

# Development Aid - A Perspective on the Sustainability of World Bank Projects

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## Abstract

This paper focuses on the evaluation of the World Bank (WB) performance in delivering development aid to the Least Developed Countries (LDCs). For this purpose, an extensive research was performed to analyze a set of 790 Implementation Completion and Results reports for sustainability outcomes. Results of this research provide various insights on sustainability ratings of project delivery of the LDCs and the African and Asian continent, whereas overall satisfying sustainability ratings are disclosed.

**Keywords:** Sustainability, World Bank, WB, World Bank Performance, Millennium Development Goals, MDG, MDGs, Least Developed Countries, LDC, LDCs

## List of Abbreviations

CAS	Country Assistance Strategy
CSR	Corporate Social Responsibility
DAC	Development Assistance Committee
ERR	Economic Rate of Return
GDP	Gross Domestic Product
GNP	Gross National Product
HIPC	Heavily Indebted Poor Countries
IBRD	International Bank for Reconstruction and Development
ICR	Implementation Completion and Results Report
IDA	International Development Association
IEG	Independent Evaluation Group
LDCs	Least Developed Countries
MDGs	Millennium Development Goals
MDRI	Multilateral Debt Relief Initiative
NA	North America
NPV	Net Present Value
ODA	Official Development Assistance
OECD	Organization of Economic Cooperation
PDO	Project Development Objective
PRS	Poverty Reduction Strategy
QAG	Quality Assurance Group

SROI	Social Return on Investment
UN	United Nations
UNICEF	United Nations Children's Fund
WB	World Bank
WHO	World Health Organization

## 1. Introduction to the Topic

During the last two centuries global prosperity has accelerated and each generation has been encouraged to meet new challenges to “make the world better” by lifting up human well-being. Nevertheless, the picture is not promising everywhere. Still today about three million people live on less than two dollars a day, more than eight hundred million don’t have enough to eat, about ten million children die every year from diseases which could be easily prevented, AIDS is killing close to three million people a year, one billion lack access to clean water and some two billion people lack access to sanitation. Furthermore, about one billion adults are still illiterate and about 25 percent of the children in poor countries don’t finish primary school.<sup>1</sup>

According to experts there are ten significant challenges within the global poverty context: air pollution, conflict, disease, global warming, education, sanitation and water, malnutrition and hunger, trade barriers and subsidies, women and development and terrorism.<sup>2</sup>

To address global poverty problems and to help the poorest billion to improve their situations, particularly in the last decades many development aid organizations and so called human aid institutions have arisen.<sup>3</sup>

The new millennium offered prospective hope in solving global prosperity problems through emerging technologies as part of the ongoing IT boom and the continued economic progress in China, India, and Russia. Although Africa was still in a miserable crisis, a spread of democracy throughout the continent took place and the possibility of activating processes to use new technologies to fight different diseases gave hope. The most vivid reflection of this was the Millennium Assembly which took place at the United Nations in New York. It was the largest coming together of world leaders in history with 147 heads of state and government. For this occasion, UN Secretary-General Kofi Annan presented the document “We the Peoples: The Role of the United Nations in the 21<sup>st</sup> Century”, laying out a critical view of the global challenges of our time, such as extreme poverty, environmental damage, major disease problems, civil conflicts and war. This document became the basis for the Millennium Declaration which sets forth a series of time-bound and quantified goals, the Millennium Development Goals (MDGs).<sup>4</sup>

## 2. Assessing Poverty Problems, Achieving Economic Growth, Reaching MDGs

The problem of how to end poverty in our world has been widely discussed throughout literature, whereas most of all the research indicates that those countries affected are caught in a “poverty trap.” A combination of poor geography, health care and infrastructure prevent some societies from generating any economic surplus (this is especially the case for Sub-Saharan Africa). To help such countries make the first step on the economic ladder of development, far more aid assistance from “rich world countries” as well as debt forgiveness, better trade terms and access to good technologies need to be ensured. This is generally referred as the “top-down” approach for economic assistance. Jeffery D. Sachs can be regarded as a main driver of this approach. However, there are also other important supporters, such as Paul Collier.<sup>5</sup>

There are also some opposers who don’t believe in any “utopian” top-down approach. William Easterly is a well-known proponent among those who believe that helping the poor is only possible through simple and cost-effective uses of foreign aid such as dietary supplements (e.g. vitamins, infant formula, and iodine), fertilizer subsidies, education in sexual practices (using condoms) and urban water provision.<sup>6</sup>

Beyond these comparative opinions of how foreign aid assistance should be applied, there has been an

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<sup>1</sup> Cf. Easterley (2006), p. 7.; Sachs (2005), p. 360;

<sup>2</sup> Cf. Lomborg (2009), p. 2.

<sup>3</sup> Cf. Easterley (2008), unpag.

<sup>4</sup> Cf. Sachs (2005), p. 210 et seq.

<sup>5</sup> Cf. Collier (2008), unpag.; Sachs (2005), p. 242 et seq.

<sup>6</sup> Cf. Easterly (2006), p. 327 et seq.

emergence of new “contra foreign aid” opinions – first advocated by Dambisa Moyo with her book “Dead Aid” – pursuing that economic growth and a significant decline in poverty can be achieved without reliance on foreign aid or aid-related assistance.<sup>7</sup>

In a nutshell, one has to admit that an “easy-to-reach” solution cannot be achieved in the short run due to the complexity of the poverty problem.<sup>8</sup>

Still, there are some common ideas and agreements on how to start immediately with foreign aid solutions, regardless of the opposing opinions on how to apply Official Development Assistance (ODA) most efficiently:<sup>9</sup>

- Promotion of understanding ODA as a subsidy
- Grants instead of loans
- Differentiated diagnoses according to the country specific needs by shifting from supply to demand focus
- Competitive advantages and accountabilities of aid agencies

Furthermore, the MDGs have been agreed in unison by the 191 UN member states UN-member states that culminated in the signing the United Nations Millennium Declaration in 2002. In principle, those goals stand for the main objectives of our time to solve the world’s poverty problems and gain global prosperity. The MDGs consist of the following eight goals:<sup>10</sup>

- Goal 1: Eradicate extreme poverty and hunger
- Goal 2: Achieve universal primary education
- Goal 3: Promote gender equality and empower women
- Goal 4: Reduce child mortality
- Goal 5: Improve maternal health
- Goal 6: Combat HIV/AIDS, malaria and other diseases
- Goal 7: Ensure environmental sustainability
- Goal 8: Develop a Global Partnership for Development

Today the eight MDGs are broken down into 21 quantifiable targets that are measured by 60 indicators.<sup>11</sup> To ensure that the MDGs can be achieved and to put a realistic plan into place, the UN Millennium Project was founded in 2002. The project was engaged by 250 central global expert participants who represented each part of the entire UN system (WHO, UNICEF, the Food and Agriculture Organization, The United Nations Environment Program, etc.). In order to estimate the total amount of foreign aid available through the MDGs, each country must first offer a detailed costing plan based on the Millennium Project methodology. This has been outlined by a minimum amount of \$135 to \$195 billion US Dollars per year for the period of 2005 through 2015 (this is about 0.44 to 0.54 percent of the rich-world GNP each year). Based on the official calculations from 2005/06 and the MDGs Summit outcome in 2010, this means that ODA would need to be more than doubled for the majority of the Least Developed Countries<sup>12</sup> (LDCs) to reach the MDGs and for poverty to be halved by 2015.<sup>13</sup>

The most disappointing results in solving extreme poverty can be observed in Africa. While some of the North African states will be able to halve poverty on time most of the Sub-Saharan African countries (known as Black Africa) will not, although an average economic per capita growth rate<sup>14</sup> of 3.3% still exists.<sup>15</sup>

<sup>7</sup> Cf. Moyo (2009), unpag.

<sup>8</sup> Cf. Schabbel (2006), p. 281 et seq.

<sup>9</sup> Cf. Easterly (2006), unpag.; Sachs (2005), unpag.; Schabbel (2006), p. 281 et seq.

<sup>10</sup> Cf. Easterly (2006), p. 8; Sachs (2005), p. 25; United Nations Development Programme (2011): Millennium Development Goals.

<sup>11</sup> Author’s Note: Find the full list including all targets and indicators in Appendix A.

<sup>12</sup> Author’s Note: Find an overview of all LDCs in Appendix B.

<sup>13</sup> Cf. Sachs (2005), p. 223 et sqq.; United Nations Development Programme (2011): The 2010 MDG Summit Outcome.

<sup>14</sup> Cf. Besley/Burgess (2003), unpag.; Lopez (2004), p. 2 et sqq.; Schabbel (2006), p. 192 et seq., p. 213: A substantial number of studies found that there is a positive relationship between growth and poverty, which is a finding that reaches a relative high standard of consensus among development researchers. Although empirical observations support the view that growth is pro-poor, there is still a very uneven extend to which growth reduces poverty (at a given growth rate, poverty reduction is very uneven across countries). Among 71 studies about the relationship between growth and poverty, only one study outlined a statistically negative relationship and 31 studies reported inconclusive results (statistically insignificant), which is due to the fact that there is a lack of a (strong) analytical framework for evaluating

In this context, questions such as these have been introduced into the global poverty discussion:<sup>16</sup>

- Why are still so many countries failing to achieve economic success?
- What can Western-aid offer and how does it need to be delivered to achieve long-term prosperity in developing countries?
- How sustainable are the outcomes of development assistance projects?

Aiming to answer the last question, the proposed paper will focus on analyzing the sustainability of development assistance projects lead by the World Bank within the LDCs.

### 3. Research Approach

In this chapter, the research idea among relevant terms, definitions, and methods will be provided and explained.

#### 3.1 Research Idea

The idea of this research paper is to access the sustainability outcome of all World Bank projects which have been conducted and finalized within any LDC after the passage of the MDGs. The paper therefore aims to evaluate the sustainability of outcomes after project completion to discover the main reasons for a low likelihood of sustainability based on the latest data publicly available. Hereby, these reasons will be accessed and compared across the LDCs at large, as well as among the LDC continents individually. Therefore, a quantitative analysis to count the “positive” and “negative” sustainability ratings within the relevant Implementation Completion and Results Reports (ICR) across the LDCs will be conducted in the first stage. Thereafter, a classical content analysis will be applied in the second stage to find out the reasons for a “negative” sustainability rating and the underlying types of projects associated. Lastly, there will be a continent comparison and short excursus on the negative sustainability projects that of which disclose a positive Net Present Value<sup>17</sup> (NPV) at project completion. This paper will close with a short summary and conclusion of findings from the research conducted.

#### 3.2 Implementation Completion and Results Reports

The ICR is one of the main instruments of self-evaluation and serves as an integral part to increase development effectiveness of the World Bank.<sup>18</sup> Reports are prepared by the World Bank itself at each project closing respectively at the close of every International Development Association (IDA) or International Bank for Reconstruction and Development (IBRD)-funded operation containing major financial figures, such as the NPV and the Economic Rate of Return<sup>19</sup> (ERR). On top of that the ICR assesses to which degree the Project Development Objectives (PDO) have been achieved by providing outcome ratings for different project categories, such as Bank Performance, Borrower Performance, Sustainability respectively Risk to Development Outcome. Furthermore, the ICR represents a continuous process of self-evaluation, lessons learned, knowledge sharing and being accountable for results. The following list provides the main intention of the ICR and its system:

- Provide a complete account of the performance and results of each project and operation
- Capture and dispose experience from previous projects in order to:
  - a) improve future interventions to achieve the goals of the Country Assistance Strategy (CAS)
  - b) improve the design and implementation of up-coming operations through lessons learned and
  - c) ensure a greater development impact and sustainability for these future operations
- Provide accountability and transparency at the project level while considering the bank, borrower and involved stakeholders

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the causal relationships in various studies because aid is given in many different forms and for a lot of different purposes. Moreover, 40 studies showed a statistically positive impact of aid on growth. This shows that the majority of case studies have proven that foreign economic development assistance can affect economic results positively.

