identified as one of the main challenges in results-based management because it is very difficult to make a realistic assessment of an indicator value that has to be attained within a given period. For this reason, commentators have suggested taking the following factors into account when setting targets:

- First, it is important to identify trends in the indicator over time (assuming that data are available). If patterns or trends can be identified, these should be reflected by the target value, in addition to the “added value” that the intervention or strategy is expected to deliver (Binnendijk 2000, 33).
- Second, it may also be helpful to use consultations or surveys in order to build up a picture of customers’ or beneficiaries’ expectations (Binnendijk 2000, 33). However, it is important to bear in mind that targets should be realistic and attainable, and based on the available resources. Moreover, limits to progress have to be identified. If necessary, these should be reflected by the targets (UNDP 2002).

9.3.2 Agency-level performance measurement

Development outcomes and impacts in partner countries

A baseline must be constructed in order to monitor development of partner countries at an aggregate level. Targets can provide a strategic orientation for aid agencies but are not necessary since an individual agency cannot be held responsible for the achievement of development outcomes and impacts that are influenced by a variety of factors. Moreover, it is very difficult to set targets for groups of countries in which conditions are highly disparate. Of the donor agencies reviewed in Chapter 6.1, only the ADB and the World

Bank present target values for selected indicators (ADB 2008a, 8-9; World Bank 2013b, 7). These are all MDG indicators for which internationally agreed targets exist. Although UNDP is also planning to use target values for outcome and impact indicators in its 2014-2017 results framework, these have not been formulated to date (UN 2013a).

Agencies' contributions to development outcomes and impacts

Although baseline and target values can be useful for measuring an agency's performance in terms of aggregate contributions to development outcomes and impacts in partner countries, they are not always necessary. Baseline values can be calculated as cumulative results delivered in a previous year or during a period in the past, e.g. 2004-2006. Similarly, target values are the cumulative results that are expected to be achieved either in a given year or over a given time span.

A "traffic-light system" is often used for measuring performance against targets. For instance, the AfDB rates operations that achieve 95% or more of their targets as green, operations that achieve between 60% and 94% of their targets as yellow, and operations that achieve less than 60% of their targets as red (AfDB Group 2013a, 26). The purpose of a traffic-light system is to highlight areas in which performance is off-track and to take timely corrective action (see AfDB Group 2010, 20; ADB 2012b, 34).

Targets can be set on either a bottom-up or a top-down basis:

- *Bottom-up*: Targets are initially set for individual interventions. Agency-level targets are then estimated or calculated as the cumulative results that should be delivered by all interventions within a given period, i.e. the only results counted are those that are planned to be delivered and that have ideally been decided jointly with development partners.
- *Top-down*: Targets are chosen to reflect strategic priorities and are set at organisational level for the results to be produced by all interventions as a whole. An agency that aims to increase its activities in the energy sector might set itself the following target, for example: "we will install 20,000 km of transmission lines during the period up to 2020". This is contrary to the principle of country ownership, however, since it does not take sufficient account of the demands of partner countries.

Development agencies use three strategies for assessing their performance in terms of contributions to development outcomes and impacts:

1. *Baseline and target values are calculated:* an agency's current performance in terms of aggregate results delivered can be assessed against two values, i.e. the target value ("Is the agency on track to achieve the target set?") and the baseline value ("Has there been an increase in the results delivered compared to the previous period?").
2. *Target values but no baseline values are defined:* an agency's current performance can only be assessed against the expected target. The advantage of not presenting baseline values is that agencies are not pressured to show positive increases in results delivered over time. For example, if an agency trains one million teachers in year 1 but only 500,000 in year 2, this is not necessarily a sign of bad performance, but could just as well point to a shift in strategic priorities away from education.
3. *Baseline values but no target values are defined:* an agency's current performance can only be assessed against the baseline value. Some agencies do not define target values for expected contributions since being accountable for the achievement of targets can also have unintended negative effects. While reasons for non-attainment can be identified and corrective action taken at the level of individual interventions, this is much more difficult to do at agency level. At the same time, there is more pressure to perform. One potential measure that can be taken if an agency's performance falls short of the target is to increase the budget for interventions delivering the off-track result. This may lead to an inefficient allocation of aid (or less value for money), however, if the additional money could have been used to greater effect elsewhere. A further problem with targets is that large projects have much more effect on the achievement of a cumulative results target than small projects. Hence, shortcomings in several small projects could be concealed by only one successful large project. In the same manner, one failed big project could easily lead to the non-achievement of a target even though the majority of projects performed well.

9.4 Disaggregating indicators

When selecting a custom or standard indicator, the user also has to decide on the levels of disaggregation. Indicators measuring average values are useful for measuring the overall progress of a country or a development intervention, and for comparing the general situation in certain sectors and countries. However, average values tend to mask significant differences between socio-economic groups and geographical regions, as well as gender disparities for example (Prennushi / Rubio / Subbarao 2002, 111). As far as possible, therefore, indicators should be disaggregated by factors such as gender, age, ethnicity, religion, income level and location (UNDP 2002). The number and type of groups for which disaggregated indicators are needed differ from one country to another. Differences also exist among countries in terms of how relevant groups are defined (Prennushi / Rubio / Subbarao 2002, 111-112).

There are many ways of disaggregating an indicator (see Table 19). For instance, indicators distinguishing between rural and urban areas, administrative units or geoclimatic units may be constructed to account for regional differences. Similarly, where income groups are concerned, an indicator could be used that measures income along a continuum or which simply distinguishes between poor and non-poor households. Using a simple binary indicator such as poor/non-poor has the advantage of generating easily understandable information in summary form. However, it does not capture differences among poor households and does not account for the fact that households just below and just above the poverty line tend to have very similar characteristics. For this reason, a continuous measure of income may be preferred because it allows for the further disaggregation of data between income deciles, quintiles or quartiles (Prennushi / Rubio / Subbarao 2002, 111-112).

Table 19: Disaggregation of indicators	
Dimensions	Common levels of disaggregation
Location	Urban/rural Administrative units Geoclimatic zones
Socio-economic groups	Poor/non-poor Income deciles, quintiles, quartiles or percentiles Occupation Level of education
Social group	Gender Age Ethnicity Religion Tribe Caste
Source: Adapted from Prennushi / Rubio / Subbarao (2002, 111-112)	

9.5 Documenting indicators

Indicators should be documented in *methodological guidance notes* once they have been selected (Delorme / Chatelain 2011, 28). Although this applies to all indicators used for measuring performance, it is especially vital in the case of standard indicators. If standard indicators are used in a variety of intervention and country contexts, they must be clearly defined to ensure comparability. A *methodological guidance note* should include relevant information on the indicator allowing for a proper analysis and interpretation of data. For example, UNAIDS (2010, 13-14) suggests that the following details should be included:

- Title and definition:
 - The title is a short summary of the indicator that could easily be used on a day-to-day basis, for example “young people: knowledge of HIV prevention”.

- The definition is a clear, brief description of the indicator, for example “percentage of young people aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission”.
- Purpose and rationale for the indicator: a statement of what the indicator is for and why it is needed.
- The method of measurement: where applicable, this should explain any calculations that are needed and what their numerators and denominators are.
- The collection method: how data will be collected, including the data source.
- The measurement frequency: how often the indicator will be measured.
- Details on how data from the indicator are to be disaggregated (e.g. by age or sex).
- Guidelines on how to interpret data from the indicator. For example, what does a rise in the indicator mean? If there are different possible interpretations, how can these be distinguished?
- Brief notes on the indicator’s strengths and weaknesses. In particular, common problems in measuring the indicator should be stated, and practical suggestions given for overcoming these.
- Any additional sources of information for the indicator, including original descriptions of the indicator, examples of its use in practice and links to any international commitment to which the indicator is attached. This would also include links and/or references to technical background documents, as appropriate.

Delorme and Chatelain (2011, 28) also mention that any concerns about data sources should be included in the guidance note.

Table 20 is an example of a guidance note used by the US Department of State and USAID for an indicator defined as “percentage of children who received DPT3 vaccine by 12 months of age”.

Table 20: Example of an indicator information sheet used by USAID	
Indicator	Percentage of children who received DPT3 vaccine by 12 months of age
Definition	Numerator: Children aged 12-23 months who received third dose of DPT (Diphtheria, Pertussis, Tetanus)-containing vaccine by 12 months of age. Denominator: Number of living children aged 12-23 months/100.
Linkage to long-term outcome or impact	Coverage of child immunisation through regular programmes rather than special campaigns is an internationally accepted health indicator because it improves overall immunisation status, as well as being a good indication of a working health system and utilisation of services.
Indicator type	Outcome
Unit of measure	Percentage
Use of indicator	Information used both for programme planning, programme adjustment and budget decisions. Data are segregated by region, quintile to indicate whether targeted programming is needed. Data used by in-country programme managers (public and non-public sectors), policy-makers and development partners.
Data source and reporting frequency	Most recent DHS/MICS/Reproductive Health Survey and other population-based surveys. DHS (Demographic and Health Survey) surveys and MICS (Multiple Indicator Cluster Survey) are country-specific and published every 3-5 years: DHS: http://www.measuredhs.com/countries/ MICS: http://www.unicef.org/statistics/index_24302.html Coverage data are routinely reported by UNICEF and WHO and serve as the primary source for all reporting purposes. In most countries data are collected and reported on an annual basis. Although local data reports are available at greater frequency, they are not routinely collected across all countries.

Table 20 (cont.): Example of an indicator information sheet used by USAID	
Indicator	Percentage of children who received DPT3 vaccine by 12 months of age
Data source and reporting frequency	Special surveys may be conducted. However, most coverage data are administrative data. Individual operating units input data for years when new data are available.
Known data limitations	Data quality often depends on recall by respondents (since almost half of respondents are unable to produce the immunisation record cards at the time of the survey).
Baseline time frame	The year in which baseline data are collected for this indicator varies by operating unit.
Disaggregate(s)	Sex; numerator, denominator.
Source: US Department of State / USAID (2012d, 113)	

10 Collecting data and monitoring indicators

This chapter deals with data collection and the monitoring of indicators. The chapter begins by describing data sources and methods that can be used to monitor the implementation and performance of an intervention or strategy, at the various levels of the results chain. I go on to analyse the problem of capacity constraints in partner countries' monitoring systems. The chapter concludes with a discussion of the challenges faced by donor agencies in collecting and monitoring data on standard indicators for measuring agency performance.

10.1 Collecting and monitoring data along the results chain

The data sources and methods used to collect data, as well as the frequency with which information is needed, differ from one level of the results chain to another (see Table 21). Input, activity, output and immediate-outcome indicators should be monitored on an ongoing basis in order to ascertain

whether an intervention or strategy is being implemented in accordance with work plans and budgets (Binnendijk 2000, 37-39; Prennushi / Rubio / Subbarao 2002, 116). Intermediate outcome and impact indicators change only gradually so it may take several years to observe any changes. For this reason, for most typical aid interventions, data on these high-level indicators only need to be collected every 3-5 years (Prennushi / Rubio / Subbarao 2002, 116).

Indicator type	Data collection methods/ data sources	Frequency of data collection
Input	Project records, financial accounts	Monthly or quarterly, at least annual
Activity	Project records, administrative records	Monthly or quarterly, at least annual
Output	Project records, administrative records	Bi-annual, at least annual
Immediate outcome	Quick monitoring surveys, household surveys, qualitative studies	Annual
Intermediate outcome/impact	Census, household surveys, qualitative surveys, administrative records, national accounts, trade statistics	Multi-annual (every 3-5 years)
Sources: Adapted from Binnendijk (2000, 38); Prennushi / Rubio / Subbarao (2002, 116)		

The sources from which data on inputs, activities and outputs can be obtained differ depending on whether a development intervention or the implementation of a country strategy (e.g. a poverty reduction strategy) is being monitored. Data used for tracking progress in implementing traditional donor interventions usually come from project or programme records and accounts (Binnendijk 2000, 37). Data on inputs, activities and outputs delivered as part of country-led strategies and interventions can

be obtained from national or sub-national ministries. For instance, data on expenditure on education may be obtained from the finance ministry or treasury, while the ministry of education may be able to provide data on activities and outputs (e.g. number of workshops conducted or the number of schools built) (Prennushi / Rubio / Subbarao 2002, 113-115). Prennushi , Rubio and Subbarao note (2002, 113), however, that there are frequent problems with the accuracy, timeliness and comprehensiveness of data obtained from government administrative records. In general, data on output, outcome and impact indicators are more useful for monitoring and decision-making if they are disaggregated by e.g. location (e.g. rural/urban, administrative units) and socio-economic characteristics (e.g. age, sex, race or economic status) (Prennushi / Rubio / Subbarao 2002, 111-112).

The data sources and data collection methods used at the different levels of the results chain are briefly described below.

- At input level, data can usually be drawn from financial accounts (Danida 2006b, 8).
- At activity and output level, data on indicators can be collected relatively easily from project or programme records or as administrative data from sector ministries (Prennushi / Rubio / Subbarao 2002, 113-115; Binnendijk 2000, 37).
- The assessment of immediate outcomes involves conducting regular follow-up surveys with beneficiaries. Data on access to and the use of outputs as well as on clients' satisfaction with outputs can be collected through relatively low-cost surveys, such as quick monitoring surveys, rapid appraisals or participatory methods (Prennushi / Rubio / Subbarao 2002, 115; Binnendijk 2000, 39). Data collection can be organised either by a project implementing agency provided there is enough capacity, or by a subcontracted local university, organisation or consultancy firm (Binnendijk 2000, 39).
- The best way of obtaining data on intermediate development outcomes and impacts is by conducting costly and methodologically sound household surveys (Binnendijk 2000, 39). Surveys for collecting data on outcome and impact-level indicators are usually carried out by national statistical agencies, often with donor support. In some cases, however, if there is not enough national data available, donors organise household surveys themselves to collect data on longer-term development changes

(Binnendijk 2000, 39). If there are no survey data, it may be possible to obtain data on certain development outcomes (e.g. school enrolment rates) from government administrative records (Danida 2006b, 8). However, Prennushi, Rubio and Subbarao note (2002, 114) that, while administrative data are cheap to exploit, they are often less reliable than data obtained from household surveys. Households have fewer incentives to report incorrect data than programme administrators or local officials, whose budget allocations or other incentives may depend on the data reported. In addition, household surveys collect data on several issues, which makes it possible to analyse the causes of and trends in development outcomes and impacts (Prennushi / Rubio / Subbarao 2002, 114).

Before donors or partner countries' governments use already existing data as a basis for decision-making or for evaluating interventions or strategies, they must first analyse the quality and coverage of the data (Binnendijk 2000, 39). The International Monetary Fund (IMF) has set up a Data Quality Assessment Framework which can be used to identify "*quality-related features of statistical systems, statistical processes, and statistical products*" and to assess "*existing practices against best practices, including internationally accepted methodologies*" (IMF 2006). The framework defines the following five dimensions of statistical quality¹¹⁴ (IMF 2006):

1. **Assurances of integrity:** The principle of objectivity in the collection, processing, and dissemination of statistics is firmly adhered to.
2. **Methodological soundness** The methodological basis for the statistics follows internationally accepted standards, guidelines or good practices.
3. **Accuracy and reliability:** Source data and statistical techniques are sound and statistical outputs sufficiently portray reality.
4. **Serviceability:** Statistics, with adequate periodicity and timeliness, are consistent and follow a predictable revisions policy.
5. **Accessibility:** Data and metadata are easily available and assistance to users is adequate.