<sup>15</sup> Cf. Calderisi (2006), p. 2 et sqq.; Collier (2008), p. 3 et sqq.; Schabel (2006), p. 114; Wolff (2005), unpag.

<sup>16</sup> Cf. Ahrens (2005), unpag.; Easterley (2006), p. 24; Köhler et al. (1996), unpag.

<sup>17</sup> Cf. Projektmagazin (2014): The Net Present Value is a financial measure that converts future returns of a project or investment to today's values.

<sup>18</sup> Author's Note: All ICR are being evaluated and cross-checked by the Independent Evaluation Group (IEG) (please refer to <http://ieg.worldbank.org/>).

<sup>19</sup> BusinessDictionary (2014): Interest rate at which the cost and benefits of a project, discounted over its life, are equal.

- Provide an instrument for realistic self-evaluation of performance by the bank and borrowers (government and implementation agency)
- Contribute to databases for analysis and reporting, especially by the Quality Assurance Group (QAG) and the Independent Evaluation Group (IEG)<sup>20</sup> on the effectiveness of development assistance in contributing to development strategies at the various levels (sector, country, and global).

The audience for the ICR is both internal (e.g. board members, bank managers and staff) and external (governments and their agencies, stakeholders, and beneficiaries in partner countries, as well as the general public). In general, the final ICR is publicly disclosed at the time it is submitted within the World Bank and to the board.<sup>21</sup>

### 3.3 Project Types

In order to have a common basis for comparing project outcomes in Africa and Asia, a study on the available project types needed to be conducted. The classification of project types is based and defined as “Sector and Theme Codes” within the ICR documents. Each project can consist of multiple “sector codes” (up to 5 in total) that determine the project type for the project funding provided by the WB. As illustrated in the following table, for each sector type a percentage is used to indicate how much of WB funding allocated to the project had been planned at the appraisal stage (“Original” column) and actually disbursed at project completion (“Actual” column):<sup>22</sup>

Table 1. Example of a project type definition<sup>23</sup>

Sector Code (as % of total Bank financing)	Original	Actual
Central government administration	36	36
General education sector	4	4
General public administration sector	9	9
Health	40	40
Other social services	11	11

In this example the planned WB financing per sector code has been estimated as actually disbursed.

### 3.4 Data Access and Relevance

The research data used for this paper was obtained from ICR documents published by the World Bank on the World Bank Homepage. The audiences of this data set are governments, beneficiaries amongst individual countries and around the globe as well as the general public. The initial data load was conducted in September of 2012. The 49 LDCs respectively their country documents (type: spreadsheet) contained links to around 30,500 documents – about 2,000 of which being ICR documents – of roughly 5,500 projects. To narrow down the research data basis and to maintain focus on specific relevance, this paper only references ICR documents that have been released after the MDGs have been officially passed (9/8/2000).<sup>24</sup> In principle, the idea is to evaluate if the majority of ICR documents disclose key figures and ratings in order to support the assessment of the country’s progress towards achieving the MDGs as requested by the UN and outlined in each country’s Poverty Reduction Strategy (PRS). Therefore, this paper was conducted from research of 790 ICR documents among all of the LDCs.<sup>25</sup>

<sup>20</sup> Author’s Note: Most of the IEG Project Performance Assessment Reports are not available under the country’s documents side (<http://documents.worldbank.org/curated/en/country>); instead the IEG ratings which are based on the ICR ratings (indirect assessment) and contain some condensed project description can be accessed via <http://data.worldbank.org/data-catalog/IEG>.

<sup>21</sup> Cf. World Bank (2013), p. 3 et seq.; WorldPress (2006), p. 1 et seq.

<sup>22</sup> Author’s Note: Very often the WB is not the only project donor whereas the sector and theme codes distribution is only available for the WB funds but not for other donor funding. As outlined later in this thesis the total WB funding only makes up a minor portion of the total funding for the whole of the researched projects.

<sup>23</sup> Cf. Afghanistan: AF\_Completion\_ICR1263.

<sup>24</sup> Author’s Note: Projects might have been started and closed before that date already.

<sup>25</sup> Cf. World Bank (2012); Author’s Note: The data set used for this research paper is the same as the one used for the actual dissertation paper.

### 3.5 Definition of ICR Sustainability Rating

Looking at the sustainability rating within an ICR document, one must not be confused with the “three-pillar model” of Corporate Social Responsibility (CSR).<sup>26</sup> A sustainability rating of an ICR describes the ‘Risk to Development Outcome’ as “the risk, at the time of evaluation, that development outcomes (or expected outcomes) will not be maintained (or realized). This refers to outcomes that have actually been achieved (or are expected to be achieved).”<sup>27</sup> In principle, the risk to development outcome has 2 dimensions:<sup>28</sup>

- 1) The likelihood that some changes may occur from the operation that are detrimental to the ultimate achievement of the development outcome.
- 2) The impact from the operation and the development outcomes if some or all of these changes materialize.

There are internal risks primarily related to the operation itself and external risks which arise from factors outside of the project (e.g. at the country or global level). The sustainability rating helps to identify those operations that require a close monitoring and controlling process in managing risks which may affect project outcome and benefits. Therefore, rating ICR sustainability requires an assessment of uncertainties, which the operation might face over its remaining useful lifetime, and whether adequate measures and arrangements are in place to mitigate or even avoid the impact of those uncertainties. Defined by the WB, the ICR sustainability rating is the “evaluator’s judgment of the uncertainties faced by the operation’s development out-comes over its expected remaining useful life, taking account of any risk mitigation measures already in place at the time of evaluation.”<sup>29</sup> <sup>30</sup>

The ICR sustainability rating is 1 of 3 major rating categories that describe the overall project performance of an operation or project as the following graphic illustrates:<sup>31</sup>

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<sup>26</sup> Cf. Lexikon der Nachhaltigkeit (2014); Lexikon der Nachhaltigkeit (2013): In general, the foundation of Corporate Social Responsibility (CSR) concept lies in the “three-pillar model” of sustainability – in particular economic and financial world. Thereafter, economic, environmental and social are *pari passu* and equally weighted, both at the macroeconomic and political level as well as at the global and corporate level.

<sup>27</sup> World Bank (2013), p. 40.

<sup>28</sup> World Bank (2013), p. 40; World Bank (2010), p. 3.

<sup>29</sup> World Bank (2013), p. 40.

<sup>30</sup> World Bank (2013), p. 40; World Bank (2010), p. 3.

<sup>31</sup> Author’s Note: Please refer to any country ICR document (<http://documents.worldbank.org/curated/en/country>).

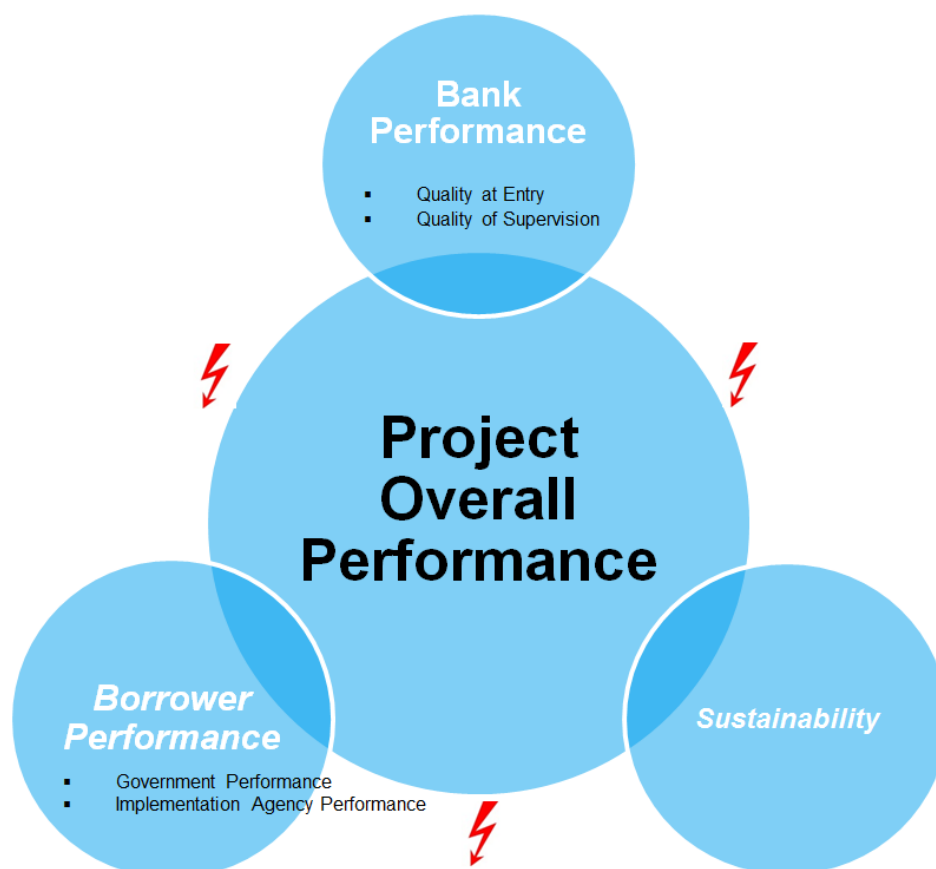


Figure 1. Project overall performance categories

The project overall performance is mainly based on the evaluation and ratings of the following three categories and its respective sub-categories, whereas each of the categories and sub-categories can have positive or negative effects on any other (sub-)category.<sup>32</sup>

- Bank Performance
  - Quality at Entry (beginning after the design phase with project start)
  - Quality of Supervision (of the World Bank)
- Borrower Performance
  - Government Performance
  - Implementation Agency Performance
- Sustainability (Risk to Development Outcome)

It is worth noting that the sustainability rating does not give an indication about the absolute level of project benefits. For example, a project may have a positive NPV or a high expected ERR and a low sustainability rating, still resulting in a satisfactory project overall performance rating.<sup>33</sup>

In order to establish the most adequate and reliable assessment of a sustainability rating, the evaluator and its team (mainly project staff and ICR WB employees) must consider operational, sector, and country-specific related issues by weighing in the relative importance of each individualized criterion of a risk and how it may affect the planned project outcome – these risk factors include:<sup>34</sup>

<sup>32</sup> Author's Note: A detailed description and analyses of performance areas other than sustainability are not subject of this research paper. Still, analyses in this regard will be provided in the actual dissertation paper.

<sup>33</sup> Cf. World Bank (2013), p. 40 et seq.; World Bank (2010), p. 3.

<sup>34</sup> Cf. World Bank (2013), p. 41.

- Technical (e.g. innovative technologies & system)
- Financial (e.g. robustness of financial flows & financial viability)
- Economic (e.g. regional & global)
- Social (e.g. strength of stakeholder support)
- Political (e.g. volatility of political situation)
- Environmental (including positive & negative impacts)
- Government Ownership & Commitment (e.g. supportive policies, budget)
- Other Stakeholder Ownership (e.g. from private sector/civil society)
- Institutional Support & Capacity (e.g. from project entities; and/or related to legal/legislative framework)
- Governance
- Natural Disasters Exposure

There are 4 rating categories suggested by the WB for the ‘Risk to Development Outcome’ rating category:<sup>35</sup>

- Negligible to Low
- Moderate
- Significant
- High

Based on the outcome of the research conducted 2 major findings need to be outlined:

- 1) In ICR documents disclosed before mid-2005<sup>36</sup>, rating category ‘Risk to Development Outcome’ was assessed (and named) as ‘Sustainability’ and thus has controversial rating categories.
- 2) Besides the above rating categories suggested by the WB, other rating categories have been used for the ‘Risk to Development Outcome’ category, such as substantial, medium, and modest.

To account for these findings and to build the foundation for the content analysis, mapping of the ratings and categories was performed and is illustrated in the table below. Within the context of this research paper only negative rating categories are researched using the content analysis:<sup>37</sup>

Table 2. Mapping of sustainability rating categories

Rating Category Type	Sustainability	Risk to Development Outcome
Positive	Highly Likely	Low or Negligible
	Likely	
Neutral	Modest	Medium / Moderate / Modest
Negative	Unlikely	Substantial / Significant
	Highly Unlikely	High

Going forward both categories will be referred as ‘Sustainability’ whereas “Unlikely” and “Highly Unlikely” will be used as rating category types containing as well the “Significant” and “High” ‘Risk to Development Outcome’ rating category types.