114 See Delorme and Chatelain (2011) for more details on statistical quality.

10.2 Capacity constraints in partner countries' monitoring systems

The usefulness of indicators for monitoring and evaluation, as well as for strategic policy decisions, depends on the quality of the existing data and the capacity for collecting new data. In many developing countries, however, continued underinvestment in statistical systems has led to a low technical and institutional capacity for producing data from administrative records or household surveys. As a result, there are no regular, reliable country estimates of many of the key indicators that are needed for monitoring poverty reduction strategies or progress towards the MDGs, for example (IDA 2003, 7-9; PARIS21 2004, 9).

The problem of capacity constraints in partner countries' monitoring systems affects data availability and quality at all levels of the results chain. The most basic activity that is performed in monitoring the performance of a sector strategy or a poverty reduction strategy is the tracking of expenditure data (Edmunds / Marchant 2008, 21). However, in many countries, expenditure data are available only after a significant time-lag (Prennushi / Rubio / Subbarao 2002, 116). In addition, it is often impossible to link input data (e.g. on expenditures and human resources) to outputs. For example, a large share of aggregate expenditure on education will be on "general overhead costs" and it is unclear how much of this relates to primary education and how much to secondary education. As a result, it is difficult to estimate the costs of the services and outputs produced. Moreover, a good deal of spending data is not available at a disaggregated level, which makes it difficult to assess whether public funds were spent for their intended purposes (Prennushi / Rubio / Subbarao 2002, 116). Prennushi, Rubio and Subbarao quote as an example (2002, 116) that a survey of a random sample of Ugandan schools revealed that only 30% of the public funds intended for non-salary expenditure in schools in 1991-1995 actually reached schools.

Although the availability of data on outcome and impact indicators has improved since the late 1990s in the wake of the need to monitor the performance of poverty reduction strategies and progress towards the MDGs, many problems still surround the statistical capacity of partner countries (PARIS21 2004, 5; OECD 2011b, 87-89). In particular, national statistical systems continue to be underfinanced, administrative data systems are underdeveloped and countries rely heavily on donor-financed sample

surveys (PARIS21 2004, 9-10; OECD 2011b, 87-89). Various weaknesses in the underlying statistical capacities of developing countries are described below. These were identified in six country case studies performed by the Partnership in Statistics for Development in the 21st Century¹¹⁵ (PARIS21 2004, 13-23).

1. Census data are outdated in many countries, although accurate population estimates are needed as denominators to calculate many important indicators such as mortality rates and school enrolment rates.
2. Survey estimates often suffer from inconsistencies in methods and definitions.¹¹⁶ For example, if the definition of literacy varies across surveys, survey estimates are not directly comparable.
3. Wider statistical systems beyond central statistical offices (i.e. administrative data systems and registers) are weak. This is due primarily to poor staff pay, a lack of training opportunities and difficulties in retaining staff.
4. It is important to prioritise user needs in order to keep statistical outputs relevant. Many countries have statistics councils dealing with user-producer relations. However, they often do not function properly.
5. Human resource constraints in statistical systems are common. Staff are not adequately trained and paid. Trained staff often leave to take posts in the private sector or with international organisations, where salaries are higher.
6. Countries experience difficulties in processing data, also due to limited web capacity.
7. Although PRSPs have had the effect of improving the capacity for using data for indicators and analysis in recent years, it remains limited in

115 The Partnership in Statistics for Development in the 21st Century (PARIS21) was founded in 1999 to “to promote the better use and production of statistics throughout the developing world. [...] PARIS21’s goal is to develop a culture of Management for Development Results (MfDR). PARIS21 pursues this goal primarily by encouraging and assisting low-income and lower middle income countries to design, implement, and monitor a National Strategy for the Development of Statistics (NSDS)” (PARIS21 2013).

116 For instance, the country report for Burkina Faso notes that “differences in basic concepts, definitions and measurement methods across surveys are the most likely source of inconsistent results from different surveys for many key MDG and PRSP indicators” (PARIS21 2004, 15).

many countries. In particular, additional support and training is needed to enable countries to set up truly country-owned statistical systems, to develop indicator systems, to set targets and to analyse trends.

The weaknesses of developing countries' statistical systems complicate the process of compiling data on MDG indicators and other standardised outcome and impact-level indicators which are used to aggregate results across countries. First, there are frequent problems with missing data and the quality of the data submitted by countries' statistical offices is often highly varied. Second, countries often use different methodologies and definitions in computing data on standard indicators (Edmunds / Marchant 2008, 34). Edmunds and Marchant observe (2008, 34) that, while international institutions can use advanced techniques to fill data gaps and transform data so that it looks convincing at an international level, they are still highly dependent on data provided by countries' national statistical systems. Donors should therefore have a strong interest in strengthening statistical capacity in developing countries.

10.3 Monitoring standard indicators: challenges for donor agencies

Donor agencies face a variety of challenges when collecting and monitoring data on standard indicators for measuring agency performance. In order to produce estimates of development outcomes and impacts in partner countries, data are usually drawn from public statistical databases and other pre-existing sources. The challenges at this level therefore mainly involve the general problem of data availability and reliability, as well as capacity constraints in partner countries' monitoring systems. Since these have been described in sections 10.1 and 10.2, they will not be discussed in further detail here.

By contrast, data for aggregating intervention outputs and outcomes across countries are sourced from the programmes and projects delivering the results. Here, donor agencies face five main challenges in organising the data collection process:

- 1) how to guarantee the inclusion of standard indicators in programme or project results frameworks;
- 2) how to organise the central data collection process;

- 3) how to improve data availability and quality;
- 4) how to deal with double counting;
- 5) how to count the beneficiaries.

1) Guaranteeing the inclusion of standard indicators in programme or project results frameworks

The inclusion of standard indicators in programme or project results frameworks is a prerequisite for measuring and aggregating results at agency level. When first introducing standard indicators, an agency can choose to make their use either mandatory or optional. Standard indicators can also be either integrated *ex post* in the results frameworks of ongoing projects and programmes or used only for planned interventions.

Of the aid agencies reviewed in section 6.1, only the IFC insists on the use of a selected set of standard indicators. The IFC has defined a set of mandatory standard indicators for each sector in which it operates. It has also listed standard indicators that are mandatory only if they are relevant to the intervention¹¹⁷ (IFC 2010).

The advantage of specifying that the use of standard indicators is optional (i.e. standard indicators should be used if they are relevant to the intervention), as practised by the other donor agencies reviewed, is that potential unintended negative effects can be partly mitigated. For example, interventions are less likely to be designed around standard indicators and activities delivering results measurable with standard indicators are less likely to be favoured.

The drawback, however, is that it is difficult to guarantee the use of optional standard indicators. One way of encouraging the use of standard indicators by aid agencies is to employ a team of advisers to analyse all existing and/or proposed projects and programmes and to suggest that standard indicators be included in results frameworks. Another option is to mount awareness-raising campaigns to communicate the advantages of standard indicators. In deciding whether standard indicators should be included *ex post* in results frameworks of ongoing interventions or used only for future projects and programmes, it is important to bear in mind that introducing them *ex post* may entail a high cost. For example, baseline values are often not

117 The IFC discourages the use of custom indicators.

available and programme or project managers may be reluctant to collect data on additional indicators if they have not been agreed at the start of the intervention. On the other hand, it may take a long time for results to be measured and aggregated if standard indicators are only included in the results frameworks of new interventions.

2) Organising the central data collection process

In order to centrally collect data on standard indicators from projects and programmes, some donor agencies conduct regular data queries. Others have set up computerised reporting systems to which results have to be reported and updated on a regular basis. The two approaches are illustrated below, by explaining how the World Bank and DFID collect data on standard indicators.

The World Bank collects data on standard indicators “*through a rigorous bottom-up process from the Bank’s operational data systems and documents*” (World Bank 2013b, 5). All World Bank operations are required to have results frameworks with indicators in place. Progress in indicators (including standard indicators) is monitored by means of Implementation Status and Results Reports, which have to be updated every 6-12 months in the bank’s management information system (World Bank 2013b, 5). Once a year in July, the World Bank’s Results Unit examines the data in the management information system and aggregates the results measured by standard indicators. However, before the results can be aggregated, the data reported by programmes and projects first have to be cleaned to guarantee their quality. If there are serious doubts about the results reported, the data are not used for aggregating results at corporate level.¹¹⁸

DFID carries out regular data queries to collect data on standard indicators.¹¹⁹ Every six months, a formal letter is sent to country offices asking them to report on progress in terms of the commitments made for standard indicators at level 2 of DFID’s results framework. Country offices are required to complete a standardised spreadsheet showing the results achieved to date and forecasting their planned future achievements. In order

118 The final part of the paragraph is based on an interview conducted with Gisu Mohadjer and Lisandro Martin (both from the World Bank) on 4 June 2013.

119 DFID is thinking about introducing an IT-based reporting system to simplify the collection of data and to reduce the reporting burden placed on country offices.

to ensure that data are collected in a systematic way, DFID has published methodological guidance notes for all standard indicators.¹²⁰ When completing the spreadsheet, country offices are asked whether they have followed the indicator guidelines in collecting data and are also invited to report any difficulties, risks or uncertainties with the data.¹²¹

3) Improving data availability and quality

Ensuring data quality and availability are among the main problems faced by donor agencies when collecting data on standard indicators from projects and programmes. This is due to a variety of factors. First, the need to report regularly on standard indicators to a donor agency places an additional burden on implementing agencies and partners. Not all partners are likely to respond on time to data queries. Second, incentives for data misrepresentation and manipulation may affect both quality and objectivity. Third, there may be a lack of statistical capacity in reporting units, leading to problems with data quality. For example, DFID reports that country offices have difficulties combining data sources and forecasting planned achievements. Moreover, data on indicators come from multiple sources and data collection and reporting skills are likely to vary across countries and projects (IEG 2011, xxvi).

There are different ways of dealing with problems of data quality, such as carrying out regular data quality reviews to detect irregularities, asking for documentation, performing random checks and using external forms of assurance.

4) Dealing with double counting

Within-partner or between-partner double counting of individuals or locations is a common problem when measuring development results. The issue is particularly important when donor agencies aggregate development results across interventions and countries. Donor agencies usually work with a number of implementing agencies, who may report on the same individuals or the same locations. Moreover, many development interventions these

120 See <https://www.gov.uk/government/publications/indicator-methodology-notes>.

121 This paragraph is based on an interview with Mehdi Hussein, Senior Statistics Advisor at DFID, on 22 May 2013.

days are jointly financed by a variety of funders, which increases the risk of various funders reporting the same results.

There are three types of double counting:

- (a) within-partner double counting of individuals;
- (b) between-partner double counting of individuals;
- (c) double counting of locations (Obiero / Schmidt / Foreit 2010, 3-4).

(a) Within-partner double counting of individuals

Within-partner double-counting arises if one implementing agency at one project site provides the same service to the same individual on a number of occasions and then counts the individual a number of times when reporting on the number of individuals reached (Obiero / Schmidt / Foreit 2010, 3).

Example: An implementing agency vaccinates individuals. Instead of counting the number of individuals immunised, the partner reports the total number of vaccinations.

(b) Between-partner double counting of individuals

Between-partner double counting can occur if two or more implementing agencies provide the same service to the same individual at the same site or at a different site and both partners count the individual when reporting on the number of individuals served (Obiero / Schmidt / Foreit 2010, 3).

Example 1 (two partners, one location): A clinic providing anti-retroviral (ARV) treatment is funded by two partners. In their annual reports, both partners report on the total number of individuals receiving ARV treatment at the clinic. If a bilateral agency provides funding for both partners and wishes to aggregate the results at organisational level, the agency will double-count the number of individuals served (assuming that the agency is not aware of the double count).¹²²

Example 2 (two implementing partners, two locations): Two implementing agencies provide the same service at different locations. For example, partner I provides first-aid courses in the east of a city and partner II does the same in the west of the city. If individual X attends first-aid courses given by

122 The example is based on Obiero / Schmidt / Foreit 2010, 3.

both partners, he or she will be counted twice under the indicator defined as “total number of individuals trained in first aid”.¹²³

(c) Double counting of locations

Double counting of locations occurs if “*different partners provide different supplies and/or services to the same organization within one reporting period and each partner counts the organization as one of its service points*” (Obiero / Schmidt / Foreit 2010, 4).

Example: Partner A provides money to a school for the renovation of classrooms; Partner B supplies computers to the same school. When the partners report on the “number of schools upgraded”, both partners will count the same school.¹²⁴

5) Counting the beneficiaries

Many of the standard indicators used for aggregating results at agency level measure the number of project beneficiaries (e.g. the number of students benefiting from education projects). It is often very difficult, however, to define the beneficiaries and hence to quantify their number. Are only direct beneficiaries counted, i.e. “*those who will participate directly in the project, and thus benefit from its existence*” (FAO 2005)? Or should the definition of beneficiaries be extended to include indirect beneficiaries?¹²⁵ Indirect beneficiaries are often defined as those living within the zone of influence of an intervention (FAO 2005). The definition can, however, be broadened to include anyone who benefits indirectly from an intervention, e.g. an employer may benefit indirectly from a health intervention if it reduces staff absenteeism (Weiers 2012).

Clearly defining beneficiary groups is especially difficult if standard indicators are broadly defined (e.g. total population benefited or total number of households reached). Hence, figures on the number of beneficiaries provided by different interventions are often not comparable. It is easier to define beneficiary groups for standard indicators that relate to a specific sector or intervention area. For instance, indirect beneficiaries measured by

123 The example is based on Obiero / Schmidt / Foreit 2010, 4.

124 The example is based on Obiero / Schmidt / Foreit 2010, 4.

125 “*Indirect beneficiaries are often, but not always, all those living within the zone of influence of the project*” (FAO 2005).

the “number of people with access to better health services” could be defined as those living within a 5km radius of health centres, hospitals and other health facilities which have been built or upgraded as a result of healthcare interventions (FAO 2005). However, a boundary of 5 km may be more appropriate for some interventions than for others since the definition of “beneficiaries” is highly context-specific. For example, whereas there may be only a few hospitals in one area and the average person may be willing to travel 15 km to get to a clinic, another area may contain several clinics, which means that the catchment area of a single clinic is much smaller.

11 Conclusions and policy recommendations

11.1 Conclusions

This study analyses the role of indicators in development cooperation, focusing on the use of key and standard indicators for agency-level performance measurement. I have shown that, against the background of growing results orientation and greater calls for accountability and transparency, indicators are becoming more and more important for planning, monitoring and evaluating development interventions and strategies as well as for reporting on performance.

The growing importance of indicators is particularly evident in the outcome documents of a series of High Level Fora on Aid Effectiveness, in which donors and partner countries adopted results-based management as one of the key principles guiding development cooperation, and pledged to make aid more transparent and to become more accountable to the public as well as to each other. Indicators play a crucial role in fulfilling these commitments at three different organisational levels at which results-based management and reporting systems can be used:

- agency level;
- country level;
- project or programme level.

However, indicators cannot be applied equally well to all intervention contexts and their use may lead distortions. The use of indicators is particularly likely to have adverse effects where they are used to assess

performance. For instance, there is the risk of resources being shifted to areas where performance is more easily measurable or where results are easier to achieve. Moreover, accountability demands may lead to too much emphasis being placed on results measured by indicators at the expense of unquantified performance aspects.

The challenges with respect to the use of indicators as well as the types of indicators used differ from one level (i.e. agency, country and project or programme) to another. The main challenges and common practices identified regarding the use of indicators are briefly summarised for each of the three levels below. Based on the main conclusions, I then go on to make a number of policy recommendations.

Agency level

At times of tight budgets, governments in traditional donor countries are being challenged by their citizens to give more “value for money” and to demonstrate the effectiveness of aid. Against this background, several donor agencies have adopted performance measurement systems at agency level. However, using indicators for planning, management and reporting on results is especially challenging at agency level since donor agencies work in a number of countries, performing all sorts of different interventions in different sectors. This makes it difficult to identify indicators that can be used to inform decision-making and assess an agency’s performance as a whole.