<sup>35</sup> Cf. WB (2013), p. 41 et seq.; WB (2013), p. 42: The lack of sufficient information, or other circumstances, makes it impossible to assign one of the above ratings, whereas “non-evaluable” should be recorded.

<sup>36</sup> Author’s Note: The exact date can’t be determined because both situations exist: ICR documents disclosed before 2005 contain ‘Risk to Development Outcome’ as a rating category; ICR documents disclosed after 2005 contain ‘Sustainability’ as a rating category.

<sup>37</sup> Cf. WB (2006), p. 26.



### 3.6 Content Analysis

Content analysis is a research tool used to determine the presence of certain words or concepts within texts or sets of texts. Researchers quantify and analyze the presence, meanings and relationships of words and concepts before making inferences about the messages within the texts. To conduct a content analysis the text is coded, or broken down into manageable pieces and categories on a variety of levels, such as words, word senses, phrases, sentences, or themes.<sup>38</sup> In principle, there are two complementary types of content analysis:<sup>39</sup>

- Conceptual Analysis (quantitative): Analyzing the existence and frequency of concepts which are used the most within the text.
- Relational Analysis (qualitative): Analyzing the relationship among concepts within the text.

## 4. Outcome and Results

The following chapters analyze the outcome of the sustainability ratings of the LDCs. In the next chapter the quantitative counts of the negative, neutral and positive sustainability ratings are assessed. Thereafter, the outcome of the content analysis for the negative sustainability projects is presented. For this purpose, results of the LDCs, the ones for Haiti followed by the outcome comparison of the African and Asian continents, are examined. The chapter will continue with an excursus on the results of positive NPV projects, before a summary and conclusion finalize this section.

### 4.1 Quantitative Assessment of Sustainability Ratings

In order to assess the quantitative number of negative, neutral and positive sustainability ratings, each ICR document had to be reviewed individually as the rating categories are not yet available in any other format nor have they been published anywhere else by the WB.<sup>40</sup>

Table 3 provides an overview of the neutral and positive sustainability ratings for the LDCs per continent, whereat the ratings related to the risk to development outcome category have been added to the corresponding sustainability rating category in order to provide a comprehensive summary (same mapping approach as for the negative sustainability rating; refer to *chapter 3.5 Definition of ICR Sustainability Rating*):

Table 3. Quantitative assessment of neutral and positive sustainability ratings<sup>41</sup>

	Neutral Sustainability Counts	Positive Sustainability Counts
<b>Total</b>	160	364
<b>Africa</b>	121	276
<b>Asia</b>	36	88
<b>Latin America (Haiti)</b>	3	0

Approx. 20 percent (160 out of 790) of all ICR documents disclose a neutral rating for sustainability, such as modest or moderate. On a global level, 364 out of 790 (46.1 percent) projects exhibit a positive rating. Interestingly enough, Asia contains approx. the same number of projects with positive and negative sustainability ratings (roughly 80 projects). On the contrary, Haiti does not even disclose 1 project with a positive rating. In Africa – the continent where most projects have been executed – nearly half of the projects (about 48 percent) received a positive rating for sustainability.

In conclusion, it can be adhered that these WB projects are rather sustainable in terms of having a positive likelihood that the project outcome will be sustained after project closing, as there are more positive than negative ratings available.

Table 4 provides an overview of the negative sustainability ratings per continent as well as per category:

<sup>38</sup> Author's Note: Please see Appendix C for the process of executing a content analysis.

<sup>39</sup> Cf. Mayring (2008), unpag.; Krippendorff (2004), unpag.; Hausmann/Rudolph (2014), s. 8.

<sup>40</sup> Cf. Email from WB (Jeannette Smith) on 2012/12/27; Author's Note: Only IEG ratings can be publicly accessed on a portfolio level via <http://data.worldbank.org/data-catalog/IEG>.

<sup>41</sup> Author's Note: The mismatch in the sum of the total number of projects per category and the total number of ICR documents (790) is due to the fact that some documents did not provide a rating for sustainability.

Table 4. Quantitative assessment of negative sustainability ratings

	<b>ICR Report Counts</b>	<b>Negative Sustainability Counts</b>	<b>Sustainability „Unlikely“ Counts</b>	<b>Sustainability „Highly Unlikely“ Counts</b>
<b>Total</b>	790	263	212	51
<b>Africa</b>	574	174	145	29
<b>Asia</b>	206	82	64	18
<b>Latin America (Haiti)</b>	10	7	3	4

When broken down by percentages, the “Highly Unlikely” sustainability rating makes up about 20 percent of the total negative sustainability ratings. In Africa, 17 percent of the negative sustainability projects have a “Highly Unlikely” rating. In Asia about 22 percent account for this rating. In Haiti 4 out of 10 projects disclose this negative sustainability rating.

As a summary it must be outlined that in total 33.3 percent of the projects analyzed have an “Unlikely” or “Highly Unlikely” sustainability rating (30.3 percent in Africa, 39.8 percent in Asia).

However, it must be noted that the sustainability rating may always be subject to change due to any reasons which might not have been foreseen during the rating period –more than likely resulting in a positive rating moving towards a more negative rating rather than the other way around.<sup>42</sup>

#### 4.2 Content Analyses

In order to evaluate the reasons why achieved project outcomes might not be sustained after project completion with a “significant” or even “high” negative sustainability rating, classical content analyses were conducted using ATLAS.ti. The following chapters outline the results of the content analyses per continent.

##### 4.2.1 Types of Reasons

In order to assess the types of reasons for negative sustainability ratings within the LDCs as a whole, each sustainability ICR report was researched using the qualitative toolset of content analysis. The following table provides an overview of the existing types of reasons which were identified across all LDCs:

Table 5. Identified reasons for a negative sustainability rating

<b>Category</b>
<b>Macroeconomic / Country Risks</b>
<b>Governmental Risks</b>
Government Commitment Risks
Government Action / Task Risks
Government Capacity Risks
<b>Political Risks</b>

<sup>42</sup> WB (2013), p. 40 et sqq.

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**Security Risks**

Natural Disasters / Environmental Risks  
 War / Conflict Risks  
 Epidemic Risks  
 Thirst & Hunger

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**Corruption**


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**Fiduciary Risks**

Funding / Donor Risks  
 Payment Risks

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**Implementation Capacity / Institutional Risks**


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**Infrastructure Risks**


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**Project Risks**

PDO Risks  
 Implementation Agency Risks  
 Bank Risks  
 Technical Risks  
 Other Project Risks

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Macroeconomic or country risks affect the country as a whole and can be due to external/global reasons, such as a financial crisis. Governmental risks relate to the government itself, its (lack of) commitment, its (lack of) actions and its limited capacity<sup>43</sup> (e.g. resources). The third type of reason for a negative rating in sustainability is political risks, such as political instability or uncertainty within the country perhaps due to upcoming elections. Another group of risks identified are security risks – sub-divided by natural disaster and environmental risks, war and conflicts, epidemic risks, and thirst and hunger. The fifth category of reasoning is corruption which is still a major issue in the LDCs. Following this, fiduciary risks, implementation capacity and institutional risks, and infrastructure risks are 3 additional reasons mentioned. Lastly, project specific risks such as PDO risks (which directly have an impact on the project's PDOs), implementation agency risks, bank risks, technical risks, and other project risks make up the final reasoning in this assessment.<sup>44</sup>

#### 4.2.2 Overall Results

Looking at the LDCs as a whole (including Haiti), 33.3 percent have a negative outcome for the sustainability rating (263 out of 790 projects). Out of the 263 projects, 212 projects have an “Unlikely” rating and 51 have a “Highly Unlikely” rating for sustainability (refer to *chapter 4.1 Quantitative Assessment of Sustainability Ratings, table 3: Quantitative Assessment of Negative Sustainability Ratings*). The following table highlights the major reasons for negative sustainability ratings within the LDCs compared against the total number of 790 projects researched within this paper:

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<sup>43</sup> Author's Note: In case where government capacity was mentioned in the context of funding the code was counted under funding risks instead of government capacity risks.

<sup>44</sup> Author's Note: Appendix D provides an overview of appropriate codes used for the most relevant types of reasons.

Table 6. Top reasons for a negative sustainability rating across LDCs<sup>45</sup>

Category	% of Projects	% of total Projects
<b>Macroeconomic / Country Risks</b>	<b>27,4</b>	<b>9,1</b>
<b>Governmental Risks</b>	<b>44,9</b>	<b>14,9</b>
Government Commitment Risks	27,4	9,1
Government Action / Task Risks	22,4	7,5
Government Capacity Risks	10,6	3,5
<b>Political Risks</b>	<b>20,2</b>	<b>6,7</b>
<b>Security Risks</b>	<b>28,1</b>	<b>9,4</b>
Natural Disasters / Environmental Risks	6,8	2,3
War / Conflict Risks	23,2	7,7
Epidemic Risks	0,8	0,3
Thirst & Hunger	0,8	0,3
<b>Corruption</b>	<b>21,6</b>	<b>1,4</b>
<b>Fiduciary Risks</b>	<b>54,8</b>	<b>18,2</b>
Funding / Donor Risks	54,4	18,1
Payment Risks	4,6	1,5
<b>Implementation Capacity / Institutional Risks</b>	<b>50,6</b>	<b>16,8</b>
<b>Infrastructure Risks</b>	<b>8,7</b>	<b>2,9</b>
<b>Project Risks</b>	<b>48,3</b>	<b>16,1</b>
PDO Risks	27	9
Implementation Agency Risks	19,8	6,6
Bank Risks	1,9	0,6
Technical Risks	11,4	3,8
Other Project Risks	19	6,3

The “% of Projects” column represents the percentages of the risk category in comparison to the 263 negative sustainability projects, whereas the “% of total projects” shows the share in regards to the total of 790 projects. The majority of reasoning for the LDCs to share a negative sustainability rating lies behind fiduciary risks (54.8 percent), whereas this affects about 18 percent of all WB projects researched in the context of the LDCs. More than 50 percent of the negative sustainability rated projects have implementation capacity and institutional risks, close to 50 percent have project-related risks, specifically in areas of PDO and implementation agency. Furthermore, nearly 45 percent of the negative projects today are assessed with governmental risks, followed closely by security risks at 30 percent (roughly 20 percent of these being due to war and conflict). Interestingly, corruption and political risks are still 2 types of risks which affect more than 20 percent of the negative sustainability projects, whereas infrastructure risks represent the smallest type of reasoning with a share of 8.7 percent only.

Out of 263 negative sustainability projects across the LDCs there are 81 sector codes available in total. Table 7 represents the 10 most common sector codes across the negative sustainability LDC projects, whereas the %-points and the %-share are given based on the project type definition already presented in *chapter 3.3*

<sup>45</sup> Author's Note: See *Appendix E* for reasons for „Unlikely“ and „Highly Unlikely“ sustainability ratings across all LDCs.

*Project Types* (refer to table 1: *Example of a Project Type Definition*):<sup>46</sup>

Table 7. Most common sector codes across negative sustainability projects of the LDCs<sup>47</sup>

<b>Sector Code</b>	<b>% -Points</b>	<b>% -Share</b>
Central government administration	54.04	20.4
Health	27.32	10.31
Other social services	16	6.04
Power	13.22	4.99
Roads and highways	11.77	4.44
Water supply	10.42	3.93
General public administration sector	9.08	3.43
Primary education	8.98	3.39
Agricultural extension and research	8.08	3.05
Irrigation and drainage	6.82	2.57
<b>Total</b>	<b>165.73</b>	<b>62.55</b>

The ‘Central government administration’ sector code counts about 54 %-points and is thus the largest shared among sector codes (about 20 percent). It belongs to 148 out of the 263 total negative sustainability projects. The ‘Health’ sector code counts approx. 27 %-points and has a share of roughly 10 percent, accounting for 61 projects. Other major sector codes to be noted are ‘Other social services’, ‘Power’, ‘Roads and highways’, as well as water supply.