Standardised key indicators, which allow for development results to be aggregated across countries and interventions, play a key role in addressing this challenge. A comparison of performance measurement systems used by 12 selected bilateral and multilateral donor agencies shows that standardised key indicators are often introduced at two levels. Standard indicators measuring longer-term development outcomes and impacts in partner countries serve as a strategic orientation for donor agencies by providing information on the overall development context in partner countries. It is important to remember, however, that results at these levels are influenced by a variety of factors and thus cannot be used to assess the performance of individual stakeholders. For this reason, the donor agencies reviewed have

also defined standard indicators at output and immediate-outcome level.¹²⁶ These can be used to aggregate results delivered across interventions and countries in order to present a snapshot of their contributions to the attainment of higher-level development goals. As such, they are a key tool for reporting on development results delivered to external stakeholders and for strengthening public support for development cooperation.

I identified a number of differences between donor agencies in their use of standard indicators for aggregating intervention outputs and outcomes. First, there are differences in the way in which the question of attribution or contribution is handled. While some agencies take full credit for results reported, others are more careful and report on results to which they have contributed. Not only may the attribution of results be open to criticism on the basis of the principle of country ownership, it is often not practicable in situations where outcome-level changes are measured that are influenced by a variety of factors. Second, the number of standard indicators defined differs widely among donor agencies. This is due to an inherent trade-off between a desire to keep the number of indicators low to preserve a snapshot character and a desire to capture the complexity of an aid portfolio.

The use of standardised key indicators to assess the contributions of individual donor agencies is not undisputed. This study identified a number of limitations:

1. Standard indicators measuring intervention results cannot be used as a measure of development effectiveness because the effects of outputs and outcomes on longer-term development progress are not considered.
2. Standardised key indicators usually measure results that are very broadly defined and only provide a very rough and overly simplistic approximation of the results achieved.
3. Since data are aggregated across countries and interventions, it is difficult to identify reasons for failure or success. This also makes it difficult to draw conclusions that are relevant to decision-making and improving performance at agency level.

Given these limitations, it is unclear whether standard indicators are actually useful for portfolio management and for assessing the performance of an

¹²⁶ Some donor agencies also use a few indicators at intermediate-outcome level and indicators that measure inputs and activities.

agency. The on-line publication of information on the results of individual aid activities (e.g. in the form of reports, databases or as part of the IATI standard) is an alternative to using standardised key indicators. While such an approach is less suitable as a snapshot of development results for the general public, it does have several advantages. The obligation to publish results may help to improve results orientation at project or programme level. It may also help to reconcile conflicting demands in terms of accountability between donors and partner countries, because the information can be used by the public in both donor and developing countries to call development partners to account for their actions.

Country level and programme or project level

At country level and programme or project level, similar indicators were found to be useful in the context of results-based management. Key indicators are helpful for planning development interventions and development strategies at country or sectoral level, especially those which provide information on the broader constraints and challenges in a country, sector or intervention area. Indicators that measure progress along the results chain are important for monitoring and evaluating the performance of interventions or strategies. Custom indicators specific to the country or intervention context are usually formulated for this purpose. While country-level monitoring systems adopt a long-term perspective and focus mainly on outcome and impact-level indicators, projects and programmes have a more limited horizon and therefore tend to focus more on output indicators.

The main challenges identified in this paper differ between the two organisational levels. Most development agencies have already gained considerable experience with indicators for results-based management at programme or project level. Nevertheless, challenges remain in particular with respect to the use of information resulting from indicators, and in ensuring data quality and reliability when collecting data. Another challenge that was identified is how to foster a results culture focused on learning and management and not exclusively on meeting reporting requirements. At country level, capacity constraints in developing countries' monitoring systems are a major problem, and can adversely affect data quality and availability at all levels of the results chain. These constraints have major implications for intervention and agency-level performance measurement systems as well, since they often rely on country-level data. In particular, data on many key

indicators is frequently missing and the quality of data produced by countries' statistical offices is highly varied. Moreover, data on standard indicators is often not comparable between countries since different countries use different methodologies and definitions when computing data on indicators.

The weaknesses of partner countries' monitoring systems, coupled with pressure in donor countries to deliver "value for money", have led to donor agencies setting up parallel reporting systems in partner countries. Nonetheless, it is crucial for partner countries to have a single monitoring framework that is used jointly by all development actors, so that they can gain a full picture of all activities undertaken in their countries and of the progress made, and so that they become more accountable to their citizens. In this respect and with regard to the principles of country ownership and the use of country systems, the practice of some donor agencies in setting up parallel reporting systems for reporting on their results is open to criticism.

11.2 Recommendations

A number of recommendations may be made, based on the findings of this study, that are relevant to future policies on indicators and performance measurement systems.

1. First, development partners should make more use of the information from indicators for decision-making and managing development interventions and policies. It is especially important to foster a results culture that focuses on learning and management for results and is not geared primarily to meeting reporting requirements. This may also reduce several of the risks associated with using indicators for performance measurement, such as an overemphasis on measures of success or data manipulation.
2. Donor agencies and partner countries should step up investments in statistical capacity-building and in monitoring and evaluation systems as the usefulness of indicators depends on the quality and availability of data. At a country level, joint efforts by partner countries and the donor community are needed to boost the supply of and demand for data at national level. Development agencies should strengthen the statistical capacities of project and programme managers, and invest in regular (external) data quality reviews to improve data quality and reliability.

3. When using indicators to report on their contributions to development in partner countries, donor agencies are advised to report on the results they have supported (either full or proportional contribution) and not to attribute results to their own engagement. The attribution of results is contrary to the commitments made in Paris, Accra and Busan with respect to country ownership and the use of country systems. Moreover, results cannot be attributed where outcome-level results are measured that are influenced by various external factors.
4. Donor agencies should invest in harmonising definitions, units of measurement and reporting standards in relation to indicators that measure intervention outputs and outcomes. Harmonisation would decrease the cost of coordination among development partners when implementing joint projects and programmes, and would also help to reduce the total number of indicators monitored. This would reduce the overall cost of data collection and monitoring and lower the burden placed on partner countries' statistical systems. Data quality and availability are also likely to improve as a result.
5. Finally, donor agencies are advised to explore complementary options or alternatives to using standardised key indicators for reporting on results at agency level. This study found that standardised key indicators are useful for presenting a snapshot of an agency's contributions to development outcomes and impacts in partner countries. I also found, however, that standardised key indicators are not an adequate instrument for assessing the development effectiveness of donor agencies. Moreover, using them for accountability purposes may lead to distortions, such as a shift in resources to activities focusing on results measured by standard indicators at the expense of interventions that are not reported on at agency level. I therefore recommend exploring the possibility of publishing on-line information on the results of individual aid activities (e.g. as part of the IATI standard or in the form of reports) as an alternative to using standardised key indicators to report on agency performance. The public in donor and partner countries could also use the information on the results of individual interventions to hold development agencies to account, particularly if the information is easily searchable. Where standardised key indicators are used, it is advisable to complement them with systems for rating development outcomes. These assess the overall success of interventions and provide additional information on development effectiveness.

Bibliography

- Adam, C. et al.* (2004): Performance-based conditionality : a European perspective, in: *World Development* 32 (6), 1059–1070
- ADB (Asian Development Bank)* (2008a): ADB results framework; online: <http://www.adb.org/sites/default/files/pub/2008/r166-08.pdf> (accessed 07 Oct. 2013)
- (2008b): Strategy 2020 : the long-term strategic framework of the Asian Development Bank 2008-2020, Manila
- (2010): Refinements to ADB's results framework; online: <http://www.adb.org/sites/default/files/pub/2010/Refinements-Results-Framework.pdf> (accessed 07 Oct. 2013)
- (2012a): ADB results framework indicators definition (updated after the framework's refinement); online: http://www.adb.org/sites/default/files/ADB%20Results%20Framework%20Indicators%20Definition_updated%202012.pdf (accessed 07 Oct. 2013)
- (2012b): Review of the ADB results framework; online: www.adb.org/sites/default/files/review-of-adb-results-framework-2012.pdf (accessed 25 Nov. 2013)
- (2012c): Review of the ADB results framework : supplementary appendix A : indicator definitions; online: <http://www.adb.org/sites/default/files/supplementary-appendixA-indicator-definitions.pdf> (accessed 28 Jan. 2014)
- (2013a): Core operational areas; online: <http://www.adb.org/about/core-operational-areas> (accessed 11 July 2013)
- (2013b): Development effectiveness review 2012, Manila
- (2013c): Guidelines for the use of ADB's results framework indicators for core sector outputs and outcomes; online: <http://www.adb.org/sites/default/files/guidelines-rfi-indicators.pdf> (accessed 09 Dec. 2013)
- (2013d): Results framework 2013-2016; online: <http://www.adb.org/sites/default/files/resultsframework.pdf> (accessed 07 Oct. 2013)
- ADF (African Development Fund)* (2008): Results reporting for ADF-10 and results measurement framework for ADF-11 : background paper : ADF-11 replenishment : fourth consultation; online: http://www.afdb.org/fileadmin/uploads/afdb/Maps/ADF11_04_EN_ADF-11%20RESULTS%20REPORTING%20-%20EN%20FINAL.pdf (accessed 22 Jan. 2014)
- Adserà, A. / C. Boix / M. Payne* (2003): Are you being served? : political accountability and quality of government, in: *Journal of Law, Economics & Organization* 19 (2), 445–490

- AfDB Group (African Development Bank Group)* (2010): Bank group results measurement framework; online: <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Bank%20Group%20Results%20Measurement%20Framework%20-%20REV%202%5B1%5D.pdf> (accessed 07 Oct. 2013)
- (2011): Annual development effectiveness review 2011, Tunisia
 - (2013a): Annual development effectiveness review 2013 : towards sustainable growth for Africa, Tunisia
 - (2013b): *The one bank results measurement framework 2013-2016*; online: http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/The_One_Bank_Result_Measurement_Framework_2013-2016.pdf (accessed 28 March 2014)
- aidinfo* (2013): About us; online: <http://www.aidinfo.org/about-us> (accessed 03 Sept. 2013)
- Allesina, A. / D. Dollar* (2000): Who gives foreign aid to whom and why?, in: *Journal of Economic Growth* 5 (1), 33–63
- Anderson, E.* (2008): Practices and implications of aid allocation : background study for the 2008 Development Cooperation Forum, UN Economic and Social Council (ECOSOC), Norwich: School of Development Studies; online: <http://www.un.org/en/ecosoc/newfunct/pdf/revised%20draft%28anderson%29.pdf> (accessed 07 Oct. 2013)
- Ashoff, G.* (2004): Donor coordination : a basic requirement for more efficient and effective development cooperation, Bonn: DIE (Briefing Paper 7/2014)
- AusAID (Australian Agency for International Development)* (2012): Helping the world's poor through effective aid : Australia's comprehensive aid policy framework to 2015–16, Canberra; online: <http://www.ausaid.gov.au/about/documents/capf.pdf> (accessed 07 Oct. 2013)
- Baker, J. L.* (2000): Evaluating the impact of development projects on poverty : a handbook for practitioners, Washington, DC: World Bank
- Bakewell, O. / A. Garbutt* (2005): The use and abuse of the logical framework approach; online: <http://www.intrac.org/data/files/resources/518/The-Use-and-Abuse-of-the-Logical-Framework-Approach.pdf> (accessed 07 Oct. 2013)
- Baldacci, E. et al.* (2004): Social spending, human capital, and growth in developing countries : implications for achieving the MDGs, Washington, DC: International Monetary Fund (IMF Working Paper 04/217)
- Baulch, B.* (2006): Aid distribution and the MDGs, in: *World Development* 34 (6), 993–950
- Berthélemy, J.-C.* (2006): Aid allocation : comparing donors' behaviours, in: *Swedish Economic Policy Review* 13, 75–109

- Bidani, B. / M. Ravallion* (1997): Decomposing social indicators using distributional data, in: *Journal of Econometrics* 77 (1), 125–139
- Binnendijk, A.* (2000): Results based management in the development co-operation agencies : a review of experiences; online: <http://www.oecd.org/development/evaluation/1886527.pdf> (accessed 07 Oct. 2013)
- Birdsall, N. / W. D. Savedoff / A. Mahgoub* (2010): Cash on delivery : a new approach to foreign aid (one-page brief); online: <http://www.cgdev.org/content/article/detail/1423828/> (accessed 10 March 2013)
- *et al.* (2011): Cash on delivery : a new approach to foreign aid, Washington, DC: Center for Global Development; online: http://www.cgdev.org/files/1424603_file_CashDelivery_FINAL.pdf (accessed 07 Oct. 2013)
- Bruglio, L.* (1995): Small island developing states and their economic vulnerabilities, in: *World Development* 23 (9), 1615–1632
- Burnside, C. / D. Dollar* (2000): Aid, policies, and growth, in: *American Economic Association* 90 (4), 847–868
- Canoog, E.* (2009): Results based monitoring system, Makati City: The Private Sector Promotion Program
- Chauvet, L. / P. Guillaumont* (2004): Aid and growth revisited : policy, economic vulnerability, and political instability, in: N. H. Stern / B. Tunngodden / I. Kolstad (eds.), *Toward pro-poor policies : aid, institutions, and globalization*, New York: World Bank, Oxford University Press
- CIDA (Canadian International Development Agency)* (2008a): Presentation of the amended key results-based management terms and definitions : for the 2008 results-based management policy statement; online: [http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUIImages/Results-basedManagement/\\$file/RBM_POLICY_STATEMENT_2008_COMPANION.pdf](http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUIImages/Results-basedManagement/$file/RBM_POLICY_STATEMENT_2008_COMPANION.pdf) (accessed 07 Oct. 2013)
- (2008b): RBM tools at CIDA : how-to guide; online: <http://www.acdi-cida.gc.ca/acdi-cida/acdi-cida.nsf/eng/NAT-92213444-N2H> (accessed 07 Oct. 2013)
- Collier, P.* (2002): Aid allocation and poverty reduction, in: *European Economic Review* 46 (8), 1475–1500
- / *D. Dollar* (2001): Can the world cut poverty in half? : how policy reform and effective aid can meet international development goals, in: *World Development* 29 (11), 1787–1802
- / *A. Hoeffler* (2004): Aid, policy and growth in post-conflict societies, in: *European Economic Review* 48 (5), 1125–1145
- Cook, T. J. et al.* (1995): Performance measurement : lessons learned for development management, in: *World Development* 23 (8), 1303–1315