In order to better understand for which type of projects the negative sustainability project accounts, following %-shares for the project type categories can be outlined:

Table 8. Project type categories of the negative sustainability projects of the LDCs<sup>48</sup>

<b>Project Type Category</b>	<b>LDCs</b>
	<b>% -Share</b>
Governmental Administration	22.87
Health	12.41
Transportation Development	10.98
Other	9.38
Agriculture	8.52
Education	8.1
Sectorial Development & Reforming	8.06

<sup>46</sup> Author’s Note: Sector codes were assessed using both negative sustainability ratings („Unlikely“ and „Highly Unlikely“).

<sup>47</sup> Author’s Note: The uneven %-points of 165.73 are the result of some projects not disclosing whole %-points in total.

<sup>48</sup> Cf. *Appendix F* provides an overview of all 81 available sector codes and their %-shares assigned to the corresponding project type categories.

Power	7.24
Water & Sanitation	5.85
Financial Development	4.17
Natural Resources	1.26
IT & Communication	1.16
<b>Total</b>	<b>100</b>

The ‘Governmental Administration’ project type represents the major project type of the negative sustainability projects of the LDCs with a share of about 23 percent. Additional major project types are ‘Health’ (12.41 percent) and ‘Transportation Development’ (10.98 percent).

Out of the 263 projects there are only a few projects which share the same sector codes. In most cases only 2 projects share the same sector code(s), whereat most of the time projects are based on 1 sector code only. In the latter case, the %-point is 1 and the same for both projects. The following table provides an overview of the projects which are based on 1 sector code only:

Table 9. Project with common sector codes and percentage points

<b>Number of Projects sharing the same Sector Code</b>	<b>Project Report Numbers</b>	<b>Shared Sector Codes</b>
11	25705; 29215; ICR1458; 36329; ICR1489; 32710; ICR1536; ICR352; ICR1688; ICR2074; ICR1374	Central government administration
4	25102; ICR152; ICR785; ICR1143	Power
2	22231; 25624	Agricultural extension and research
2	20756; ICR1968	Irrigation and drainage
2	22167; 22804	Primary education
2	ICR2154; ICR1041	Railways
2	22416; 21529	Oil & Gas Transportation
2	37359; ICR666	General public administration sector
2	ICR2421; ICR1200	Law and justice

11 projects share the ‘Central government administration’ sector code while additional 4 projects the ‘Power’ sector code. Furthermore, there are 7 groups which consist of 2 projects each, sharing a different sector code. Another 46 projects can be grouped into smaller project groups sharing at least the same sector codes per group, whereat in none of the project groups the %-points per sector code match.<sup>49</sup> Therefore, it can be concluded that besides the 29 projects mentioned in the table above, the rest of the 188 projects do not have matching sector codes and therefore have different project types. In order to increase the probability of finding patterns that can

<sup>49</sup> Author’s Note: See *Appendix G* for an overview of matching sector codes and the corresponding projects. In total, there are 75 projects consisting of 23 groups which share the same sector code(s).

explain relationship between certain sector codes, their %-points and the effect on the sustainability rating, a detailed statistical analysis is required. A sample analysis of roughly about 100 negative sustainability projects has shown that the WB costs account for only less than 40 percent of the total project costs. Therefore, further in-depth statistical analyses could only be conducted after the sector codes of the total project funding are known.

As an outcome of this analysis it needs to be noted that the project types of the negative sustainability projects of the LDCs:

- Are based on 81 different sector codes but not representative for the total funding amount of those projects.
- Vary extremely and are rarely the same across projects/countries.
- Can only serve as “trend-setters” due to the mentioned limitations.

#### 4.2.3 Results in Haiti

Haiti is the only country within LA that belongs to the LDCs and therefore not representative for LA as a continent. Nevertheless, as outlined in in *chapter 4.1 Quantitative Assessment of Sustainability Ratings, table 3: Quantitative Assessment of Neutral and Positive Sustainability Ratings* it contains 10 ICR documents out of which 7 do have a negative sustainability rating.<sup>50</sup> The following table is provided to highlight the top reasons for receiving “Unlikely” and “Highly Unlikely” sustainability ratings in Haiti by comparing the percentages of negative projects per reasoning type to all negative sustainability projects (“% of Projects”) and in relation to all (10) projects (“% of total Projects”) within the country:

Table 10. Top reasons for a negative sustainability rating in Haiti<sup>51</sup>

Category	% of Projects	% of total Projects
<b>Macroeconomic / Country Risks</b>	<b>57.1</b>	<b>40</b>
<b>Governmental Risks</b>	<b>42.9</b>	<b>30</b>
Government Commitment Risks	42.9	30
Government Action / Task Risks	28.6	20
Government Capacity Risks	-	-
<b>Political Risks</b>	<b>71.4</b>	<b>50</b>
<b>Security Risks</b>	<b>42.9</b>	<b>30</b>
Natural Disasters / Environmental Risks	42.9	30
War / Conflict Risks	-	-
Epidemic Risks	-	-
Thirst & Hunger	-	-
<b>Corruption</b>	<b>-</b>	<b>-</b>
<b>Fiduciary Risks</b>	<b>42.9</b>	<b>30</b>
Funding / Donor Risks	42.9	30
Payment Risks	-	-
<b>Implementation Capacity / Institutional Risks</b>	<b>71.4</b>	<b>50</b>
<b>Infrastructure Risks</b>	<b>-</b>	<b>-</b>

<sup>50</sup> Cf. *Chapter 4.1 Quantitative Assessment of Sustainability Ratings, table 4: Quantitative Assessment of Negative Sustainability Ratings*.

<sup>51</sup> Author's Note: See *Appendix H* for reasons for „Unlikely“ and „Highly Unlikely“ sustainability ratings in Haiti.

<b>Project Risks</b>	<b>14.3</b>	<b>10</b>
PDO Risks	-	-
Implementation Agency Risks	-	-
Bank Risks	-	-
Technical Risks	-	-
Other Project Risks	14.3	10

According to the research conducted, the major reasons for a negative sustainability outcome in Haiti are implementation capacity and institutional risks, political risks, and macroeconomic risks, followed by 3 additional types, security, fiduciary and governmental risks, with equal shares.

#### 4.2.4 Continent Comparison

In this chapter, the outcome of the content analyses of Africa and Asia are presented and compared.<sup>52</sup>

In Africa, 30 percent of the projects outline a negative outcome for the sustainability rating (174 out of 574). Out of the 174 projects, 145 projects have an “Unlikely” while 29 disclose a “Highly Unlikely” rating for sustainability.<sup>53</sup> The following table provides an overview of the major reasons for a negative sustainability rating within Africa (174 to count) compared to the total number of projects researched within the continent (574 in total; refer to column “% of total Projects”). The comparison is based on the combination of both negative sustainability ratings (“Unlikely” and “Highly Unlikely”):

Table 11. Top reasons for a negative sustainability rating in Africa<sup>54</sup>

Category	% of Projects	% of total Projects
<b>Macroeconomic / Country Risks</b>	<b>29.9</b>	<b>9.1</b>
<b>Governmental Risks</b>	<b>42.5</b>	<b>12.9</b>
Government Commitment Risks	25.3	7.7
Government Action / Task Risks	20.1	6.1
Government Capacity Risks	7.5	2.3
<b>Political Risks</b>	<b>17.8</b>	<b>5.4</b>
<b>Security Risks</b>	<b>23</b>	<b>7</b>
Natural Disasters / Environmental Risks	6.3	1.9
War / Conflict Risks	18.4	5.6
Epidemic Risks	0.6	0.2
Thirst & Hunger	1.1	0.3
<b>Corruption</b>	<b>1.1</b>	<b>0.3</b>
<b>Fiduciary Risks</b>	<b>60.3</b>	<b>18.3</b>
Funding / Donor Risks	60.3	18.3
Payment Risks	4	1.2
<b>Implementation Capacity / Institutional Risks</b>	<b>49.4</b>	<b>15</b>

<sup>52</sup> Author's Note: Due to fact that Haiti is the only LDC in LA continent, LA will not be part of the continental comparison.

<sup>53</sup> Cf. Chapter 4.1 *Quantitative Assessment of Sustainability Ratings*, table 4: *Quantitative Assessment of Negative Sustainability Ratings*.

<sup>54</sup> Author's Note: See Appendix I for reasons for „Unlikely“ and „Highly Unlikely“ sustainability ratings in Africa.



<b>Infrastructure Risks</b>	<b>6.9</b>	<b>2.1</b>
<b>Project Risks</b>	<b>50</b>	<b>15.2</b>
PDO Risks	27.6	8.4
Implementation Agency Risks	18.4	5.6
Bank Risks	1.7	0.5
Technical Risks	10.3	3.1
Other Project Risks	19.5	5.9

The major issues in terms of making project outcomes in Africa sustainable are fiduciary risks (60.3 percent), especially due to lack of donor funding, whereat a donor could be the government or loans or grants from external sources. Project-related risks (50 percent) represent the secondary majority of reasoning in Africa, directly followed by implementation capacity and institutional risks (49.2 percent). Governmental risks (40 percent) and macroeconomic or country risks (30 percent) account for the last majority of reasoning for negative sustainability projects.

In Asia, roughly 40 percent of the projects receive a negative outcome for the sustainability rating (82 out of 206 projects), wherein the bulk of these projects (64 in total) has an “Unlikely” rating for sustainability and only 18 ICR reports receive a “Highly Unlikely” sustainability rating.<sup>55</sup> The following table is provided to present the major reasons for the negative sustainability rating for projects within Asia (82 to count), showing comparison against the corresponding total percentage of ICR reports of Asia as a basis (206 in total; refer to column “% of total Projects”):

Table 12. Top reasons for a negative sustainability rating in Asia<sup>56</sup>

<b>Category</b>	<b>% of Projects</b>	<b>% of total Projects</b>
<b>Macroeconomic / Country Risks</b>	<b>20.7</b>	<b>8.3</b>
<b>Governmental Risks</b>	<b>56.1</b>	<b>22.3</b>
Government Commitment Risks	31.7	12.6
Government Action / Task Risks	26.8	10.7
Government Capacity Risks	18.3	7.3
<b>Political Risks</b>	<b>22</b>	<b>8.7</b>
<b>Security Risks</b>	<b>41.5</b>	<b>16.5</b>
Natural Disasters / Environmental Risks	6.1	2.4
War / Conflict Risks	36.6	14.6
Epidemic Risks	1.2	0.5
Thirst & Hunger	-	-
<b>Corruption</b>	<b>11</b>	<b>4.5</b>
<b>Fiduciary Risks</b>	<b>52.4</b>	<b>20.9</b>
Funding / Donor Risks	47.6	18.9
Payment Risks	7.3	2.9

<sup>55</sup> Cf. Chapter 4.1 *Quantitative Assessment of Sustainability Ratings*, table 4: *Quantitative Assessment of Negative Sustainability Ratings*.

<sup>56</sup> Author's Note: See Appendix J for reasons for „Unlikely“ and „Highly Unlikely“ sustainability ratings in Asia.

<b>Implementation Capacity / Institutional Risks</b>	<b>62.2</b>	<b>24.8</b>
<b>Infrastructure Risks</b>	<b>13.4</b>	<b>5.3</b>
<b>Project Risks</b>	<b>62.2</b>	<b>24.8</b>
PDO Risks	32.9	13.1
Implementation Agency Risks	25.6	10.2
Bank Risks	2.4	1
Technical Risks	15.9	6.3
Other Project Risks	20.7	8.3

Interestingly, the 3 leading reasons (implementation capacity/institutional risks at 62.2 percent, project-related risks at 62.2 percent, and governmental risks at 56.1 percent) account for far more than 50 percent of the negative sustainability projects. Furthermore, it can be stated that about every fourth project executed in Asia is facing either implementation capacity/institutional or project risks. Additionally, governmental risks and fiduciary risks account for more than 50 percent of the negative ICR reports, affecting at least every fifth project in Asia. Security risks such as war and conflict make up the third type of reason with about 40 percent of the negative sustainability ratings.