- Coudouel, A. / J. S. Hentschel / Q. T. Wodon* (2002): Poverty measurement and analysis, in: J. Klugman (ed.), *A sourcebook for poverty reduction strategies : core techniques and cross-cutting issues*, Vol. 1, Washington, DC: World Bank
- Cronin, D. / J. O. Regan* (2002): *Accountability in development aid : meeting responsibilities, measuring performance : a research report for Cómhlamh*; online: http://www.dochas.ie/Shared/Files/4/Comhlamh_Research.pdf (accessed 07 Oct. 2013)
- da Costa, P.* (2009): *Study on communicating development results*; online: <http://www.oecd.org/dev/devcom/44836250.pdf> (accessed 07 Oct. 2013)
- Danida (Ministry of Foreign Affairs of Denmark)* (2006a): *Monitoring and indicators in the agricultural sector : technical note*, Copenhagen
- (2006b): *Monitoring at programme and project level : general issues*, Copenhagen
 - (2011): *Danish development cooperation in a results perspective*, Copenhagen
 - (2012a): *Data from programmes and projects*; online: <http://um.dk/en/danida-en/about-danida/danida-transparency/data-from-programmes-and-projects/> (accessed 04 Sept. 2013)
 - (2012b): *Denmark common standard implementation schedule*; online: <http://um.dk/en/~media/UM/English-site/Documents/Danida/Activities/Denmark%20Common%20Standard%20Implementation%20Schedule%20Dec%202012.xls> (accessed 07 Oct. 2013)
- Delorme, P. / O. Chatelain* (2011): *Policy steering : the role and use of performance measurement indicators*; online: http://www.dochas.ie/Shared/Files/4/Guide_on_Performance_Measurement.pdf (accessed 14 Jan. 2013)
- DFID (Department for International Development)* (2011): *UK aid : changing lives, delivering results*; online: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/67584/BAR-MAR-summary-document-web.pdf (accessed 10 Dec. 2013)
- (2011a): *DFID's Results Framework – focus on Multilateral Results*; online: http://capacity4dev.ec.europa.eu/sites/default/files/file/16/12/2011_-_1607/dfid_results_framework_focus_on_multilateral_results_0.ppt (accessed 31 March 2014)– (2013a): *DFID's results framework*, London; online: <http://www.dfid.gov.uk/Documents/publications1/DFID-external-results.pdf> (accessed 07 Oct. 2013)
 - (2013b): *Indicator methodology notes : number of people achieving food security through DFID support DFID's results framework*; online: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/197254/ind-meth-note-food-security.pdf (accessed 07 Oct. 2013)

- (2013c): Indicator methodology notes : number of people benefiting from DFID-supported cash transfer programmes DFID's results framework; online: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/197253/ind-meth-note-cash-transfer-programmes.pdf (accessed 09 Dec. 2013)
 - (2013d): Indicator methodology notes : number of people with access to improved hygiene through DFID support to hygiene promotion DFID's results framework; online: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/197393/ind-meth-note-hygiene.pdf (accessed 09 Dec. 2013)
 - (2013e): Indicator methodology notes : number of people with sustainable access to an improved sanitation facility through DFID support DFID's results framework; online: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/197392/ind-meth-note-sanitation.pdf (accessed 09 Dec. 2013)
- Dollar, D. / V. Levin* (2004): The increasing selectivity of foreign aid, 1984-2002, Washington, DC: The World Bank (Policy Research Working Paper 3299); online: <http://elibrary.worldbank.org/docserver/download/3299.pdf?expires=1381146978&id=id&accname=guest&checksum=0FB5CBC0C08D3788395AB130F7607AF2> (accessed 07 Oct. 2013)
- Doran, G. / A. Miller / J. Cunningham* (1981): There's a S.M.A.R.T. way to write management's goals and objectives, in: *Management Review* 70 (11), 35–36
- Doucouliagos, H. / M. Paldam* (2009): The aid effectiveness literature : the sad results of 40 years of research, in: *Journal of Economic Surveys* 23 (3), 433–461
- Easterly, W.* (2007): *The white man's burden : why the West's efforts to aid the rest have done so much ill and so little good*, New York: Oxford University Press
- / *R. Levine / D. Roodman* (2004): Aid, policies, and growth : comment, in: *American Economic Review* 94 (3), 774–780 *EC (European Commission) (2002): Guidelines for the use of indicators in country performance assessment*, Brussels
 - (2008): The “MDG contract” : an approach for longer term and more predictable general budget support; online: http://ec.europa.eu/development/icenter/repository/MDG-Contract-Paper-0608_en.pdf (accessed 07 Oct. 2013)
 - (2011): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions : increasing the impact of EU development policy : an agenda for change, Brussels
 - (2012): Budget support guidelines : programming, design and management : a modern approach to budget support, Brussels (Tools and Methods Series); online: http://ec.europa.eu/europeaid/how/delivering-aid/budget-support/documents/budget_support_guidelines_part-2_en.pdf (accessed 07 Oct. 2013)

- (2013a): Commission staff working document : Paving the way for an EU Development and Cooperation Results Framework; online: <http://register.consilium.europa.eu/doc/srv?l=EN&t=PDF&gc=true&sc=false&f=ST%2017709%202013%20INIT&r=http%3A%2F%2Fregister.consilium.europa.eu%2Fpd%2Fen%2F13%2Fst17%2Fst17709.en13.pdf> (accessed 28 March 2014)
- (2013b): Who we are : Development and Cooperation – EuropeAid; online: http://ec.europa.eu/europeaid/who/index_en.htm (accessed 03 April 2014)
- EDFI (European Development Finance Institutions)* (2013): Press release : harmonized development results indicators for private sector investment operations; online: <http://www.edfi.be/component/downloads/downloads/95.html> (accessed 09 Dec. 2013)
- Edmunds, R. / T. Marchant* (2008): Official statistics and monitoring and evaluation systems in developing countries : friends or foes?: the partnership in statistics for development in the 21st century; online: <http://paris21.org/sites/default/files/3638.pdf> (accessed 07 Oct. 2013)
- Edwards, M. / D. Hulme* (1996): Too close for comfort? : the impact of official aid on nongovernmental organizations, in: *World Development* 24 (6), 961–973
- EEA (European Environment Agency)* (2000): Environmental signals 2000 (Environmental assessment report 6); online: <http://www.eea.europa.eu/publications/signals-2000> (accessed 14 April 2013)
- EU (European Union)* (2012): Guide to statistics in European Commission development co-operation, Luxembourg (Eurostat Methodologies & Working Papers)
- EuropeAID* (2006): Cause-and-effect analysis; online: http://ec.europa.eu/europeaid/evaluation/methodology/methods/mth_att_en.htm (accessed 09 June 2013)
- (2013): Sector indicator guidance for programming, s. 1.
- European Commission Directorate-General for Agriculture and Rural Development* (2006): Rural development 2007-2013 handbook on common monitoring and evaluation framework; online: http://ec.europa.eu/agriculture/rurdev/eval/guidance/document_en.pdf (accessed 07 Oct. 2013)
- FAO (Food and Agriculture Organization of the United Nations)* (2005): A participatory approach to identifying and preparing small scale rural investments : module 2 : preparing and using project profiles online: <http://www.fao.org/docrep/009/a0322e/a0322e04.htm#bm4.4.1> (accessed 29 Jan. 2014)
- Faye, M. L. et al.* (2004): The challenges facing landlocked developing countries, in: *Journal of Human Development* 5 (1), 31–68
- Feyzioglu, T. / V. Swaroop / M. Zhu* (1998): A panel data analysis of the fungibility of foreign aid, in: *The World Bank Economic Review* 12 (1), 29–58

- Filmer, D. / L. Pritchett* (1999): The impact of public spending on health : does money matter?, in: *Social Science and Medicine* 49 (10), 1309–1323
- Flint, M.* (2003): Easier said than done : a review of results-based-management in multilateral development institutions; online: http://gametlibrary.worldbank.org/FILES/920_Results%20Based%20Management%20in%20Dev%20Partners.pdf (accessed 07 Oct. 2013)
- Fourth High Level Forum on Aid Effectiveness* (2011): Busan partnership for effective development co-operation; online: <http://www.oecd.org/dac/effectiveness/49650173.pdf> (accessed 22 Jan. 2014)
- GAVI Alliance (Global Alliance for Vaccines and Immunizations)* (2013): Immunisation services support; online: <http://www.gavialliance.org/support/iss/> (accessed 11 Dec. 2013)
- GPEDC (Global Partnership for Effective Development Co-operation)* (2013): Guide to the monitoring framework of the global partnership; online: http://www.effectivecooperation.org/files/20130701%20Busan%20Global%20Monitoring%20Guidance_ENG_FINAL.pdf (accessed 28 Jan. 2014)
- (2013a): Who supports the Global Partnership; online: <http://effectivecooperation.org/about-list.html> (accessed 28 March 2014)
- Görgens, M. / J. Z. Kusek* (2009): Making monitoring and evaluation systems work : a capacity development toolkit, Washington, DC : World Bank
- GPOBA (Global Partnership on Output-Based Aid)* (s.a.): What is OBA?; online: <http://www.gpoba.org/sites/gpoba.org/files/English.pdf> (accessed 07 Oct. 2013)
- Gradstein, M.* (2004): Governance and growth, in: *Journal of Development Economics* 73 (2), 505–518
- GTZ (Gesellschaft für Technische Zusammenarbeit)* (2004): Results-based monitoring : guidelines for technical cooperation projects and programmes; online: <http://www.outcomemapping.ca/forum/download.php?id=25> (accessed 07 Oct. 2013)
- (2010): Intervention impact assessment plan : GLOBALGAP option 2 scaling up, Bangkok, mimeo
- Guillaumont, P.* (2005): Macro vulnerability in low income countries and aid responses : paper presented at the ABCDE Europe conference, Amsterdam; online: <http://publi.cerdi.org/ed/2005/2005.30.pdf> (accessed 28 Jan. 2014)
- (2008): Adapting aid allocation criteria to development goals : an essay for the 2008 Development Cooperation Forum United Nations Economic and Social Council; online: <https://www.un.org/en/ecosoc/newfunct/pdf/prof.%20guillaumont%20final%20draft%20paper.pdf> (accessed 28 Jan. 2014)
- / *L. Chauvet* (2001): Aid and performance : a reassessment, in: *The Journal of Development Studies* 37 (6), 66–92

- Gupta, S. / M. Verhoeven / E. Tiongson* (1999): Does higher government spending buy better results in education and health care?, Washington, DC: International Monetary Fund (IMF Working Paper)
- Human Rights Education Association* (2007): Guide for applying indicators within UN human rights-based programming : prepared for the United Nations Development Program; online: http://hrbportal.org/wp-content/files/HRBA_Indicators_Toolkit_HREA.pdf (accessed 07 Oct. 2013)
- IATI (International Aid Transparency Initiative)* (2013a): Annual report 2013; online: <http://www.aidtransparency.net/reports/IATI-annual-report-2013.pdf> (accessed 10 Dec. 2013)
- (2013b): IATI website; online: <http://www.aidtransparency.net/about> (accessed 09 Sept. 2013)
- IDA (International Development Association)* (2001): Adapting IDA's performance-based allocations to post-conflict countries; online: http://www.worldbank.org/ida/papers/IDA13_Replenishment/performanceANDallocations.pdf (accessed 10 Dec. 2013)
- (2003): IDA results measurement system : progress and proposals; online: <http://siteresources.worldbank.org/IDA/Resources/ResultsProgressProposals.pdf> (accessed 07 Oct. 2013)
- (2011): Annex 2 : IDA's performance-based allocation system for IDA 16, in; online: http://www.worldbank.org/ida/papers/Annex_2_IDA16.pdf (accessed 28 Jan. 2014)
- IDB (Inter-American Development Bank)* (2010): Report on the ninth general increase in the resources of the Inter-American Development Bank; online: <http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=35291148> (accessed 07 Oct. 2013)
- (2011): Development effectiveness overview 2010 : Annex II : Bank's results framework 2012-2015 Washington, DC, 235–241
- (2012): Development effectiveness overview 2011, Washington, DC
- (2013a): Map americas; online: http://www.iadb.org/en/mapamericas/mapamericas-faq,6439.html#UkL9VD_M_cs (accessed 25 Sept. 2013)
- (2013b): Mid-term evaluation of IDB-9 commitments; online: <http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37653359> (accessed 09 Dec. 2013)
- IEG (Independent Evaluation Group)* (2011): IEG annual report 2011 : results and performance of the World Bank Group : main report, Vol. 1, Washinton, DC: World Bank
- (2012): IEG annual report 2012 : results and performance of the World Bank Group : main report, Vol. 1, Washinton, DC: World Bank

- IFC (International Finance Corporation)* (2010): DOTS standard indicators by sector; online: <http://www.ifc.org/wps/wcm/connect/ddaa85004b179c92b726ff08d0338960/DOTS%2BIndicators%2Bby%2Bsector%2B9-24-10.xlsx?MOD=AJPERES> (accessed 07 Oct. 2013)
- (2012): IFC road map FY 13-15 : creating innovative solutions in challenging times; online: <http://www.ifc.org/wps/wcm/connect/87c980046b649beaa04abb254bfb7d4/Road+Map+FY13-15.pdf?MOD=AJPERES> (accessed 07 Oct. 2013)
 - (2013a): Development results in IFC : PowerPoint presentation, Washington, DC, mimeo
 - (2013b): IFC's development goals (IDGs); online: http://www.ifc.org/wps/wcm/connect/c7a466004c3e205e8939cbf12db12449/IFC_DOTS_factsheet_DevelopmentGoals_8-3.pdf?MOD=AJPERES (accessed 28 Jan. 2014)
 - (2013c): IFC development goals online: http://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/IDG_Home/IFCDevelopmentGoals/ (accessed 29 July 2013)
 - (2013d): IFC development goals (IDGs) overview : IDG2 : health and education; online: http://www.ifc.org/wps/wcm/connect/d21460804bc9ade78649e71be6561834/IDG2+H_E+flyer.pdf?MOD=AJPERES (accessed 09 Dec. 2013)
 - (2013e): IFC development goals (IDGs) overview : IDG3 : financial services; online: <http://www.ifc.org/wps/wcm/connect/1d2a21004bcb4f538fbaef1be6561834/idg3+flyer+financial.pdf?MOD=AJPERES> (accessed 09 Dec. 2013)
 - (s.a.): DOTS indicator framework; online: http://www.ifc.org/wps/wcm/connect/cd28bf0049ec2edfb989bdf0b65ccb46/IFC_DE_Indicators_FINAL_.doc?MOD=AJPERES (accessed 07 Oct. 2013)
- IHP+Results* (2010): Strengthening accountability to achieve the health MDGs, London: Responsible Action UK, Re-Action! Consulting (Pty) Lts
- IMF (International Monetary Fund)* (2006): Data quality assessment framework online: http://dsbb.imf.org/images/pdfs/dqrs_factsheet.pdf (accessed 07 Oct. 2013)
- */WorldBank* (2012): Update on the Bank's business modernization : results, openness and accountability; online: <http://web.worldbank.org/WBSITE/EXTERNAL/DEVCOMMEXT/0,,pagePK:64000837~piPK:64001152~theSitePK:277473~contentMDK:23166515,00.html> (accessed 07 June 2013)
- Kanbur, R.* (2004): Reforming the formula : a modest proposal for introducing development outcomes in IDA allocation procedures : paper for presentation at the AFD-EUDN conference, Paris; online: <http://www.arts.cornell.edu/poverty/kanbur/IDAForm.pdf> (accessed 05 June 2013)

- Kasuga, H.* (2008): Aid allocation across sectors : does aid fit well with partners' development priorities? (RIETI Discussion Paper Series 08-E-039); online: <http://www.rieti.go.jp/jp/publications/dp/08e039.pdf> (accessed 07 Oct. 2013)
- Kaufmann, D. / A. Kraay / M. Mastruzzi* (2006): Measuring governance using cross-country perceptions data, in: S. Rose-Ackermann (ed.), *International Handbook on the Economics of Corruption*, Cheltenham: Edward Elgar Publishing Limited, 52–104
- Keijzer, N.* (2013): Who's the boss? : strengthening the effectiveness of capacity-development support, Bonn: DIE (Briefing Paper 15/2013)
- Klingebiel, S.* (2012): Results-based aid (RBA) : new aid approaches, limitations and the application to promote good governance, Bonn: DIE (Discussion Paper 14/2012)
- Kosack, S.* (2003): Effective aid : how democracy allows development aid to improve the quality of life, in: *World Development* 31 (1), 1–22
- Leeuw, F. / J. Vaessen* (2009): Impact evaluations and development NONIE guidance on impact evaluation, Washington, DC: The Network of Networks on Impact Evaluation
- Lehtinen, T.* (2002): Measuring the performance of EC development cooperation : lessons from the experiences of international development agencies, Maastricht: European Centre for Development Policy Management (ECDPM Discussion Paper 41)
- Lensink, R. / H. White* (2011): Are there negative returns to aid?, in: *Journal of Development Studies* 37 (6), 42–65
- Lucas, S. T.* (2011): Principles into practice : focus on results; online: <http://www.mcc.gov/documents/reports/paper-2011001052001-principles-results.pdf> (accessed 07 Oct. 2013)
- Marr, B.* (2013): What is a key performance indicator (KPI)?; online: <http://www.ap-institute.com/Key%20Performance%20Indicators.html> (accessed 20 Feb. 2013)
- Marshall, M. G.* (2002): Measuring the societal impact of war : appendix A, in: F. O. Hampson / D. Malone (eds.), *From reaction to conflict prevention : opportunities for the UN system*, Boulder, Colo.: Lynne Rienner Publishers, 63–104
- Matteis, A. D.* (2013): Relevance of poverty and governance for aid allocation, in: *Review of Development Finance* 3 (2), 51–60
- MCC (Millennium Challenge Corporation)* (2011): Indicator tracking table guidance; online: <http://www.mcc.gov/documents/guidance/guidance-2011001058801-indicator-tracking-table.pdf> (accessed 07 Oct. 2013)