In order to allow for a direct comparison of the 2 continents the results outlined above are summarized in the following table:

Table 13. Direct risk comparison of Asia and Africa

Category	Africa		Asia	
	% of Projects	% of total Projects	% of Projects	% of total Projects
<b>Macroeconomic / Country Risks</b>	29.9	9.1	20.7	8.3
<b>Governmental Risks</b>	42.5	12.9	56.1	22.3
<b>Political Risks</b>	17.8	5.4	22	8.7
<b>Security Risks</b>	23	7	41.5	16.5
<b>Corruption</b>	1.1	0.3	11	4.5
<b>Fiduciary Risks</b>	60.3	18.3	52.4	20.9
<b>Implementation Capacity / Institutional Risks</b>	49.4	15	62.2	24.8
<b>Infrastructure Risks</b>	6.9	2.1	13.4	5.3
<b>Project Risks</b>	50	15.2	62.2	24.8

The table above reflects 2 major points of interest:

- 1) Based on the risk assessment for Asia, the percentage numbers for the total number of projects (“% of total Projects” column) within the continent are considerably higher for 8 out of the 9 major risk types than that in Africa. The only risk type where Africa shows a slightly higher percentage number than

Asia is macroeconomics. Therefore, it can be concluded that the likelihood for project outcomes to not be maintained after project completion is generally higher in Asia than in Africa.

- 2) Perhaps contrary to common belief, corruption is indicated to be the lowest risk type for both continents. Therefore, it can be concluded that corruption is not a major risk in affecting the sustainability of the development outcome of a project. A deeper look into the projects reveals that corruption typically affects projects at the beginning when arrangements are first made and money transfers are agreed.<sup>57</sup>

While fiduciary or funding-related risks have the highest percentage of all risks in Africa (60.3 percent), it is only the third- or fourth-ranked risk (being that there are 2 first-ranked risks) in Asia with close to 8 percent less than that in Africa (52 percent). The 2 primary risks for Asia, namely project risks and implementation capacity/institutional risks (both at 62.2 percent) are closely matched by that in Africa (second-ranked project risks at 50 percent and third-ranked implementation capacity/institutional risks at 49.4 percent). Fiduciary risks remain a high risk within both continents. However, risks related to the government (its associated commitment and actions) have been assessed with a 14 percent variance (ranked second in Asia at 56.1 percent and fourth in Africa with about 42.5 percent). A potential explanation could be inferred, i.e. due to the higher occurrence of other risks within Asia (e.g. security risks), the governmental support has suffered (note: this has not been validated within this study). Macroeconomic/country risks are ranked as the top fifth risk in Africa (approx. 30 percent), unlike its ranking in Asia (21 percent). The largest difference between the 2 continents can be found looking at the security risk which is among the top 5 risks for Asia (41.5 percent) and about 19 percent higher than that for Africa (23 percent). An explanation of this variance can be found looking at Afghanistan specifically which accounts for about 27 percent of the negative sustainability projects (22 out of 82 projects received “Unlikely” (12) and “Highly Unlikely” (10) sustainability ratings). Due to the fact that the country has been plagued by conflicts, wars and political instability for many years, almost all of the 22 projects outline that security within the country might potentially affect the project development outcome and thus increase the security risk for Asia when comparing continents at large.

In summary, the 4 highest-ranked risks in Asia are shared differently in Africa (implementation capacity/institutional risks, project risks, governmental risks, and security risks). The 2 types of risk in Africa shown to be (slightly) higher in percentage than that in Asia are macroeconomic and fiduciary.

To conclude those findings, it again needs to be mentioned that the total negative sustainability projects in Asia are in average more often affected by any risk type or by a combination of multiple risk types. In general, this indicates that projects in Asia run worse in term of sustainability, or vice-versa, projects in Africa have a better adoption of development aid in term of making project outcomes more sustainable.

In order to account for the high number of various sector codes and to consolidate findings, the sector codes were grouped by similarity to different project type categories. The following table provides a continental comparison of the %-share per project type category.<sup>58</sup>

Table 14. Project type comparison in Asia and Africa

Project Type Category	Africa	Asia
	% -Share	% -Share
Governmental Administration	24.56	22.71
Health	14.46	5.25
Agriculture	12.01	11.83
Other	9.61	6.44
Education	9.09	6.47

<sup>57</sup> Cf. Moyo (2009), unpag.; Ahrens (2005), unpag.

<sup>58</sup> Author's Note: *Appendix K* provides an overview on the detailed sector codes mapping per category based on the %-share on a continental comparison.

Transportation Development	8.41	11.23
Power	8.19	5.33
Sectorial Development & Reforming	5.99	12.71
Water & Sanitation	3.72	10.38
Financial Development	1.75	5.03
Natural Resources	1.39	0.76
IT & Communication	0.82	1.86
<b>Total</b>	<b>100</b>	<b>100</b>

Even though no research on the total WB costs of the negative sustainability projects was conducted differences in the project type categories per continent can be found. The largest variance in sector codes between the 2 continents can be found in the 'Health' project type category with roughly 10 percent more in Africa. In total, the health-related sector codes grouped under the 'Health' project type category affect 54 African projects compared to 7 Asian projects. Additionally, 2 further but respectively minor differences can be found in the 'Water and Sanitation' and the 'Agriculture' groupings: A variance of about 6.5 percent more for the 'Water and Sanitation' as well as the 'Sectorial Development and Reforming' project type category in Asia. All other categories show differences with percentages of lower than 5 percent and therefore have not been explored any further.

In order to further explain continental differences and to determine if any of the above mentioned project type categories account for an extremity in specific risk types, separate code reviews per project type category –using only project type category relevant projects– were conducted. *Appendix L* provides a comparison analysis of risk types and their corresponding percentage of distribution over all African negative sustainability projects and specific African health-related projects. Fiduciary risks affected roughly about 75 percent of all health related projects in Africa – which is 15 percent more than compared to all negative sustainability projects in Africa. Besides this, no noteworthy results were found. Controlling vice versa –looking at Asian health-related category projects– only provided “insignificant” differences (lower than 5 percent) when compared to the entirety of negative sustainability projects in Asia. Furthermore, analyses of the 'Water and Sanitation', 'Sectorial Development and Reforming', 'Agriculture' and 'Education' project type categories resulted as well in insignificant differences (lower than 5 percent) for any risk type in either continent. Therefore, it must be summarized that even though some sector codes varied between the 2 continents, the research on varying sector codes in respect to their defined project types did not provide any further insights to the differences of continental risk types in general. The potential reasoning for this might be lying in the reference to the amount of the WB financing which is comparably low to the overall project funding.

#### 4.3 Excursus: Positive NPV Projects

In this chapter, negative sustainability projects of the LDCs that outline a positive NPV are analyzed. The goal is to find out if there are specific types of risks which cause a negative sustainability for projects with a positive NPV at project closure. Therefore, each of the 263 negative sustainability reports was searched for positive project NPV values at project completions.<sup>59</sup> The following table provides an overview of the negative sustainability projects within the LDCs, categorized per continent and by category rating type:

<sup>59</sup> Author's Note: In the first step, it was not distinguished if the outlined NPV relates to a single or multiple main components of the project only (“partial” NPV) or to the project as a whole (“overall” NPV).

Table 15. Negative sustainability counts of positive NPV projects

	<b>Total No of "Implementation Completion &amp; Result Reports"</b>	<b>Total No of „negative“ Sustainability counts</b>	<b>Total No of “negative” Sustainability counts of positive NPV projects</b>	<b>Sustainability „Unlikely“ of positive NPV projects</b>	<b>Sustainability „Highly Unlikely“ of positive NPV projects</b>
<b>TOTAL</b>	790	263	39	34	5
<b>Africa</b>	574	174	19	16	3
<b>Asia</b>	206	82	20	18	2
<b>Latin America (Haiti)</b>	10	7	0	0	0

On a LDC level, about 15 percent of the negative sustainability ICR documents (39 out of 263) expose a positive NPV. The highest share (34 projects) can be found in the “Unlikely” sustainability rating. Interestingly, the share as well as the absolute number of the negative sustainability ratings of the positive NPV projects in Asia (40 percent (20 out of 50 projects)) is higher than that in Africa (18 percent (19 out of 104 projects)) although Africa counts more than double of the negative sustainability projects (174 projects compared to that of Asia with 82 negative sustainability projects in total) as well as double of positive NPV projects (104 compared to that 50 positive NPV projects in Asia). This outcome basically underlines the results of the previous chapter: Asian projects are generally more affected by any risk type negatively influencing the future maintenance of project outcomes than African projects, whereat this effect appears to be even stronger for positive NPV projects.

The following table compares the overall outcome amongst the LDCs’ projects with the evaluated risk types in relationship to the percentage of negative sustainability projects containing a positive NPV:

Table 16. Results of negative sustainability projects with a positive NPV

<b>Category</b>	<b>% of Projects</b>	<b>% of positive NPV Projects</b>
<b>Macroeconomic / Country Risks</b>	<b>27.4</b>	<b>17.9</b>
<b>Governmental Risks</b>	<b>44.9</b>	<b>30.8</b>
Government Commitment Risks	27.4	20.5
Government Action / Task Risks	22.4	17.9
Government Capacity Risks	10.6	7.7
<b>Political Risks</b>	<b>20.2</b>	<b>15.4</b>
<b>Security Risks</b>	<b>28.1</b>	<b>25.6</b>
Natural Disasters / Environmental Risks	6.8	7.7
War / Conflict Risks	23.2	17.9
Epidemic Risks	0.8	-
Thirst & Hunger	0.8	-
<b>Corruption</b>	<b>21.6</b>	<b>2.6</b>

<b>Fiduciary Risks</b>	<b>54.8</b>	<b>61.5</b>
Funding / Donor Risks	54.4	56.4
Payment Risks	4.6	10.3
<b>Implementation Capacity / Institutional Risks</b>	<b>50.6</b>	<b>56.4</b>
<b>Infrastructure Risks</b>	<b>8.7</b>	<b>20.5</b>
<b>Project Risks</b>	<b>48.3</b>	<b>51.3</b>
PDO Risks	27	28.2
Implementation Agency Risks	19.8	20.5
Bank Risks	1.9	2.6
Technical Risks	11.4	10.3
Other Project Risks	19	20.5

The largest variance relates to corruption and shows that negative sustainability projects with a positive NPV are 19 percent less affected than the total of negative sustainability projects and thus only show a negligible effect of 2.6 percent in total. Furthermore, negative sustainability projects with a positive NPV are approx. 15 percent less affected by governmental risks. On the other hand negative sustainability projects with a positive NPV seem to be more affected by infrastructure risks at 20.5 percent compared to 8.7 percent of the total of negative sustainability projects. Aside from this, there are 2 more noteworthy variances with less than 10 percent difference: On the one hand negative sustainability projects with a positive NPV are 9.5 percent less affected by macroeconomic risks but roughly 7 percent more affected by fiduciary risks than the total of negative sustainability projects.

#### 4.4 Summary

Fiduciary was the primary risk relating to 54.8 percent of the negative sustainability projects, representing roughly 20 percent of all WB projects researched in the context of the LDCs. These were followed by the implementation capacity risks, and thereafter, by project specific risks. Corruption was the single type of risk which affected the least number of projects, followed by infrastructure and political risks.

Comparing the risk types of the Asian and the African continents showed various differences. In general, Asian projects were more often affected by any type of risk. When directly compared, the main 2 differences between the continents were found in the governmental and security risk types. For both risk types, negative sustainability projects in Asia showed 15 or more %-points. An explanation for the governmental differences could be the higher occurrence of other risks causing governments to be overwhelmed and therefore ineffective. The differences in the security risk type found in Afghanistan are due to the fact that the country has been in a war situation for several years.

When controlling for project types the major variance was found in the health-related project types. In this context, fiduciary risks showed to be the only noticeable difference affecting 75 percent of the negative sustainability health-related projects in Africa, whereat no noteworthy detection for Asia was found. Furthermore, it was concluded that – based on the research conducted – no other significant relationship was found amongst the minor differences within the continental project types and their associated risk types.

The excursus on the negative sustainability projects outlining a positive NPV showed that those projects are in principle not affected by corruption which was 19 percent lower comparing to that of the total of negative sustainability projects (refer to *chapter 4.3 Excursus: Positive NPV Projects*). Furthermore, negative sustainability projects with a positive NPV were also approx. 15 percent less affected by governmental risks, whereat on the other hand they seemed to be more affected by infrastructure risks at 20.5 percent comparing to 8.7 percent of the total of negative sustainability projects.

## 5. Conclusion and Outlook

To ensure a higher sustainability after project completion and to cope for the discovered risks and their respective underlying factors various recommendations need to be considered. With fiduciary being the major risk affecting sustainability, this paper is in line with the generally stated need that far more aid assistance from

rich countries as well as debt forgiveness and better trade terms are needed. Looking at implementation capacity as the second major risk to sustainability, donor countries and their respective development aid institutions need to ensure access to new and appropriate technologies to the LDCs. There is as well a need to provide more guidance, support and training to the respective implementation agencies and the staff on the ground. In regards to governmental risks the UN needs to get a better understanding of how to provide a more adequate assistance to support the governmental processes and tasks, such as the establishment of regulatory rules and laws, project prioritization, money distribution, and community support. With respect to security risks it is difficult to make a judgment. As outlined earlier, war and conflicts are actually “burning” money, since governmental priorities for allocating donor aid change dramatically. Especially in such conflict-environments, help and support of external sources is more than ever required to stabilize the situation within the country. Therefore, the WB might need to establish a framework which allows prioritizing, transferring and handling development aid better within the context of war- and conflict-affected countries. A start could be the re-evaluation of the country’s PRS together with the government itself.

To gain further insights why certain projects have a negative overall project rating, the bank as well as the borrower performance will need to be researched further.

## Appendixes

### Appendix A<sup>60</sup>

Millennium Development Goals	
Goals and Targets (from the Millennium Declaration)	Indicators for monitoring progress
Goal 1: Eradicate extreme poverty and hunger	
Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	1.1 Proportion of population below \$1 per day
	1.2 Poverty gap ratio
	1.3 Share of poorest quintile in national consumption
Target 1.B: Achieve full and productive employment and decent work for all, including women and young people	1.4 Growth rate of GDP per person employed
	1.5 Employment-to-population ratio
	1.6 Proportion of employed people living below \$1 per day
Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	1.7 Proportion of own-account and contributing family workers in total employment
	1.8 Prevalence of underweight children under-five years of age
Goal 2: Achieve universal primary education	1.9 Proportion of population below minimum level of dietary energy consumption
Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	2.1 Net enrolment ratio in primary education
	2.2 Proportion of pupils starting grade 1 who reach last grade of primary
	2.3 Literacy rate of 15-24 year-olds, women and men
Goal 3: Promote gender equality and empower women	
Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	3.1 Ratios of girls to boys in primary, secondary and tertiary education
	3.2 Share of women in wage employment in the non-agricultural sector
	3.3 Proportion of seats held by women in national parliament
Goal 4: Reduce child mortality	
Target 4.A: Reduce by two-thirds, between 1990 and	4.1 Under-five mortality rate

<sup>60</sup> Source: Millennium Development Goals Indicators – The Official United Nations Site for the MDG Indicators (2011).

2015, the under-five mortality rate	4.2 Infant mortality rate 4.3 Proportion of 1 year-old children immunized against measles
Goal 5: Improve maternal health	
Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	5.1 Maternal mortality ratio 5.2 Proportion of births attended by skilled health personnel
Target 5.B: Achieve, by 2015, universal access to reproductive health	5.3 Contraceptive prevalence rate 5.4 Adolescent birth rate 5.5 Antenatal care coverage (at least one visit and at least four visits) 5.6 Unmet need for family planning
Goal 6: Combat HIV/AIDS, malaria and other diseases	
Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	6.1 HIV prevalence among population aged 15-24 years 6.2 Condom use at last high-risk sex 6.3 Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS 6.4 Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years
Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it	6.5 Proportion of population with advanced HIV infection with access to antiretroviral drugs
Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	6.6 Incidence and death rates associated with malaria 6.7 Proportion of children under 5 sleeping under insecticide-treated bednets 6.8 Proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs 6.9 Incidence, prevalence and death rates associated with tuberculosis 6.10 Proportion of tuberculosis cases detected and cured under directly observed treatment short course
Goal 7: Ensure environmental sustainability	
Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss	7.1 Proportion of land area covered by forest 7.2 CO <sub>2</sub> emissions, total, per capita and per \$1 GDP 7.3 Consumption of ozone-depleting substances 7.4 Proportion of fish stocks within safe biological limits 7.5 Proportion of total water resources used 7.6 Proportion of terrestrial and marine areas protected 7.7 Proportion of species threatened with extinction
Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	7.8 Proportion of population using an improved drinking water source 7.9 Proportion of population using an improved sanitation facility
Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	7.10 Proportion of urban population living in slums
Goal 8: Develop a global partnership for development	



Some of the indicators listed below are monitored separately for the least developed countries (LDCs), Africa, landlocked developing countries and small island developing States.	
Target 8.A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system  Includes a commitment to good governance, development and poverty reduction – both nationally and internationally	<u>Official development assistance (ODA)</u> 8.1 Net ODA, total and to the least developed countries, as percentage of OECD/DAC donors' gross national income 8.2 Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation) 8.3 Proportion of bilateral official development assistance of OECD/DAC donors that is untied 8.4 ODA received in landlocked developing countries as a proportion of their gross national incomes 8.5 ODA received in small island developing States as a proportion of their gross national incomes
Target 8.B: Address the special needs of the least developed countries  Includes: tariff and quota free access for the least developed countries' exports; enhanced programme of debt relief for heavily indebted poor countries (HIPC) and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction	<u>Market access</u> 8.6 Proportion of total developed country imports (by value and excluding arms) from developing countries and least developed countries, admitted free of duty 8.7 Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries 8.8 Agricultural support estimate for OECD countries as a percentage of their gross domestic product 8.9 Proportion of ODA provided to help build trade capacity
Target 8.C: Address the special needs of landlocked developing countries and small island developing States (through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the twenty-second special session of the General Assembly)	<u>Debt sustainability</u> 8.10 Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative) 8.11 Debt relief committed under HIPC and MDRI Initiatives 8.12 Debt service as a percentage of exports of goods and services
Target 8.D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	
Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries	8.13 Proportion of population with access to affordable essential drugs on a sustainable basis
Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	8.14 Telephone lines per 100 population 8.15 Cellular subscribers per 100 population 8.16 Internet users per 100 population

## Appendix B<sup>61</sup>

### UN list of the Least Developed Countries (LDCs)

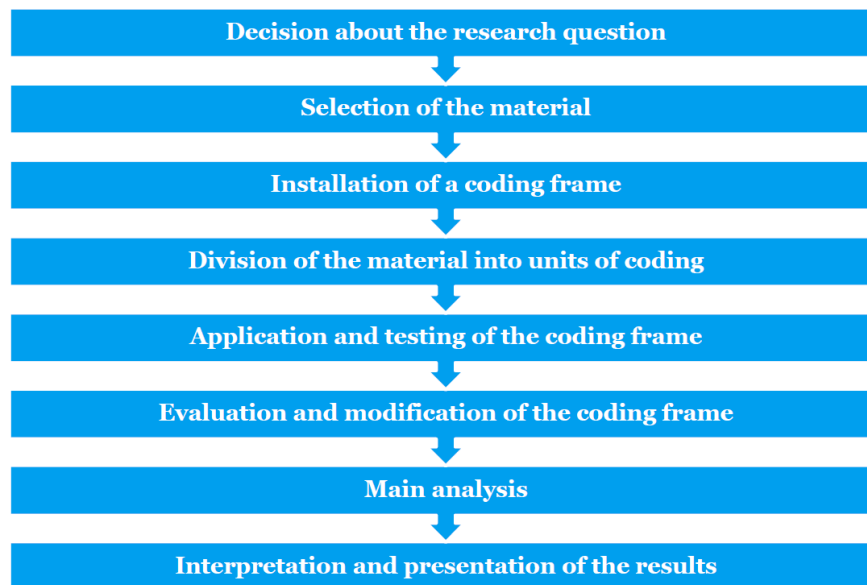
Count	Africa	Asia	Latin America
1	Angola	Afghanistan	Haiti
2	Benin	Bangladesh	

<sup>61</sup> Source: UNCTAD (2014): UN list of Least Developed Countries; Author's Note: South Sudan became a LDC in 2012.

3	Burkina Faso	Bhutan
4	Burundi	Cambodia
5	Central African Republic	East Timor
6	Chad	Kiribati
7	Comoros	Laos
8	Democratic Republic of the Congo	Myanmar
9	Djibouti	Nepal
10	Equatorial Guinea	Samoa
11	Eritrea	Solomon Islands
12	Ethiopia	Tuvalu
13	Gambia	Vanuatu
14	Guinea	Yemen
15	Guinea-Bissau	
16	Lesotho	
17	Liberia	
18	Madagascar	
19	Malawi	
20	Mali	
21	Mauritania	
22	Mozambique	
23	Niger	
24	Rwanda	
25	São Tomé and Príncipe	
26	Senegal	
27	Sierra Leone	
28	Somalia	
29	Sudan	
30	South Sudan	
31	Togo	
32	Tanzania	
33	Uganda	
34	Zambia	

## Appendix C<sup>62</sup>

### Process of Execution of the Content Analysis



## Appendix D<sup>63</sup>

### Appropriate Codes for the most common Types of Reasons

Fiduciary Risks	<ul style="list-style-type: none"> <li>▪ "fiduciary accountability of the country/project remains fragile"</li> <li>▪ "missing funds for project future support"</li> <li>▪ "reliance on external donor funding"</li> </ul>
Implementation Capacity / Institutional Risks	<ul style="list-style-type: none"> <li>▪ "high turn-over of staff will remain a problem for the national HIV/AIDS response"</li> <li>▪ "missing availability of trained resources"</li> <li>▪ "missing consistent implementation of current tariff policy"</li> </ul>
Project Risks	<ul style="list-style-type: none"> <li>▪ "demand for project outcome is far beyond its capacity"</li> <li>▪ "missing a follow-up project"</li> <li>▪ "lack of improvement by the project"</li> </ul>
Governmental Risks	<ul style="list-style-type: none"> <li>▪ "missing overall rural infrastructure strategy of the government"</li> <li>▪ "missing Government commitment to liberalize the transport sector"</li> <li>▪ "government missed to ensure resource replacement of project staff by project closing"</li> </ul>
Security Risks	<ul style="list-style-type: none"> <li>▪ "natural disasters including earthquakes, hurricanes and floods"</li> <li>▪ "existing armed conflicts are still going on"</li> <li>▪ "remaining escalation of the insurgency is one of the major risks"</li> </ul>
Macroeconomic / Country Risks	<ul style="list-style-type: none"> <li>▪ "existing global economic challenges"</li> <li>▪ "high current debt level of the country"</li> <li>▪ "the global Financial crisis has negatively affected the country as a whole"</li> </ul>

## Appendix E

### Reasons for "Unlikely" and "Highly Unlikely" Sustainability across all LDCs

Category	% of Projects
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<sup>62</sup> Source: Hausmann/Rudolph (2014), s. 8.

<sup>63</sup> Source: Own illustration.