- (2012): Guidance on common indicators; online: <http://www.mcc.gov/documents/guidance/guidance-2012001109601-common-indicators.pdf> (accessed 07 Oct. 2013)
 - (2013a): About MCC; online: <http://www.mcc.gov/pages/about> (accessed 20 July 2013)
 - (2013b): Indicators (ITTs); online: <http://data.mcc.gov/raw/performance/indicators.csv> (accessed 10 Sept. 2013)
 - (2013c): Monitoring and evaluation; online: <http://www.mcc.gov/pages/results/m-and-e> (accessed 15 Sept. 2013)
- McGee, R.* (2013): Aid transparency and accountability : “build it and they’ll come”?, in: *Development Policy Review* 31 (1), 107–124
- MDF training & consultancy* (2005): MDF tool : indicators online: <http://www.toolkitsportdevelopment.org/html/resources/40/408CC56F-509A-40D8-BE46-D7EEB4261F97/10%20Indicators.pdf> (accessed 10 April 2013)
- Meier, W.* (2003): Results-based management : towards a common understanding among development cooperation agencies; online: <http://www.managingfordevelopmentresults.org/documents/Results-BasedManagementDiscussionPaper.pdf> (accessed 28 Jan. 2014)
- Mekasha, T. J. / F. Tarp* (2013): Aid and growth : what meta-analysis reveals, in: *The Journal of Development Studies* 49 (4), 564-583
- Mumssen, Y. / L. Johannes / G. Kumar* (2010): Output-Based Aid : lessons learned and best practices, Washington, DC: World Bank
- Natsios, A.* (2010): The clash of the counter-bureaucracy and development; online: http://www.cgdev.org/files/1424271_file_Natsios_Counterbureaucracy.pdf (accessed 05 June 2013)
- Norad (Norwegian Agency for Development Cooperation) (2008)*: Results management in norwegian development cooperation : a practical guide; online: http://www.norad.no/en/tools-and-publications/publications/publication/_attachment/119718?_download=true&_ts=12047b5d9cf (accessed 06 July 2013)
- Nuscheler, F.* (2008): Die umstrittene Wirksamkeit der Entwicklungszusammenarbeit, Duisburg: Institut für Entwicklung und Frieden, Universität Duisburg (INEF-Report 93/2008)
- O’Donnell, O. et al.* (2008): Analyzing health equity using household survey data : a guide to techniques and their implementation, Washington, DC: World Bank (World Bank Institute Learning Resources Series)

- Obiero, W. / S. Schmidt / K. Foreit* (2010): Strategies used by USG country teams for dealing with double counting of individuals and sites; online: http://www.cpc.unc.edu/measure/publications/sr-09-60/at_download/document (accessed 17 July 2013)
- OECD (Organisation for Economic Co-operation and Development)* (1993): OECD core set of indicators for environmental performance reviews, Paris
- (2008a): Handbook on constructing composite indicators : methodology and user guide; online: <http://www.oecd.org/std/42495745.pdf> (accessed 28 Jan. 2014)
 - (2008b): Key environmental indicators, Paris
 - (2008c): Managing for development results : information sheet; online: <http://www.mfdr.org/About/Final-MfDR-information-sheet.pdf> (accessed 15 March 2013)
 - (2009): Mutual accountability : emerging good practice; online: <http://www.oecd.org/dac/effectiveness/49656340.pdf> (accessed 07 April 2013)
 - (2011a): 2011 survey on monitoring the Paris declaration : glossary; online: <http://www.oecd.org/site/dacsmpd11/glossary.htm> (accessed 26 Sept. 2013)
 - (2011b): Aid effectiveness 2005–10 : progress in implementing the Paris Declaration; online: <http://www.oecd.org/dac/effectiveness/48742718.pdf> (accessed 28 Jan. 2014)
 - (2014): Countries, territories and organisations adhering to the Paris Declaration and AAA; online: <http://www.oecd.org/dac/effectiveness/countriesterritoriesandorganisationsadheringtotheparisdeclarationandaaa.htm> (accessed 26 March 2014)– / *World Bank* (2006): Emerging good practice in managing for development results : first issue : source book, in; online: <http://passthrough.fw-notify.net/download/244663/http://www.mfdr.org/Sourcebook/1stEdition/MfDRSourcebook-Feb-16-2006.pdf> (accessed 28 Jan. 2014)
 - / *DAC (Development Assistance Committee)* (2005/2008): The Paris Declaration on Aid Effectiveness and the Accra Agenda for Action; online: <http://www.oecd.org/development/effectiveness/34428351.pdf> (accessed 10 Feb. 2013)
 - / – (2008): Emerging good practice in managing for development results, 3rd ed.; online: <http://www.mfdr.org/Sourcebook/3rdEdition/SourceBook3FINAL.pdf> (accessed 10 July 2013)
 - / – (2009): Glossary of key terms in evaluation and results based management : Glossar entwicklungspolitischer Schlüsselbegriffe aus den Bereichen Evaluierung und ergebnisorientiertes Management; online: <http://www.oecd.org/development/evaluation/dcdndep/43184177.pdf> (accessed 28 April 2013)

- ONE* (2013): From aid effectiveness to development effectiveness : delivering results through transparency and accountability; online: <http://www.one.org/c/international/policybrief/4132/> (accessed 14 April 2013)
- PARIS21 (Partnership in Statistics for Development in the 21st Century)* (2004): Summary report on six case studies; online: <http://www.paris21.org/sites/default/files/monitoringMDG-countrystudy-full.pdf> (accessed 25 June 2013)
- (2013): About PARIS21; online: <http://paris21.org/about> (accessed 17 June 2013)
- Pearson, M.* (2011): Results based aid and results based financing : what are they? : have they delivered results?; online: <http://www.hlsp.org/LinkClick.aspx?fileticket=tdqKrWX321Q%3D&tabid=1570> (accessed 05 June 2013)
- / *M. Johnson / R. Ellison* (2010): Review of major results based aid (RBA) and results based financing (RBF) schemes online: http://www.hlsp.org/LinkClick.aspx?fileticket=GWmdM_6ynhk%3D&tabid=2499 (accessed 05 July 2013)
- Pereira, J. / C. Villota* (2012): Hitting the target? : evaluating the effectiveness of results-based approaches to aid; online: <http://www.eurodad.org/files/pdf/520a38ca1b330.pdf> (accessed 25 May 2013)
- Pidd, M.* (2005): Perversity in public service performance measurement, in: *International Journal of Productivity and Performance Management* 54 (5/6), 482–493
- Pietschmann, E.* (2014): Forgotten or unpromising : the elusive phenomenon of under-aided countries, sectors and regions, Bonn: DIE (Studies 80)
- Prennushi, G. / G. Rubio / K. Subbarao* (2002): Monitoring and evaluation, in: J. Klugman (ed.), *A sourcebook for poverty reduction strategies : core techniques and cross-cutting issues*, Vol. 1, Washington, DC: World Bank
- PWYF (Publish What You Fund)* (2013): Publish what you fund : the global campaign for aid transparency; online: <http://www.publishwhatyoufund.org/> (accessed 03 Sept. 2013)
- Rajkumar, A. S. / V. Swaroopa* (2008): Public spending and outcomes : does governance matter?, in: *Journal of Development Economics* 86 (1), 96–111
- Roberts, D. / N. Khattri* (2012): Designing a results framework for achieving results : a how-to guide, Washington, DC: Independent Evaluation Group, World Bank
- Savedoff, W. D.* (2011): Incentive proliferation? : making sense of a new wave of development programs; online: http://www.cgdev.org/sites/default/files/1425405_file_Savedoff_Incentive_Proliferation_FINAL_0.pdf (accessed 05 June 2013)
- / *K. D. Martel* (2011): Cash on delivery aid for health : what indicators would work best?, Washington, DC: Center for Global Development (Working Paper 275); online: <http://www.cgdev.org/content/publications/detail/1425135> (accessed 09 Dec. 2013)

- Schacter, M.* (2001): Sector wide approaches, accountability and CIDA : issues and recommendations; online: <http://bdmta.org.ua/ta/files/library/200911041716220.Sector%20Wide%20Approaches%20%28CIDA%29.pdf> (accessed 25 April 2013)
- Schirnding, Y. v.* (2002): Health in sustainable development planning : the role of indicators, Geneva: World Health Organization
- Smith, P.* (1995): Of the unintended consequences of publishing performance data in the public sector, in: *International Journal of Public Administration* 18 (2–3), 277–310
- Steinhardt, B.* (2011): Key indicator systems : experiences of other national and subnational systems offer insights for the United States; online: <http://www.gao.gov/new.items/d11396.pdf> (accessed 18 March 2013)
- Svensson, J.* (1999): Aid, growth and democracy, in: *Economics and Politics* 11 (3), 954–1985
- UCLA (University of California, Los Angeles)* (2013): What is the difference between categorical, ordinal and interval variables?; online: http://www.ats.ucla.edu/stat/mult_pkg/whatstat/nominal_ordinal_interval.htm (accessed 31 March 2013)
- UN (United Nations)* (2002): Monterrey consensus on financing for development; online: <http://www.un.org/esa/ffd/monterrey/MonterreyConsensus.pdf> (accessed 05 March 2013)
- (2004): Common country assessment and United Nations development assistance framework : guidelines for UN country teams preparing CCA and UNDAF in 2004; online: <http://www.who.int/hdp/publications/5e.pdf> (accessed 05 June 2013)
 - (2013a): Annex 2 : integrated results and resources framework in, UNDP strategic plan, 2014-2017, New York
 - (2013b): Beyond 2015; online: <http://www.un.org/millenniumgoals/beyond2015.shtml> (accessed 18 April 2013)
 - (2013c): Millennium development goals indicators; online: <http://mdgs.un.org/unsd/mdg/Host.aspx?Content=Indicators/About.htm> (accessed 14 April 2013)
 - (2013d): UNDP strategic plan 2014-2017, New York
- UN DESA (United Nations Department of Economic and Social Affairs)* (2011): LDC information : the criteria for identifying least developed countries; online: http://www.un.org/en/development/desa/policy/cdp/ldc/ldc_criteria.shtml#gni (accessed 06 March 2013)
- UNAIDS (Joint United Nations Programme on HIV/AIDS)* (2010): Indicator standards : operational guidelines for selecting indicators for the HIV response; online: http://www.unaids.org/en/media/unaids/contentassets/documents/document/2010/4_3_MERG_Indicator_Standards.pdf (accessed 04 April 2013)

- UNDG (United Nations Development Group)* (2011): Results-based management handbook : harmonizing RBM concepts and approaches for improved development results at country level; online: http://www.ilo.org/public/english/bureau/program/dwcp/download/undg_rbm1011.pdf (accessed 07 Oct. 2013)
- UNDP (United Nations Development Programme)* (2002): RBM in UNDP : selecting indicators; online: <http://www.undp.org/eo/documents/methodology/rbm/indicators-Paper1.doc> (accessed 20 Jan. 2013)
- (2009): Handbook on planning, monitoring and evaluating for development results, New York
- (2011): Human development report 2011, New York
- (2013): Global partnership monitoring framework; online: <http://www.effectivecooperation.org/about-monitoringframework.html> (accessed 14 April 2013)
- US Department of State* (1998): Reorganization Plan and Report; online: http://1997-2001.state.gov/www/global/general_foreign_policy/rpt_981230_reorg8.html (accessed 03 April 2013)
- US Department of State / USAID (United States Agency for International Development)* (2007): Strategic plan : fiscal years 2007-2012; online: <http://www.state.gov/documents/organization/86291.pdf> (accessed 15 July 2013)
- / – (2010): Standardized program structure and definitions; online: <http://www.state.gov/documents/organization/141836.pdf> (accessed 07 Oct. 2013)
- / – (2012a): Cross-cutting issues; online: <http://www.state.gov/documents/organization/101761.pdf> (accessed 22 Nov. 2013)
- / – (2012b): Objective 1 : peace and security online: <http://www.state.gov/documents/organization/101762.pdf> (accessed 22 Nov. 2013)
- / – (2012c): Objective 2 : governing justly and democratically; online: <http://www.state.gov/documents/organization/101763.pdf> (accessed 22 Nov. 2013)
- / – (2012d): Objective 3 : investing in people; online: <http://www.state.gov/documents/organization/101764.pdf> (accessed 02 Oct. 2013)
- / – (2012e): Objective 4 : economic growth; online: <http://www.state.gov/documents/organization/101765.pdf> (accessed 02 Oct. 2013)
- / – (2012f): Objective 5 : humanitarian assistance; online: <http://www.state.gov/documents/organization/101766.pdf> (accessed 22 Nov. 2013)
- / – (2012g): State-USAID agency priority goals : fiscal years 2012-2013; online: <http://www.state.gov/documents/organization/187155.pdf> (accessed 07 Oct. 2013)
- / – (2013a): Standard foreign assistance indicators; online: <http://www.state.gov/f/indicators/index.htm> (accessed 29 Sept. 2013)

- /– (2013b): Standard foreign assistance master indicator list; online: <http://www.state.gov/documents/organization/213265.xlsx> (accessed 02 Oct. 2013)
- USAID (United States Agency for International Development)* (2010a): Performance monitoring & evaluation TIPS : bulding a results framework; online: <http://www.ndi.org/files/Performance%20Monitoring%20and%20Evaluation%20Tips%20Building%20a%20Results%20Framework.pdf> (accessed 10 Dec. 2013)
- (2010b): Performance monitoring & evaluation TIPS : selecting performance indicators; online: <http://redlac.org/tips-selectingperformanceindicators.pdf> (accessed 10 Dec. 2013)
- Vähämäki, J. / M. Schmidt / J. Molander* (2011): Review: results based management in development cooperation: Riksbankens Jubileumsfond; online: http://www.rj.se/Documents/Rapporter/2011/RBM_Review_Feb_2012.pdf (accessed 15 June 2013)
- Verme, P. / L. Ceriani* (2013): Aid allocation: should equally poor countries be treated equally?; online: <http://blogs.worldbank.org/developmenttalk/aid-allocation-should-equally-poor-countries-be-treated-equally> (accessed 13 Nov. 2013)
- Vielajus, M. et al.* (2009): The challenge of accountability for development agencies within their own countries and before their peers : a comparative study : draft document for the AFD-DevCom workshop “Transparent, reliable, understandable and interactive : challenges in donors’ domestic accountability”, 15–16 Dec. 2009; online: <http://www.oecd.org/dev/devcom/44251093.pdf> (accessed 28 Jan. 2014)
- Vollmer, F.* (2012): Increasing the visibility and effectiveness of development cooperation : how to reconcile two competing objectives?, Bonn: DIE (Studies 67)
- Weiers, G.* (2012): Does aid work? : The challenges of operationalizing the results agenda; online: <http://naiforum.org/2012/03/the-challenges-of-operationalizing-the-results-agenda/> (accessed 11 Nov. 2013)
- Wenar, L.* (2006): Accountability in international development aid, in: *Ethics & International Affairs* 20 (1), 1–23
- White, H.* (2006): Impact evaluation : the experience of the Independent Evaluation Group of the World Bank; online: http://mpira.ub.uni-muenchen.de/11111/1/MPRA_paper_11111.pdf (accessed 15 Sept. 2013)
- Winters, M. S.* (2013): Targeting, accountability and capture in development projects, in: *International Studies Quarterly*, forthcoming
- World Bank* (1996): Performance monitoring indicators handbook, Washington, DC (World Bank Technical Paper 334)
- (2004): Poverty monitoring guidance note 1 selecting indicators; online: http://siteresources.worldbank.org/INTPAME/Resources/Selective-Evaluations/NoteIndicators_eng_Apr04_doc.pdf (accessed 05 April 2013)

- (2007): Results terminology; online: http://siteresources.worldbank.org/INTISPMA/Resources/383704-1184250322738/3986044-1250881992889/04_WorldBank_Results_Terminology.pdf (accessed 10 July 2013)
- (2010): New world order, new bank group: (i) post-crises directions; online: <http://siteresources.worldbank.org/DEVCOMMINT/Documentation/22553954/DC2010-0003%28E%29PostCrisis.pdf> (accessed 05 June 2013)
- (2011): World Bank for results; online: <http://passthrough.fw-notify.net/download/449418/http://siteresources.worldbank.org/PROJECTS/Resources/40940-1244163232994/6180403-1316547116912/WB4R.pdf> (accessed 01 April 2014)
- (2012a): Core sector indicators and definitions, s. 1.
- (2012b): How IDA resources are allocated; online: <http://www.worldbank.org/ida/how-ida-resources-allocated.html> (accessed 06 March 2013)
- (2012c): What is the World Bank corporate scorecard? ; online: <http://corporatescorecard.worldbank.org/> (accessed 26 Nov. 2013)
- (2013a): WDI 2012; online: <http://data.worldbank.org/data-catalog/world-development-indicators/wdi-2012> (accessed 09 April 2013)
- (2013b): World Bank corporate scorecard : integrated results and performance framework; online: <http://databank.worldbank.org/data/download/World%20Bank%20Corporate%20Scorecard.pdf> (accessed 10 June 2013)
- (2013c): Worldwide governance indicators; online: <http://info.worldbank.org/governance/wgi/index.aspx#home> (accessed 10 Dec. 2013)

Annexes

Appendix I

Table A1: List of interviewees			
Name	Job title/Unit	Organisation	Date of interview
Mehdi Hussein	Senior Statistics Advisor	DFID	22 May 2013
Frank Wissing Madsen	Head of Quality Assurance and Financial Management of Development Cooperation Section	Danida	23 May 2013
Michael Gajo	Monitoring & Evaluation Unit	Deutsche <i>Gesellschaft für Internationale Zusammenarbeit (GIZ)</i>	28 May 2013
Franco Conzato	Deputy Head of Unit Quality of Delivery Systems	Directorate-General Development and Cooperation (DG DevCo) – EuropeAid	29 May 2013
Milena Reinfeld	Statistics Adviser, Quality of Delivery Systems Unit	DG DevCo – EuropeAid	29 May 2013
Gisu Mohadjer	Manager, Results Unit	World Bank	4 June 2013
Lisandro Martin	Results Specialist Operations Officer	World Bank	4 June 2013
Felix Povel	Development Policy Researcher	Kreditanstalt für Wiederaufbau (KfW) Entwicklungsbank	6 June 2013

Table A1 (cont.): List of interviewees			
Name	Job title/Unit	Organisation	Date of interview
Milena Breisinger	Sector Economist, Environment and Climate Competence Center	KfW Entwicklungsbank	6 June 2013
Vincent Fruchart	Consultant	Institutional Systems	7 June 2013
Johannes Jütting	Manager	Paris 21 Secretariat	10 July 2013
Hans Lundgren	Team Leader, Results and Evaluation, Development Co-operation Directorate	OECD	10 July 2013
Algerlynn Gyll	Senior Programme Officer, Department of Policy and Evaluation, Monitoring & Evaluation Division	MCC	18 July 2013
Debbie Chappat	Policy Analyst, Development Co-operation Directorate	OECD	20 July 2013
Patricia Meduna	Office of Strategic Planning and Development Effectiveness	IDB	22 July 2013
Ana Maria Torres	Results Measurement Specialist, Development Impact Unit, Investment Services Unit	IFC	22 July 2013
Ugo Amoretti	Private Sector Development Specialist, Development Effectiveness Unit	IFC	22 July 2013

Table A1 (cont.): List of interviewees			
Name	Job title/Unit	Organisation	Date of interview
Lita N. Echiverri	International Trade Specialist	USAID	22 July 2013
Annika Schönfeld	Monitoring & Evaluation Unit	GIZ	26 July 2013
Sabine Dinges	Monitoring & Evaluation Unit	GIZ	26 July 2013
Rebecca Goldsmith	Director, Monitoring & Evaluation, Department of Policy and Evaluation	MCC	1 August 2013
Georg Weiers	Principle Results Specialist	AfDB	12 November 2013
Amy Lewis	Office of Strategic Planning and Development Effectiveness	IDB	14 November 2013
Bernard Woods	Principle Results Measurement Specialist, Strategy and Policy Department, Results Management Unit	ADB	22 November 2013

Appendix II

	Strategic focus and RBM	Internal performance	External accountability
ADB	<i>“The results framework translates the Strategy 2020 into a detailed set of indicators and targets to help ADB plan its work better and sharpen its focus on delivering development results”</i> (ADB 2013d).	<i>“By improving the performance of its operational portfolio, ADB can increase its contribution to country outcomes and overall development effectiveness”</i> (ADB 2008a, 10). <i>“The organizational capacity is assessed to facilitate the effective management of its operations”</i> (ADB 2013d).	The results framework forms the basis for ADB’s annual Development Effectiveness Review Report, which is used <i>“to communicate the findings of the review and Management’s recommendations to staff and stakeholders in a factual and transparent manner”</i> (ADB 2013d).
AfDB	One important goal of the results measurement framework (RMF) is <i>“to strengthen the Bank’s results-oriented management culture. With this objective in mind, the Bank is reinforcing the tools, processes and systems that underpin the RMF and ensure that results inform the Bank’s strategies, operations and staff incentives”</i> (AfDB Group 2013b, iv).	The results framework <i>“is first and foremost a management tool designed to improve the Bank’s development effectiveness. It does so by enhancing the planning cycle, systematically tracking performance and fostering organisational learning”</i> (AfDB Group 2013b, iv).	The results framework is the basis for AfDB’s Annual Development Effectiveness Review, which is the Bank’s primary reporting tool. It serves to increase AfDB’s <i>“accountability on results to stakeholders and the public at large”</i> (AfDB Group 2010, 18).

Table A2 (cont.): Comparison of statements made by donor agencies on the use of results frameworks			
	Strategic focus and RBM	Internal performance	External accountability
AusAID	The results identified in AusAID's results framework are <i>"in line with the strategic goals of the aid program"</i> (AusAID 2012, 20).	<i>"In the Results Framework, Tier 3 results measure performance against key operational and organisational effectiveness criteria that were identified in the Strategic Framework for the Australian aid program, outlined in An Effective Aid Program for Australia: Making a real difference—Delivering real results. These results will lead to better value for money and a higher standard of aid delivery"</i> (AusAID 2012, 20-21).	The results framework <i>"places Australia at the forefront of aid transparency, accountability and predictability, and its implementation will provide a robust evidence base for the next independent external review of the aid program and for annual reports on progress"</i> (AusAID 2012, 20).
DFID	The results framework was set up as a tool to <i>"monitor and manage progress and report publicly on delivery"</i> (DFID 2013a, 1).	<i>"By measuring results we get a much better idea of what works and what does not so we can refine our programmes accordingly. We are also able to manage our resources to deliver these results"</i> (DFID 2013a, 1). Monitoring the operational and organisational effectiveness can help to lead to <i>"a better delivery of results and greater value for money"</i> and to <i>"improve capacity to provide more effective frontline capacity"</i> (DFID 2013a, 3).	<i>"This is the first results framework in which we have set out actual development outputs that DFID will deliver against for which we can be held accountable"</i> (DFID 2013a, 1).

Table A2 (cont.): Comparison of statements made by donor agencies on the use of results frameworks			
	Strategic focus and RBM	Internal performance	External accountability
IDB	<i>“The IDB Results Framework is an integral part of the Bank’s results-based management efforts and was designed to guide its work up to 2015” (IDB 2012, 20).</i>	<i>“Delivering results on the ground requires the Bank to step-up its “result-based” management, by tracking its performance periodically through a comprehensive set of indicators of operational effectiveness and efficiency” (IDB 2012, 24).</i>	The results framework is the basis for IDB’s annual Development Effectiveness Overview (DEO). <i>“The DEO is the IDB’s annual corporate report that accounts for the effectiveness of its work, stating the results achieved with the implementation of the Bank’s Development Effectiveness agenda” (IDB 2012, v).</i>
World Bank	<i>“The Corporate Scorecard provides information on the Bank’s overall performance and the results achieved by its clients, against the backdrop of progress on global development objectives. The Corporate Scorecard facilitates strategic dialogue between Management and the Board on progress made and areas that need attention” (World Bank 2013b, 2).</i> The World Bank organises quarterly scorecard days to discuss the Bank’s priorities (World Bank 2013b, 2).	The results framework provides <i>“information on the effectiveness of the Bank’s operations and services” (World Bank 2013b, 2).</i> It also <i>“assesses how well the Bank is functioning and adapting to better support countries in achieving results” (World Bank 2013b, 2).</i>	The Scorecard provides <i>“a snapshot of the Bank’s overall performance, including its business modernization, in the context of development results” (IMF / World Bank 2012, 13).</i>

Table A2 (cont.): Comparison of statements made by donor agencies on the use of results frameworks

	Strategic focus and RBM	Internal performance	External accountability
UNDP	<i>“The UNDP Strategic Plan Integrated Results and Resources Framework (IRRF) translates the Strategic Plan 2014-2017 into results that allow UNDP and stakeholders to monitor achievements, learn lessons” (UN 2013a, 1).</i>	<i>“The framework helps UNDP and the Executive Board to understand how well UNDP is contributing to development according to demand and plan; it is not for reporting on performance of programme countries” (UN 2013a, 2).</i>	The results framework allows <i>“UNDP and stakeholders to hold the organization accountable for the funds entrusted to it” (UN 2013a, 1).</i>
Sources: ADB (2008a, 10); AfDB Group (2010, 18); AfDB Group (2013b, iv); AusAID (2012, 20-21); DFID (2013a, 1-3); UN (2013a, 1-2); IDB (2012, 20); World Bank (2013b, 2); IMF / World Bank (2012, 13)			

Institution	Experiences
GIZ	<p>GIZ piloted the use of standard indicators¹²⁸ in five selected sectors between May 2012 and April 2013. The aim was to analyse the purposes for which GIZ can use standard indicators, how data for standard indicators can best be collected, and to assess the costs and benefits of standard indicators. GIZ drew the following conclusions:</p> <ul style="list-style-type: none"> – Standard indicators are particularly useful for reporting on aggregate development results to the public. – The cost of collecting data on standard indicators is relatively low. – Standard indicators are not very useful for portfolio management. They usually measure only those aspects of an intervention that are easily quantifiable and do not measure an intervention’s overall effectiveness. For this reason, standard indicators should not be used to compare performance across interventions.
KfW	<p>KfW uses two types of standard indicator: cross-sectoral and sectoral. The use of cross-sectoral indicators is mandatory for all new financial cooperation projects; the use of sectoral standard indicators is optional. KfW has piloted three cross-sectoral standard indicators since January 2011:</p> <ul style="list-style-type: none"> – Target group: number of beneficiaries reached (at 100% capacity utilisation) – Percentage of poor among the target group (at 100% capacity utilisation) – Emission reduction in tonnes of CO₂ per annum <p>The main reason for using standard indicators is to be able to report on development results across interventions and countries. KfW regards standard indicators as less useful for informing strategic decision-making since they do not measure longer-term development outcomes and impacts.</p>

127 Based on interviews with Felix Povel (KfW Entwicklungsbank), Milena Breisinger (KfW Entwicklungsbank), Annika Schönfeld (GIZ) and Sabine Dinges (GIZ).

128 GIZ uses the term “aggregation indicator” instead of “standard indicator”.

Table A4: List of standard indicators for measuring development outcomes and impacts in partner countries ¹²⁹					
World Bank	ADB	AfDB	IDB	DFID	UNDP ¹³⁰
Growth, jobs, poverty reduction					
<i>Population below USD 1.25 (PPP) a day (%)</i>	<i>Population living on less than USD 1.25 (PPP) per day (%)</i>	Population living below the poverty line (%)	<i>Extreme poverty rate (%)</i>	<i>Proportion of population below USD 1 (PPP) per day</i>	<i>Number and proportion of people living below (a) USD 1.25 a day (PPP) and (b) USD 2 a day (PPP) (International poverty line)</i>
					Poverty gap at national poverty line (%)

129 The indicators used by AusAID, EuropeAID, the US Department of State and USAID are not shown because of the large number of indicators defined. AusAID uses the MDGs at Level 1 of its results framework and has not selected any specific indicators. The indicators defined by EuropeAID can be found in its *Sector Indicator Guidance for Programming* document (EuropeAID 2013). The indicators used by the US Department of State/USAID are available online at: <http://www.state.gov/documents/organization/213265.xlsx>.

130 The indicators listed under Outcome 7 (“Development debates and actions at all levels prioritise poverty, inequality and exclusion, consistent with our engagement principles”) of UNDP’s results framework (UN 2013a) are not listed since they do not refer to development results in countries, but to the post-2015 agenda and the sustainable development agenda.