	<i>Unlikely</i>	<i>Highly Unlikely</i>
<b>Macroeconomic / Country Risks</b>	<b>28.3</b>	<b>25.5</b>
<b>Governmental Risks</b>	<b>46.2</b>	<b>66.7</b>
Government Commitment Risks	27.4	35.3
Government Action / Task Risks	21.2	29.4
Government Capacity Risks	9	17.6
<b>Political Risks</b>	<b>21.2</b>	<b>21.6</b>
<b>Security Risks</b>	<b>25.5</b>	<b>47.1</b>
Natural Disasters / Environmental Risks	5.2	15.7
War / Conflict Risks	21.2	33.3
Epidemic Risks	0.5	2
Thirst & Hunger	0.9	-
<b>Corruption</b>	<b>3.8</b>	<b>5.9</b>
<b>Fiduciary Risks</b>	<b>63.2</b>	<b>52.9</b>
Funding / Donor Risks	62.7	47.1
Payment Risks	3.8	9.8
<b>Implementation Capacity / Institutional Risks</b>	<b>54.7</b>	<b>70.6</b>
<b>Infrastructure Risks</b>	<b>7.1</b>	<b>15.7</b>
<b>Project Risks</b>	<b>53.8</b>	<b>64.7</b>
PDO Risks	27.8	37.3
Implementation Agency Risks	20.3	21.6
Bank Risks	2.4	-
Technical Risks	12.3	13.7
Other Project Risks	20.8	19.6

This table shows the reasons for “Unlikely” and “Highly Unlikely” sustainability ratings across all LDCs.

## Appendix F

### Project Type Category Mapping of the Negative Sustainability Projects of the LDCs

Category Mapping	LDCs
	%-Share
<b>Water &amp; Sanitation</b>	5.85
Water Supply	3.93
General water, sanitation and flood protection sector	1.01
Sanitation	0.72
Sewerage	0.19
<b>Power</b>	7.24
Power	4.99
General Energy Sector	0.43

Renewable Energy	0.28
Hydro	0.19
Other Power & Energy Conversion	0.19
Energy efficiency in Power Sector	0.01
Oil and gas	0.75
Oil & Gas Exploration & Development	0.38
District heating and energy efficiency services	0.02
<b>Transportation Development</b>	<b>10.98</b>
Roads and highways	4.54
Railways	1.28
Urban Environment	0.38
Other Urban Development	0.38
Urban Management	0.57
Ports, waterways and shipping	0.4
General Transportation Sector	0.93
Public Administration - Transportation	0.08
Other Transportation	0.38
Transportation Adjustment	1.21
Oil & Gas Transportation	0.75
Aviation	0.08
<b>Education</b>	<b>8.1</b>
(Pre-)Primary education	3.51
General Education Sector	1.54
Vocational training	1.27
Tertiary education	0.97
Secondary education	0.47
Adult Literacy/non-formal education	0.34
<b>Financial Development</b>	<b>4.17</b>
Banking	1.12
General finance sector	0.67
Micro- and SME finance	0.32
Housing finance and real estate markets	0.09
Social Funds & Social Assistance	0.19
Public Financial Management	0.19
Reform and financing	0.38
Financial Sector Development	1.21
<b>IT &amp; Communication</b>	<b>1.16</b>
General information and communications sector	0.43
Telecommunications	0.69
Media	0.04
<b>Health</b>	<b>12.41</b>
Health	10.83

Population, Health & Nutrition Adjustment	0.07
Non-compulsory health finance	0.01
Compulsory health finance	0.01
Non-compulsory health finance	1.18
Compulsory health finance	0.31
<b>Governmental Administration</b>	<b>22.87</b>
Central Government Administration	20.35
Sub-national Government Administration	2.52
<b>Agriculture</b>	<b>8.52</b>
Agricultural Extension and Research	3
Agricultural Marketing and Trade	1.64
General agriculture, fishing and forestry sector	1.51
Other Agriculture	0.07
Crops	0.98
Irrigation and drainage	2.52
Forestry	1.32
Petrochemicals and fertilizers	0.3
Agro-Industry	0.18
<b>Sectorial Development &amp; Reform</b>	<b>8.06</b>
General Public Administration Sector	3.43
General industry and trade sector	1.99
Law and justice	1.66
Institutional Development	0.38
Agency reform	0.35
Other domestic and international trade	0.25
<b>Other</b>	<b>9.38</b>
Other social services	6.22
Other industry	0.38
Flood protection	0.15
Animal production	0.44
Solid waste management	0.03
Postal services	0.19
Fisheries & Aquaculture	0.19
Economic management	0.19
Compulsory pension and unemployment insurance	0.27
Research	0.12
Non-compulsory pensions and insurance	0.4
Other economic	0.38
Macro/Non-Trade	0.38
Housing construction	0.04
<b>Natural Resources</b>	<b>1.26</b>
Mining and other extractive	0.88

Natural Resources Management

0.38

This illustration shows the outcome of the sector codes mapped to project type categories. For each of the sector codes respectively project types the %-share based on the corresponding %-points is given.

## Appendix G

### Negative Sustainability Projects with matching Sector Codes

Number of Projects sharing the same Sector Code	Project Report Numbers	Shared Sector Codes
11	25705; 29215; ICR1458; 36329; ICR1489; 32710; ICR1536; ICR352; ICR1688; ICR2074; ICR1374	<ul style="list-style-type: none"> <li>Central government administration</li> </ul>
8	26250; 35610; 28022; 30277; 27387; ICR769; 32159; ICR1298	<ul style="list-style-type: none"> <li>Central government administration</li> <li>Health</li> </ul>
8	34153; ICR72; ICR1045; ICR1187; ICR1325; ICR604; ICR1324; ICR1984	<ul style="list-style-type: none"> <li>Central government administration</li> <li>Sub-national government administration</li> </ul>
7	26251; ICR158; ICR1131; ICR1497; ICR2023; ICR2146; ICR1275	<ul style="list-style-type: none"> <li>Other social services</li> <li>Health</li> <li>Central government administration</li> <li>Sub-national government administration</li> </ul>
4	25102; ICR152; ICR785; ICR1143	<ul style="list-style-type: none"> <li>Power</li> </ul>
3	27570; ICR2037; ICR1014	<ul style="list-style-type: none"> <li>Central government administration</li> <li>General industry and trade sector</li> </ul>
2	36464; ICR8	<ul style="list-style-type: none"> <li>Sub-national government administration</li> <li>Central government administration</li> <li>Other social services</li> </ul>
2	ICR992; ICR1716	<ul style="list-style-type: none"> <li>Central government administration</li> <li>Crops</li> <li>General industry and trade sector</li> </ul>
2	25283; ICR1415	<ul style="list-style-type: none"> <li>Agricultural extension and research</li> <li>Central government administration</li> <li>Agricultural marketing and trade</li> </ul>
2	ICR2056; ICR1129	<ul style="list-style-type: none"> <li>Health</li> <li>Other social services</li> <li>Sub-national government administration</li> </ul>
2	ICR1432; 26249	<ul style="list-style-type: none"> <li>Health</li> <li>Other social services</li> <li>Primary education</li> <li>Roads and highways</li> </ul>
2	26510; 25247	<ul style="list-style-type: none"> <li>Water supply</li> <li>Sewerage</li> <li>Sanitation</li> </ul>
2	26745; ICR2152	<ul style="list-style-type: none"> <li>Power</li> <li>Oil and gas</li> <li>Central government administration</li> </ul>
2	ICR1779; ICR1365	<ul style="list-style-type: none"> <li>Sanitation</li> </ul>

		• Water supply
2	ICR134; 27527	• General public administration sector • Other social services
2	26930; 24252	• Roads and highways • Central government administration
2	22231; 25624	• Agricultural extension and research
2	20756; ICR1968	• Irrigation and drainage
2	22167; 22804	• Primary education
2	ICR2154; ICR1041	• Railways
2	22416; 21529	• Oil & Gas Transportation
2	37359; ICR666	• General public administration sector
2	ICR2421; ICR1200	• Law and justice

This table shows the result of any negative sustainability projects within the LDCs with common sector codes. It needs to be noted that only where there is only 1 sector code available the % -points for this sector code are the same for the projects sharing this sector code (namely 1 % -point).

## Appendix H

### Reasons for “Unlikely” and “Highly Unlikely” Sustainability in Haiti

Category	% of Projects	
	<i>Unlikely</i>	<i>Highly Unlikely</i>
<b>Macroeconomic / Country Risks</b>	<b>33.3</b>	<b>75</b>
<b>Governmental Risks</b>	<b>66.7</b>	<b>25</b>
Government Commitment Risks	66.7	25
Government Action / Task Risks	33.3	25
Government Capacity Risks	-	-
<b>Political Risks</b>	<b>66.7</b>	<b>75</b>
<b>Security Risks</b>	<b>-</b>	<b>75</b>
Natural Disasters / Environmental Risks	-	75
War / Conflict Risks	-	-
Epidemic Risks	-	-
Thirst & Hunger	-	-
<b>Corruption</b>	<b>-</b>	<b>-</b>
<b>Fiduciary Risks</b>	<b>66.7</b>	<b>25</b>
Funding / Donor Risks	66.7	25
Payment Risks	-	-
<b>Implementation Capacity / Institutional Risks</b>	<b>33.3</b>	<b>100</b>
<b>Infrastructure Risks</b>	<b>-</b>	<b>-</b>
<b>Project Risks</b>	<b>-</b>	<b>25</b>
PDO Risks	-	-
Implementation Agency Risks	-	-



Bank Risks	-	-
Technical Risks	-	-
Other Project Risks	-	25

This table shows the reasons for “Unlikely” and “Highly Unlikely” sustainability ratings based on 3 respectively 4 projects.

## Appendix I

### Reasons for “Unlikely” and “Highly Unlikely” Sustainability in Africa

Category	% of Projects	
	<i>Unlikely</i>	<i>Highly Unlikely</i>
<b>Macroeconomic / Country Risks</b>	<b>30.3</b>	<b>27.6</b>
<b>Governmental Risks</b>	<b>44.1</b>	<b>65.5</b>
Government Commitment Risks	24.8	37.9
Government Action / Task Risks	20.7	20.7
Government Capacity Risks	7.6	6.9
<b>Political Risks</b>	<b>19.3</b>	<b>17.2</b>
<b>Security Risks</b>	<b>21.4</b>	<b>34.5</b>
Natural Disasters / Environmental Risks	5.5	10.3
War / Conflict Risks	16.5	27.6
Epidemic Risks	-	3.4
Thirst & Hunger	1.4	-
<b>Corruption</b>	<b>1.4</b>	<b>-</b>
<b>Fiduciary Risks</b>	<b>68.3</b>	<b>55.2</b>
Funding / Donor Risks	68.3	55.2
Payment Risks	3.4	6.9
<b>Implementation Capacity / Institutional Risks</b>	<b>53.1</b>	<b>65.5</b>
<b>Infrastructure Risks</b>	<b>4.8</b>	<b>17.2</b>
<b>Project Risks</b>	<b>52.4</b>	<b>65.5</b>
PDO Risks	27.6	37.9
Implementation Agency Risks	17.2	27.6
Bank Risks	2.1	-
Technical Risks	11	13.8
Other Project Risks	20.7	20.7

This table shows the reasons for “Unlikely” and “Highly Unlikely” sustainability ratings in Africa.

## Appendix J

### Reasons for “Unlikely” and “Highly Unlikely” Sustainability in Asia

Category	% of Projects	
	<i>Unlikely</i>	<i>Highly Unlikely</i>

<b>Macroeconomic / Country Risks</b>	<b>23.4</b>	<b>11.1</b>
<b>Governmental Risks</b>	<b>50</b>	<b>77.8</b>
Government Commitment Risks	31.3	33.3
Government Action / Task Risks	21.9	44.4
Government Capacity Risks	12.5	38.9
<b>Political Risks</b>	<b>23.4</b>	<b>16.7</b>
<b>Security Risks</b>	<b>35.9</b>	<b>61.1</b>
Natural Disasters / Environmental Risks	4.7	11.1
War / Conflict Risks	32.8	50
Epidemic Risks	1.6	-
Thirst & Hunger	-	-
<b>Corruption</b>	<b>9.4</b>	<b>16.7</b>
<b>Fiduciary Risks</b>	<b>51.6</b>	<b>55.6</b>
Funding / Donor Risks	50	38.9
Payment Risks	4.7	16.7
<b>Implementation Capacity / Institutional Risks</b>	<b>59.4</b>	<b>72.2</b>
<b>Infrastructure Risks</b>	<b>12.5</b>	<b>16.7</b>
<b>Project Risks</b>	<b>59.4</b>	<b>72.2</b>
PDO Risks	29.7	44.4
Implementation Agency Risks	28.1	16.7
Bank Risks	3.1	-
Technical Risks	15.6	16.7
Other Project Risks	21.9	16.7

This table shows the reasons for “Unlikely” and “Highly Unlikely” sustainability ratings in Asia.