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
					Multi-dimensional poverty index (MPI), adjusted to reflect national data, standards and definitions
					Human Development Index, including inequality-adjusted HDI
<i>GDP per capita (constant 2000 USD)</i> ¹³¹	<i>GDP per capita growth rate (%)</i>	GDP per capita (USD)		<i>Growth rate of GDP per person employed</i>	
		Gross domestic product (GDP) growth (%)			
	Countries with high income inequality (% of countries with Gini coefficient exceeding 0.4)	Income inequality (Gini index: 0–100)	Gini coefficient of per capita household income inequality		

131 Dollar figures for GDP are converted from domestic currencies using 2000 official exchange rates.

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
<i>Employment to population ratio (15+) (%)</i>		Unemployment rate (%)		<i>Employment to population ratio</i>	
	Wage and salaried workers in total employment (%)		Share of formal employment in total employment (%)		Employment rate (formal and informal)
Ratio of female to male labour force participation (%)		Women's participation in the labour market (%)		<i>Share of women in wage employment in the non-agricultural sector</i>	Wage gaps between men and women
					Coverage of social protection systems
Health					
<i>Under-five mortality rate (per 1,000 live births)</i>	<i>Under-five child mortality (number per 1,000 live births)</i>		<i>Infant mortality ratio</i>	<i>Under-five mortality rate</i>	

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
<i>Prevalence of underweight children (% children under five years)</i>	<i>Underweight children under five years old (%)</i>			<i>Prevalence of underweight children under five years</i>	
		Life expectancy (years)			
<i>Maternal mortality ratio (per 100,000 live births)</i>	<i>Maternal mortality ratio (number per 100,000 live births)</i>		<i>Maternal mortality ratio</i>	<i>Maternal mortality ratio</i>	
				<i>Unmet need for family planning</i>	
				<i>Proportion of births attended by skilled health personnel</i>	
<i>Prevalence of HIV among women aged 15–24 (%)</i>				HIV prevalence among population aged 15-49 years	Coverage of HIV and AIDS services

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
				<i>Proportion of population with advanced HIV infection with access to antiretroviral drugs</i>	
				<i>Incidence and death rates associated with malaria</i>	
			Incidence of waterborne diseases (per 100,000 inhabitants)		
					Proportion of women subjected to physical or sexual abuse in the last 12 months

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
Education					
Gender parity index in primary and secondary education (%)	<i>Ratio of girls to boys in education secondary and tertiary education</i>			<i>Ratios of girls to boys in primary, secondary and tertiary education</i>	
<i>Primary school completion rate (% of relevant age group)</i>				<i>Proportion of pupils starting grade 1 who reach last grade of primary school</i>	
		Enrolment in education (%)		<i>Net enrolment ratio in primary education</i>	
Secondary school enrolment rate (% gross)	Gross lower secondary education graduation rate (%)	Enrolment in technical/ vocational training (%)			
				<i>Literacy rate of 15-24 year-olds, women and men</i>	
				Proportion of children that can read with sufficient fluency for comprehension in early grades	

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
Institutions and governance					
				<i>Proportion of seats held by women in national parliament</i>	<i>Proportion of women to men in parliaments</i>
					Proportion of decision-making positions (executive, legislative and judicial) occupied by women at national and sub-national levels
		Gender-Sensitive Country Institutions (index: 0–7)			
					Voter turnout
					Peaceful completion of electoral and constitutional processes

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
State institutions with adequately established/ differentiated power structure (scale: 1–10)					
Effective and accountable government (scale: 0–7)		Index of Effective and Accountable Government (scale: 0–7)			Proportion of core government functions reaching minimum operational levels
					Level of public confidence in the delivery of basic services
Public access to information (scale: 0–100)					Number of countries with open access to data on government budgets, expenditures and public procurement
Level of statistical capacity (scale: 0–100)					

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries

World Bank	ADB	AfDB	IDB	DFID	UNDP
	Governance and public-sector management assessment (index)	Mo Ibrahim Index of African Governance (scale: 0–100)			
		Country Policy and Institutional Assessment (CPIA) score (scale: 0-6)			
		Tax and non-tax fiscal revenues (%)	Ratio of actual to potential tax revenues		
			Public expenditure managed at the decentralized level as % total public expenditure		
			Children under five whose birth was registered (%)		

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
			Homicides per 100,000 inhabitants		Homicide rate per 100,000 inhabitants
					Access to justice services
Infrastructure					
<i>Access to an improved water source (% of population)</i>	<i>Population using an improved drinking water source (%)</i>	<i>Access to improved water source (% of population)</i>		<i>Proportion of population using an improved drinking water source</i>	
<i>Access to an improved sanitation facility (% of population)</i>	<i>Population using an improved sanitation facility (%)</i>	<i>Access to improved sanitation facilities (% of population)</i>		<i>Proportion of population using an improved sanitation facility</i>	
Household electrification rate (% of households)	Electrification rate (%)	Access to electricity (% of population)	Households with electricity (% of households)		
Paved roads (% of total roads)	Paved roads (km per 10,000 people)	Road density (km roads/ km ² of land area)	Paved road coverage (km/km ²)		

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
			Proportion of urban population living in dwellings with hard floor		
<i>Mobile cellular telephone subscriptions (per 100 people)</i>		Access to telephone services (per 1000 people)			
Agriculture and food security					
Cereal yield (kg per hectare)					
Agriculture value added per worker (constant 2000 USD)		Average agricultural value-added per agricultural worker (constant 2000 USD)	Annual growth rate of agricultural GDP (%)		
		Food insecurity (% of population)			

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
Finance and private-sector development					
Male-female gap in the population with an account at a formal financial institution (% of population aged 15+)	Deposit accounts in financial institutions (number per 1,000 adults)	Adults with an account at a financial institution (% of population)			Women's access to credit (commercial and micro-credit)
			% of firms using banks to finance investments		
Time required for business start-up (days)	Time to start business (days)	Time required for business start-up (days)			
Domestic credit to private sector (% of GDP)					
		Global competitiveness index (scale: 1–7)			

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
Environment and climate change					
<i>CO₂ emissions (kg per 2005 USD of GDP)¹³²</i>	<i>CO₂ emissions (metric tonnes per capita)</i>	<i>CO₂ emissions (kg per USD of GDP)</i>	<i>CO₂ equivalent emissions (metric tonnes per habitant)</i>	<i>CO₂ emissions, total, per capita and per USD 1 GDP (PPP)</i>	<i>Annual emissions of CO₂ (in millions of metric tonnes)</i>
Average annual deforestation (%)	<i>Land area covered by forests (% of land)</i>			<i>Proportion of land area covered by forest (%)</i>	
Protected terrestrial areas (% of total land area)			Proportion of terrestrial and marine areas protected to total territorial area (%)		
		Renewable energy (% of total electricity generated)			Coverage of cost-efficient and sustainable energy

132 Dollar figures for GDP are converted from domestic currencies using 2005 official exchange rates.

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
		Institutional capacity for environmental sustainability (sub-indicator of the CPIA)	Countries with planning capacity in mitigation and adaptation of climate change		Percentage of countries with disaster and climate risk management plans fully funded through national, local and sectoral development budgets
			Annual reported economic damages from natural disasters		Economic loss from natural hazards (e.g. geo-physical and climate-induced hazards) as a proportion of GDP
					Mortality risk from natural hazards (e.g. geo-physical and climate-induced hazards) for women and men

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
		Resilience to water shocks: total freshwater withdrawn (% of actual total renewable water resources)			
Regional integration and trade					
			Trade openness (trade as % of GDP)		
Trade logistics performance (scale: 1–5)					
Trade diversification – Product export diversification (index: 0–1) – Market diversification (index: 0–1)		Economic diversification (index: 0–1)			

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
	Intraregional trade in total Asia and Pacific trade (%)	Intra-African trade (in USD)	Intraregional trade in Latin American countries (% of total merchandise trade)		
		Cost of trading across borders (index: 0–1)			
			Foreign direct investment net inflows (% of GDP)		
Conflicts					
					Percentage of affected populations meeting critical benchmarks for social and economic recovery within 6 to 18 months after a crisis

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
					Percentage of post-disaster and post-conflict countries having operational strategies to address the causes or triggers of crises
					Percentage of countries with national and sub-national institutions that are able to lead and coordinate the early recovery process 6 to 18 months after crises
					Percentage of (monetary equivalent) benefits from temporary employment/ productive livelihoods options in the context of early economic recovery programmes received by women and girls

Table A4 (cont.): List of standard indicators for measuring development outcomes and impacts in partner countries					
World Bank	ADB	AfDB	IDB	DFID	UNDP
					Proportion of decision-making positions in peace-building processes occupied by women
					Economic loss from conflicts (% of GDP)
<p>*Indicators in italics are MDG indicators.</p> <p>Sources: World Bank (2013b, 7); ADB (2013d); AfDB Group (2013b, 12-13); IDB (2012, 21); DFID (2013a, 4); UN (2013a, 5-13)</p>					

Table A5: List of standard indicators measuring intervention outputs and outcomes ¹³³						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
Energy and climate change						
Transmission and distribution lines constructed or rehabilitated (km)	Transmission lines installed or upgraded (km)		Electricity transmission and distribution lines installed or upgraded (km)			
	Distribution lines installed or upgraded (km)					
		Staff trained/ recruited in the maintenance of energy facilities (number)				

133 The indicators used by the US Department of State/USAID, EuropeAID and UNDP are not shown because of the large number of indicators defined. The US Department of State/USAID has defined 278 output-level indicators that are listed in its Standard Foreign Assistance Master Indicator List (US Department of State / USAID 2013b). The indicators defined by EuropeAID can be found in its *Sector Indicator Guidance for Programming* document (EuropeAID 2013). The output indicators defined by UNDP are listed in UNDP's results framework 2014-2015 (UN 2013a). The indicators used by the IFC to measure progress towards the IDGs are also not shown. The IFC uses only one indicator per IDG (see IFC 2013c).

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
Generation capacity of conventional and renewable energy (megawatts)	Installed energy generation capacity (of which renewable) (megawatts)	Power capacity installed (of which renewable) (megawatts)	Power generation capacity from low-carbon sources (% of total generation capacity funded by IDB)			
People provided with access to electricity (number)	New households connected to electricity (number)	People benefiting from new or improved electricity connections (number, % of which are women)		People with improved access to clean energy as a result of DFID funding (number)		
Emission reduction with support of special climate finance instruments (million tonnes of CO ₂ equivalent per annum)	Greenhouse gas emission reduction (tonnes of CO ₂ equivalent per annum)	CO ₂ emissions reduced (tonnes of CO ₂ equivalent per annum)				Countries assisted to minimise carbon emissions through technological and regulatory support as their economies grow (number)

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
Countries supported on natural disaster management (number)			National frameworks for climate-change mitigation supported (number)	People supported by DFID funding to cope with the effects of climate change (number)		Countries assisted with adaptation programmes to reduce vulnerability to climate change (number)
			Climate change pilot projects in agriculture, energy, health, water and sanitation, transport, and housing (number)			
			Projects with components contributing to improved management of terrestrial and marine protected areas (number)	Hectares where deforestation and degradation have been avoided (number)		

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
Transport						
Roads constructed or rehabilitated (km)	Roads built or upgraded (km)	Roads constructed, rehabilitated or maintained (km)	Inter-urban roads built or maintained or upgraded (km)		Roads completed (km)	Roads constructed, rehabilitated or maintained (km)
	Use of roads built or upgraded (average daily vehicle-km in the first full year of operation)	Feeder roads constructed or rehabilitated (km)			Average annual daily traffic (number and type of vehicles per day)	
					Roughness (metres of height per km of distance)	
	Use of railways built or upgraded (average daily tonne-km in first full year of operation)					

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
	Railways constructed or upgraded (km)					
	Urban rail and bus-based mass transit systems built or upgraded (km)					
		People with improved access to transport (number, % of which are women)	People given access to improved public low-carbon transportation systems (number)			
		Staff trained/recruited for road maintenance (number)				
		People educated in road safety and HIV transmission (number)			Road traffic fatalities (number)	

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
Water and sanitation						
People provided with access to improved water sources (number)	Households with new or improved water supply (number)	People with new or improved access to water and sanitation (number)	Households with new or upgraded water supply (number)	People with sustainable access to clean drinking water sources with DFID support (number)	Access to improved water supply (% of households in project area)	People provided with increased access to safe water (number)
	Water supply pipes installed or upgraded (length of network in km)				Water points constructed (number)	
					Volume of water produced (m ³ per day)	
	Waste-water treatment capacity added or improved (m ³ per day)	Drinking water capacity created (service reservoirs m ³ per day)				

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
		Workers trained in the maintenance of water facilities (number)				
					Non-revenue water (volume of water “lost” as a percentage of water supplied)	
					Continuity of service (average hours of service per day for water supply)	
					Operating cost coverage (%)	
					Residential water consumption (litres per capita per day)	

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
					Industrial and commercial water consumption (m ³ per month)	
				People with access to improved hygiene through DFID support to hygiene promotion (number)	People trained in hygiene and sanitary best practices (number)	People with increased knowledge of hygiene practices (number)
People provided with access to improved sanitation (number)	Households with new or improved sanitation (number)	People with new or improved access to water and sanitation (number)	Households with new or upgraded sanitary connections (number)	People with sustainable access to an improved sanitation facility through DFID support (number)	Access to improved sanitation (% of households in project area)	People provided with increased access to basic sanitation (number)
			Households with new or upgraded dwellings (number)			

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
Agriculture, irrigation and food security						
Area provided with irrigation services (hectares)	Land improved through irrigation, drainage, and/or flood management (hectares)	Land with improved water management (hectares)			Hectares under improved irrigation (number)	
Nutrition services for vulnerable groups (number of people)				People reached with emergency food assistance through DFID support (number)		
				People achieving food security through DFID support (number)		
		Land whose use has been improved: replanted, reforested (hectares)			Hectares under improved practices as a result of training (number)	

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
					Farmers trained (number)	
		Rural population using improved technology (number)				
Farmers adopting improved agricultural technology (number)		People benefiting from improvements in agriculture (number, % of which are women)			Farmers who have applied improved practices as a result of training (number)	Number of farmers (at least 40% female) enabled to access new agricultural technologies, resulting in increased crop value (AUD)
					Enterprises assisted (number)	
					Enterprises that have applied improved techniques (number)	

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
			Farmers given access to improved agricultural services and investments (number)		Loan borrowers (number)	
					Value of agricultural and rural loans (USD)	
Education						
	Students benefiting from new or improved educational facilities (number)	Classrooms and educational support facilities constructed/ rehabilitated (number)			Educational facilities constructed or rehabilitated (number)	Number of boys and girls enrolled in schools with (number) of classrooms built or upgraded
		People benefiting from better access to education (number, % of which are female)	Students benefited by education projects (number)	Number of children supported by DFID in primary education (per annum)	Students participating in MCC-supported education activities (number)	Students provided with financial or nutritional support (number)

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
				Number of children in lower secondary education supported by DFID (per annum)		
		People benefiting from vocational training (number, % of which are women)				
				Number of children completing primary education supported by DFID (per annum)	Graduates from MCC-supported education activities (number)	
					Employed graduates of MCC-supported education activities (number)	

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
						Number of people (at least half of them women) awarded tertiary education scholarships and subsequently returning home to assist their countries' economic development
Countries with bank-supported learning assessments (number)	Students educated and trained under improved quality assurance systems (number)					Number of textbooks provided, contributing to (number) of boys and girls obtaining a better quality education

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
Teachers recruited and/or trained (number)	Teachers trained with quality or competency standards (number)	Teachers and other educational staff recruited or trained (number)	Teachers trained (number)		Instructors trained (number)	Teachers and school officials trained (number)
					Legal, financial and policy reforms in the education sector adopted (number)	
Health						
Number of children immunised (number)						Children vaccinated (number)
Number of people with access to a basic package of health services (number)		People with access to better health services (number, % of which are female)	Individuals (all, indigenous, afro-descendants) receiving a basic package of health services (number)	Children under five and pregnant women reached through DFID's nutrition-relevant programmes (number)		

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
		Primary, secondary and tertiary health centres constructed, renovated and/ or equipped (number)				
		Health workers trained (number)				
					Incidence of diarrhoea (% of individuals)	
				Insecticide-treated bed nets distributed with DFID support (number)		

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
				Number of malaria-specific deaths per 1000 persons per year		
Pregnant women receiving antenatal care (number)				Births delivered with the help of nurses, midwives or doctors with DFID support (number)		Births attended by a skilled birth attendant (number)
				Additional women using modern methods of family planning through DFID support (number)		
				Maternal lives saved through DFID support (number)		

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
				Neonatal lives saved through DFID support (number)		
Finance						
Active number of microfinance loan accounts (number)	Microfinance loan accounts opened or end borrowers reached (number)	Micro-credits granted (number)		People with access to financial services as a result of DFID support (number)		Number of poor people (at least 50% female) with increased access to financial services such as loans with which to start a small business
	Small and medium-sized enterprise loan accounts opened or end borrowers reached (number)	People benefiting from investee projects and microfinance (number, % of which are women)				

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
	Trade finance supported (USD million per year)					
Social sector and humanitarian assistance						
Beneficiaries covered by social safety net programmes (number)			Individuals (all, indigenous, afro-descendant) receiving targeted anti-poverty programme (number)	People benefiting from DFID-supported cash transfer programmes (number)		People provided with disability services such as prostheses (number)
Women and girls benefiting from social protection programmes and other targeted schemes (number)				Women and girls with improved access to security and justice services through DFID support (number)		Vulnerable women, men and children receiving social protection support such as cash transfers or basic nutritional support (number)

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
						Boys and girls attending schools that are more accessible to children with disabilities (number)
						Female survivors of violence receiving services, including counselling (number)
						Vulnerable people supplied with life-saving assistance in conflict and crisis situations (number)

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
						AusAID disaster response launched within 48 hours of a request for assistance in anticipated humanitarian crises
Land and property rights						
				People supported through DFID to improve their rights to land and property (number)		
					Legal and regulatory land law and property rights reforms adopted (number)	

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
					Land administration offices established or upgraded (number)	
					Stakeholders trained (number)	
					Conflicts successfully mediated (number)	
					Parcels corrected or incorporated in land system (number)	
					Household land rights formalised (number)	

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
					Percentage change in time for property transactions	
					Percentage change in cost for property transactions	
Regional integration and trade						
Countries that have applied trade-related diagnostic tools (number)						
	Cross-border cargo volume facilitated (tonnes per year)	Cross-border roads constructed or rehabilitated (km)				
	Cross-border transmission of electricity (gigawatt-hours per year)	Cross-border transmission lines constructed or rehabilitated (km)				

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
			Public trade officials and private entrepreneurs trained in trade and investment (number)			
			Regional and sub-regional integration agreements and cooperation initiatives supported (number)			
			Number of cross-border and transnational projects supported (infrastructure, customs, etc.)			

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
			International trade transactions financed (number)			
			Mobilisation volume by non-sovereign guaranteed financed projects/ Companies (USD)			
Private sector development & employment						
		Small and medium-sized enterprises effect (turnover from investments, in million USD)	Micro, small and medium-sized productive enterprises financed (number)			
			Individuals (all, men, women, youth) benefited from programmes to promote higher labour market productivity (number)			Poor people with increased incomes through market development programmes (number)

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
		Jobs created (number, % of which are for women)	Jobs added to formal sector (number)			
Institutions and governance						
Countries with strengthened national statistical systems (number)						
				Countries supported by DFID in freer & fairer elections (number)		
				People who vote in elections supported by DFID (number)		

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
Countries with strengthened public management systems in civil service and public administration (number)		Share of countries with improved quality of public administration (%)				
Countries with strengthened public management systems in tax policy and administration (number)						
Countries with strengthened public management systems in public financial management (number)		Share of countries with improved quality of budgetary and financial management (%)	Number of public financial systems implemented or upgraded (budget, treasury, accounting, debt, and revenues)			Countries supported to improve public financial management (number)

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
Countries with strengthened public management systems in procurement (number)		Share of countries with improved procurement systems (%)				
Countries with bank-supported programmes on asset, liability and risk management (number)						
Countries with bank-supported programs on transparency and access to information (number)		Share of countries with improved transparency, accountability and corruption mitigation in the public sector (%)				

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
		Share of countries with improved competitive environment (%)				
			Municipal and other sub-national governments supported (number)			
			Persons incorporated into a civil or identification registry (number)			
						Law and justice officials trained (number)
						Number of public servants trained (at least 25% women)

Table A5 (cont.): List of standard indicators measuring intervention outputs and outcomes						
World Bank	ADB	AfDB	IDB	DFID	MCC	AusAID
						Civil-society organisations supported to track service provision (number)
			Cities benefited with citizen security projects (number)			
				People supported to have choice and control over their own development and to hold decision-makers to account (number)		
Sources: World Bank (2013b, 9); ADB (2013d); AfDB Group (2013b, 12-13); IDB (2012, 22-23); DFID (2013a, 5-6); AusAID (2012, 22); MCC (2012, iii-iv)						

Table A6: Indicators measuring operational effectiveness, organisational effectiveness and efficiency – comparison of donor agencies	
ADB	<p><i>Level 2: ADB contribution to development results</i></p> <ul style="list-style-type: none"> – Quality at completion (country strategies and assistance programmes rated successfully completed) <p><i>Level 3: Operational management:</i></p> <ul style="list-style-type: none"> – Implementation quality (operations satisfactorily implemented) – Quality at entry (high-quality country partnership strategies and operations prepared) – Development finance (development finance mobilised and transferred) – Strategy 2020 Development Agendas and core operations (ADB operations focused on strategic agendas and core operational areas) – Strategy 2020 drivers of change (ADB operations promote drivers of change) <p><i>Level 4: Organisational management:</i></p> <ul style="list-style-type: none"> – Human resources (sufficient staff resources maintained, and staff motivation and diversity increased) – Budget resources (budget efficiency and adequacy improved) – Process efficiency and client orientation (business process efficiency and client orientation improved)
AusAID	<p><i>Tier 3: Delivering aid efficiently and effectively</i></p> <ul style="list-style-type: none"> – A clear strategy – Value for money and consolidation – Risk management and performance oversight – Transparency and results – Involving the Australian community

Table A6 (cont.): Indicators measuring operational effectiveness, organisational effectiveness and efficiency – comparison of donor agencies	
AfDB	<p><i>Level 3: Is AfDB managing its operations effectively?</i></p> <ul style="list-style-type: none"> – Strengthening results at the country level – Delivering effective and timely operations <ul style="list-style-type: none"> • Learning from our operations • Ensuring strong portfolio performance • Preparing high-quality operations – Designing gender- and climate-informed operations <p><i>Level 4: Is AfDB managing itself efficiently?</i></p> <ul style="list-style-type: none"> – Decentralisation: Moving closer to our clients – Human resources: Engaging and mobilising staff – Value for money: Improving cost-efficiency
IDB ¹³⁴	<p><i>Level 4: Operational effectiveness and efficiency indicators</i></p> <ul style="list-style-type: none"> – Effectiveness: Country strategies – Effectiveness: Loans – Effectiveness: Knowledge and capacity-building products – Effectiveness: Partner satisfaction – Efficiency – Human resources

134 With the exception of lending programme indicators, the IDB has included all effectiveness indicators at level 4 of its results frameworks (IDB 2012, 24-25).

Table A6 (cont.): Indicators measuring operational effectiveness, organisational effectiveness and efficiency – comparison of donor agencies	
DFID	<p><i>Level 3: Operational effectiveness</i></p> <ul style="list-style-type: none"> – Portfolio quality – Pipeline delivery – Monitoring and evaluation – Structural reform <p><i>Level 4: Organisational efficiency</i></p> <ul style="list-style-type: none"> – Human resources – Budget performance and efficiency – Estates – Transparency and accountability
IFC	<p><i>IFC corporate goals</i></p> <ul style="list-style-type: none"> – Greater development impact – Financial sustainability – Greater client satisfaction – High quality, diverse and engaged employees
UNDP	<p><i>Level 3: Organisational effectiveness and efficiency</i></p> <ul style="list-style-type: none"> – Higher quality programmes through results-based management <ul style="list-style-type: none"> • Improved accountability of results • Field/country office oversight, management and operations support • Corporate oversight and assurance (internal audit, investigations and corporate evaluations) – Making UNDP a more open, adaptable and agile institution <ul style="list-style-type: none"> • Leadership and corporate direction • Corporate financial, information & communication technology and administrative management • Corporate human resources management • Corporate external relations and partnerships, communications and resources mobilisation • Staff and premises security – Coordination of the UN Development System <ul style="list-style-type: none"> • UN development system leadership and coordination

Table A6 (cont.): Indicators measuring operational effectiveness, organisational effectiveness and efficiency – comparison of donor agencies

World Bank	<p><i>Tier III: Development outcomes and operational effectiveness</i></p> <p><i>A. Development outcome ratings</i></p> <p><i>B. Operational effectiveness</i></p> <ul style="list-style-type: none"> – Lending operations <ul style="list-style-type: none"> • Ensuring sound quality and portfolio performance • Managing operations for results, monitoring, and evaluation • Gender mainstreaming – Knowledge Activities – Use of country systems <p><i>Tier IV: Organisational Effectiveness and Modernization</i></p> <p><i>A. Resources, skills and business modernization</i></p> <ul style="list-style-type: none"> – Resources and alignment – Capacity and skills – Business modernisation <ul style="list-style-type: none"> • Products and services for results • Organisation • Processes and systems for flexibility and efficiency <p><i>B. Sector actions related to post-crisis direction</i></p>
<p>Sources: World Bank (2013b, 13; 17); ADB (2013d); AfDB Group (2013b, 13-17); IDB (2012, 25-26); DFID (2013a, 8-10); IFC (2012, 98); AusAID (2012, 23)</p>	

Publications of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE)

Studies

- 80 *Pietschmann, Elena*: Forgotten or unpromising? The elusive phenomenon of under-aided countries, sectors and sub-national regions, 147 pp., Bonn 2014, ISBN 978-3-88985-587-9
- 79 *Vidican, Georgeta et al.*: Achieving inclusive competitiveness in the emerging solar energy sector in Morocco, 198 pp., Bonn 2013, ISBN 978-3-88985-586-2
- 78 *Reeg, Caroline*: Micro, small and medium enterprise upgrading in India: learning from success cases, 299 pp., Bonn 2013, ISBN 978-3-88985-585-5
- 77 *Mahn, Timo Casjen*: Country-level aid coordination at the United Nations: taking the resident coordinator system forward, 146 pp., Bonn 2013, ISBN 978-3-88985-584-8
- 76 *Loewe, Markus et al.*: Which factors determine the upgrading of small and medium-sized enterprises (SMEs)? The case of Egypt, 288 pp., Bonn 2013, ISBN 978-3-88985-583-1
- 75 *Mallik, Vidyadhar*: Local and community governance for peace and development in Nepal, 179 pp., Bonn 2013, ISBN 978-3-88985-582-4
- 74 *Brandi, Clara et al.*: Sustainability certification in the Indonesian palm oil sector: Benefits and challenges for smallholders, 258 pp., Bonn 2013, ISBN 978-3-88985-581-7
- 73 *Klingebiel, Stephan*: Entwicklungszusammenarbeit – eine Einführung, 86 pp., Bonn 2013, ISBN 978-3-88985-580-0
- 72 *Ashoff, Guido*: Análisis de impacto del Fondo Contravalor Perú-Alemania, 198 pp., Bonn 2012, ISBN 978-3-88985-509-1
- 71 *Leiderer, Stefan et al.*: Efficiency of local service provision in Zambia's health, education and road sectors: Implication for decentralisation and the effectiveness of budget support, 304 pp., Bonn 2012, ISBN 978-3-88985-508-4
- 70 *Ashoff, Guido et al.*: Wirkungsanalyse Deutsch-Peruanischer Gegenwertfonds, Bonn 2012, 198 pp., ISBN 978-3-88985-507-7
- 69 *Lundsgaarde, Erik et al.*: Private foundations and development cooperation: Insights from Tanzania, 118 pp., Bonn 2012, ISBN 978-3-88985-506-0

[Price: 10.00 Euro; books may be ordered from the Institute or through bookshops.]

Discussion Papers

- 14/2014 *Hausmann, Jeannine*: Turkey as a donor country and potential partner in triangular cooperation, 62 pp., ISBN 978-3-88985-633-3
- 13/2014 *Paulo, Sebastian*: International cooperation and development: a conceptual overview, 31 pp., Bonn 2014, ISBN 978-3-88985-632-6
- 12/2014 *Schamp, Eike W.*: The formation of a new technological trajectory of electric propulsion in the French automobile industry, 53 pp., Bonn 2014, ISBN 978-3-88985-599-2
- 11/2014 *Never, Babette*: Making energy efficiency pro-poor: insights from behavioural economics for policy design, 36 pp., Bonn 2014, ISBN 978-3-88985-631-9
- 10/2014 *Camacho, Luis A.*: Understanding regime support in new and old democracies: the role of performance and democratic experience, 30 pp., Bonn 2014, ISBN 978-3-88985-630-2
- 9/2014 *Ashoff, Guido / Stephan Klingebiel*: Transformation of a policy area: development policy is in a systemic crisis and faces the challenge of a more complex system environment, 32 pp., Bonn 2014, ISBN 978-3-88985-598-5
- 8/2014 *Banholzer, Lilli*: When do disarmament, demobilization and reintegration programmes succeed?, 43 pp., Bonn 2014, ISBN 978-3-88985-597-8
- 7/2014 *Yamineva, Yulia*: The governance of scientific assessment in the context of the Intergovernmental Panel on Climate Change: Lessons for international cooperation in science, technology and innovation, 24 pp., Bonn 2014, ISBN 978-3-88985-593-0
- 6/2014 *Pauw, Pieter et al.*: Different perspectives on differentiated responsibilities: a state-of-the-art review of the notion of common but differentiated responsibilities in international negotiations, 65 pp., Bonn 2014, ISBN 978-3-88985-596-1
- 5/2014 *Furness, Mark*: Let's get comprehensive. European Union engagement in fragile and conflict-affected countries, 41 pp., Bonn 2014, ISBN 978-3-88985-595-4
- 4/2014 *Lindenberg, Nannette*: Public instruments to leverage private capital for green investments in developing countries, 49 pp., Bonn 2014, ISBN 978-3-88985-594-7
- 3/2014 *Janus, Heiner*: Real innovation or second-best solution? First experiences from results-based aid for fiscal decentralisation in Ghana and Tanzania, 55 pp., Bonn 2014, ISBN 978-3-88985-592-3

[Price: EUR 6.00; publications may be ordered from the DIE or through bookshops.]

Analysen und Stellungnahmen (ISSN 1434-8934)

- 5/2014 *Janus, Heiner / Stephan Klingebiel / Timo Casjen Mahn*: Wie soll Entwicklungszusammenarbeit gestaltet werden? Die Globale Partnerschaft und das Development Cooperation Forum
- 4/2014 *Holzapfel, Sarah*: Darstellung von Ergebnissen in der Entwicklungszusammenarbeit: Risiken und Grenzen
- 3/2014 *Brandi, Clara / Birgit Schmitz / Caroline Hambloch*: Verfügbarkeit von Handelsfinanzierung – Herausforderung für *Global Economic Governance*
- 2/2014 *Janus, Heiner / Niels Keijzer*: Post-2015: Wie sollten Ziele für (inter)nationale Politik entworfen werden?
- 1/2014 *Schraven, Benjamin / Niels Keijzer / Anna Knoll*: Post-2015: Migration im Sinne einer nachhaltigen Entwicklung gestalten

[Analysen und Stellungnahmen free of charge available from the DIE.]

Briefing Papers (ISSN 1615-5483)

- 4/2014 *Holzapfel, Sarah*: Presenting results in development cooperation: risks and limitations
- 3/2014 *Janus, Heiner / Stephan Klingebiel / Timo Casjen Mahn*: How to shape development cooperation? The global partnership and the development cooperation forum
- 2/2014 *Ye, Jiang / Thomas Fues*: A strong voice for global sustainable development: how China can play a leading role in the Post-2015 Agenda
- 1/2014 *Brandi, Clara / Birgit Schmitz / Caroline Hambloch*: The availability of trade finance: a challenge for global economic governance
- 24/2013 *Faust, Jörg*: Is the Earth flat or is it a cube? European foreign aid, political conditionality and democracy
- 23/2013 *Janus, Heiner / Niels Keijzer*: Post-2015: how to design goals for (inter)national action?
- 22/2013 *Dafe, Florence / Renate Hartwig / Heiner Janus*: Post 2015: why the development finance debate needs to make the move from quantity to quality

[Briefing Papers free of charge available from the DIE.]

For a complete list of DIE publications:

<http://www.die-gdi.de>