## Appendix K

### Project Type Category Mapping of the Negative Sustainability Projects of Africa and Asia

Category Mapping	Africa	Asia
	%-Share	%-Share
<b>Water &amp; Sanitation</b>	3.72	10.38
• Water Supply	2.27	7.43
• General water, sanitation and flood protection sector	0.87	1.32
• Sanitation	0.52	1.16
• Sewerage	0.06	0.47
<b>Power</b>	8.19	5.33
• Power	5.32	4.72
• General Energy Sector	0.57	-
• Renewable Energy	0.27	0.25
• Hydro	0.26	-

• Other Power & Energy Conversion	0.26	-
• Energy efficiency in Power Sector	0.01	-
• Oil and gas	0.94	0.36
• Oil & Gas Exploration & Development	0.54	-
• District heating and energy efficiency services	0.02	-
<b>Transportation Development</b>	<b>8.41</b>	<b>11.23</b>
• Roads and highways	3.7	5.59
• Railways	1.34	1.21
• Urban Environment	0.54	-
• Other Urban Development	0.54	-
• Urban Management	0.54	-
• Ports, waterways and shipping	0.01	1.22
• General Transportation Sector	0.66	0.31
• Public Administration- Transportation	-	0.24
• Other Transportation	-	1.21
• Transportation Adjustment	0.54	-
• Oil & Gas Transportation	0.54	1.21
• Aviation	-	0.24
<b>Education</b>	<b>9.09</b>	<b>6.47</b>
• Primary education	4.13	2.33
• General Education Sector	1.73	1.22
• Vocational training	1.84	0.12
• Tertiary education	1	0.92
• Secondary education	0.36	0.8
• Adult Literacy/non-formal education	-	1.08
<b>Financial Development</b>	<b>1.75</b>	<b>5.03</b>
• Banking	0.47	2.53
• General finance sector	0.33	0.18
• Micro- and SME finance	0.35	0.05
• Housing finance and real estate markets	0.08	0.05
• Social Funds & Social Assistance	0.26	-
• Public Financial Management	0.26	-
• Reform and financing	-	1.21
• Financial Sector Development	-	1.21
<b>IT &amp; Communication</b>	<b>0.82</b>	<b>1.86</b>
• General information and communications sector	0.41	0.45
• Telecommunications	0.41	1.29
• Media	-	0.12
<b>Health</b>	<b>14.46</b>	<b>5.25</b>
• Health	13.89	4.14
• Population, Health & Nutrition Adjustment	0.16	-
• Non-compulsory health finance	0.02	-

• Compulsory health finance	0.01	-
• Non-compulsory health finance	0.02	1.21
• Compulsory health finance	0.36	-
<b>Governmental Administration</b>	24.56	22.71
• Central Government Administration	18.97	21.68
• Sub-national Government Administration	3.38	1.03
<b>Agriculture</b>	12.01	11.83
• Agricultural Extension and Research	3.29	2.29
• Agricultural Marketing and Trade	2.17	0.64
• General agriculture, fishing and forestry sector	1.51	1.73
• Other Agriculture	0.3	-
• Crops	1.5	0.06
• Irrigation and drainage	2.36	5.31
• Forestry	1	1.8
• Petrochemicals and fertilizers	0.5	-
• Agro-Industry	0.38	-
<b>Sectorial Development &amp; Reform</b>	5.99	12.71
• General Public Administration Sector	2.18	6.31
• General industry and trade sector	1.82	2.45
• Law and justice	0.61	3.96
• Institutional Development	0.54	-
• Agency reform	0.49	-
• Other domestic and international trade	0.35	-
<b>Other</b>	9.61	6.44
• Other social services	7.8	2.77
• Other industry	-	0.15
• Flood protection	0.11	0.18
• Animal production	0.52	0.29
• Solid waste management	0.01	0.12
• Postal services	0.26	-
• Fisheries & Aquaculture	0.26	-
• Economic management	0.26	-
• Compulsory pension and unemployment insurance	0.2	-
• Research	0.16	0.51
• Non-compulsory pensions and insurance	0.03	-
• Other economic	-	1.21
• Macro/Non-Trade	1.21	1.21
<b>Natural Resources</b>	1.39	0.76
• Mining and other extractive	1.13	0.16
• Natural Resources Management	0.26	0.6

This illustration shows the outcome of the sector codes mapped to project type categories. For each of the sector codes respectively project types the %-share based on the corresponding %-points is given.

## Appendix L

**Risk Percentage Outcome of African ‘Health’ related Projects**

Category	Africa	
	% of Projects	% of Health Projects
<b>Macroeconomic / Country Risks</b>	29.9	29.7
<b>Governmental Risks</b>	42.5	42.6
<b>Political Risks</b>	17.8	18.5
<b>Security Risks</b>	23	25.9
<b>Corruption</b>	1.1	1.9
<b>Fiduciary Risks</b>	60.3	74.1
<b>Implementation Capacity / Institutional Risks</b>	49.4	57.4
<b>Infrastructure Risks</b>	6.9	3.7
<b>Project Risks</b>	50	50

This table shows a comparison of risk types and their corresponding percentage of distribution over all African negative sustainability projects (“% of Projects” with relationship to 174 total projects) and specific African health-related projects (“% of Health Projects” with relationship to 54 projects). Fiduciary risks do affect roughly about 75 percent of all health related projects in Africa – which is 15 percent more than compared to all negative sustainability projects in Africa – and thus mainly contributes to the higher percentage in the African country. Following this, there is a slight increase of variance amongst the implementation capacity/ institutional risks. Other than that there are no noteworthy differences.

## References

- Ahrens, H. (2005). *Development Cooperation – Evaluation and New Approaches*. Schriften des Vereins für Sozialpolitik, Band 308. Duncker and Humblot GmbH, Berlin (Germany) 2005. <http://dx.doi.org/10.3790/978-3-428-51867-8>
- Besley, T., & Burgess, R. (2003). *Halving Global Poverty*. Retrieved June 4, 2011, from <http://econ.lse.ac.uk/staff/rburgess/wp/jep11.pdf>
- BusinessDictionary. (2014). *Economic Rate of Return*. Retrieved March 7, 2014, from <http://www.businessdictionary.com/definition/economic-rate-of-return-ERR.html>
- Calderisi, R. (2006). *The Trouble with Africa. Why Foreign Aid isn't working*. Palgrave Macmillan, New York (USA).
- Collier, P. (2008). *The Bottom Billion – Why the Poorest Countries Are Failing & What Can Be Done About It*. Oxford University Press Inc., New York (USA).
- Easterly, W. (2006). *The White Man's Burden – Why the West's Efforts to Aid the Rest have done so much Ill and so little Good*. Oxford University Press Inc., New York (USA).
- Hausmann, M., & Rudolph, K. (2014). *Qualitative Data Analysis – Content Analysis*. Presentation at HHL – Leipzig Graduate School of Management, Leipzig (Germany) 2014.
- Köhler, G., Gore, C., Reich, U.-P., & Ziesemer, T. (1996). *Questioning Development – Essays in the theory, policies and practice of development interventions*. Metropolis-Verlag, Marburg (Germany).
- Krippendorff, K. (2004). *Content Analysis: An Introduction to Its Methodology* (2nd ed). Sage Publications, Inc., Thousand Oaks, California, USA.
- Lexikon der Nachhaltigkeit. (2013). Corporate Social Responsibility. Retrieved February 16, 2014, from [http://www.nachhaltigkeit.info/artikel/corporate\\_social\\_responsibility\\_unternehmerische\\_1499.htm](http://www.nachhaltigkeit.info/artikel/corporate_social_responsibility_unternehmerische_1499.htm)

- Lexikon der Nachhaltigkeit. (2014). *Drei Säulen Modell*. Retrieved February 16, 2014, from [http://www.nachhaltigkeit.info/artikel/1\\_3\\_a\\_drei\\_saeulen\\_modell\\_1531.htm](http://www.nachhaltigkeit.info/artikel/1_3_a_drei_saeulen_modell_1531.htm)
- Lomborg, B. (2009). *Global Crises, Global Solutions* (2nd ed.). Cambridge University Press, Cambridge (UK). <http://dx.doi.org/10.1017/CBO9780511807633>
- Lopez, J. H. (2004). *Pro-growth, pro-poor: Is there a trade-off? Paper prepared in the context of the "Pro-poor Growth" program sponsored by the World Bank's PREM Poverty Group*. Retrieved June 3, 2011, from [http://siteresources.worldbank.org/INTPGI/Resources/15040\\_WBSWP3378.pdf](http://siteresources.worldbank.org/INTPGI/Resources/15040_WBSWP3378.pdf)
- Mayring, P. A. E. (2008). *Qualitative Inhaltsanalyse: Grundlagen und Techniken*, Beltz Pädagogik, Weinheim 1983, 9. Auflage, Beltz, UTB, Weinheim 2003, Germany.
- Millennium Development Goals Indicators – The Official United Nations Site for the MDG Indicators (2011). Retrieved June 8, 2011, from <http://unstats.un.org/unsd/mdg/Host.aspx?Content=Indicators/OfficialList.htm>
- Moyo, D. (2009). *Dead Aid – Why Aid is not working and how there is another way for Africa*. Penguin Books Ltd., London (England).
- Projektmagazin. (2014). *Net Present Value*. Retrieved March 7, 2014, from <https://www.projektmagazin.de/glossarterm/net-present-value>
- Sachs, J. D. (2005). *The End of Poverty – Economic Possibilities for Our Time*. Penguin Press, a member of Penguin Group Inc., USA 2008.
- Schabbel, C. (2007). *The Value Chain of Foreign Aid – Development, Poverty Reduction, and Regional Conditions*. Physica-Verlag, Heidelberg (Germany).
- UNCTAD. (2014). *UN list of Least Developed Countries*. Retrieved February 13, 2011, from <http://unctad.org/en/pages/aldc/Least%20Developed%20Countries/UN-list-of-Least-Developed-Countries.aspx>
- United Nations Development Programme. (2011). *Millennium Development Goals*. Retrieved June 4, 2011, from <http://www.undp.org/mdg/basics.shtml>
- United Nations Development Programme. (2011). *The 2010 MDG Summit Outcome*. Retrieved June 23, 2011, from <http://www.undp.org/mdg/summit.shtml>
- Wolff, J. H. (2005). *Entwicklungshilfe: Ein hilfreiches Gewerbe? Versuch einer Bilanz*. LIT Verlag Münster, Münster (Germany).
- World Bank. (2006). *ICR Cambodia 38161*. Retrieved February 14, 2014, from [http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2007/01/16/000020953\\_20070116104952/Rendered/PDF/38161.pdf](http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2007/01/16/000020953_20070116104952/Rendered/PDF/38161.pdf)
- World Bank. (2010). *Harmonize Evaluation Criteria*. Retrieved February 14, 2014, from <http://ieg.worldbankgroup.org/Data/HarmonizeEvalCriteria.pdf>
- World Bank. (2012). *Country/Area Documents & Reports*. Retrieved September 4, 2012, from <http://documents.worldbank.org/curated/en/country>
- World Bank. (2013). *Guidelines for Reviewing World Bank Implementation Completion & Results Reports*. Retrieved February 15, 2014, from [https://ieg.worldbankgroup.org/Data/reports/icr\\_manual.pdf](https://ieg.worldbankgroup.org/Data/reports/icr_manual.pdf)
- World Press. (2006). *Implementation Completion & Results Report – Guidelines*. Retrieved February 15, 2014, from [http://nvardmanasian.files.wordpress.com/2011/02/icrguidefinalaug\\_2006.pdf](http://nvardmanasian.files.wordpress.com/2011/02/icrguidefinalaug_2006.pdf)

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