

Who gets aid for the environment?

An analysis of global environmental aid allocation patterns

by

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Contents

Chapter 1. Introduction	1
1.1. Objectives and research questions	6
1.2. Rationale	8
1.3. Methodology	9
1.4. Delimitations and limitations	13
1.5. Structure of the thesis	14
Chapter 2. Literature review	17
2.1. Environment and development are interlinked	17
2.2. The conflict of North-South environmental priorities	18
2.3. Global environmental aid allocation patterns	21
2.4. Environmental aid and traditional aid	24
2.5. Importance of environmental issues in developing countries	26
2.6. Obstacles to effective aid implementation	27
2.7. Multilateral and bilateral aid approaches	29
Chapter 3. Understanding of the term: aid for the environment	31
3.1. The definition challenges	31
3.2. Environmental aid trends	36
3.3. World Bank's understanding of environmental aid	42
3.4. The GEF's understanding of environmental aid	47
3.4.1. The GEF and World Bank linkage	50
3.5. UNDP's understanding of environmental aid	52
3.5.1. The UNDP and GEF linkage	54
3.6. Japan's understanding of environmental aid	58
3.7. American understanding of environmental aid	66
3.8. Denmark's understanding of environmental aid	68
3.9. Does the environment really matter to donors?	70
3.10. Conclusions : is environmental aid an ODA priority?	76
Chapter 4. Econometric methodology and statistical regression outputs for donors	79
4.1. Methodology	79
4.2. Regression outputs	84
4.3. Quality of regression outputs	87

Chapter 5. Is environmental aid for the environment?	90
5.1. Policy focus areas of environmental aid	91
5.1.1. Is the Bank green?	91
5.1.2. The GEF is not only for the environment	95
5.1.3. UNDP's environmental focus	98
5.1.4. Is Japan the "greenest" bilateral donor?	106
5.1.5. Is the US an environmental laggard?	112
5.1.6. Denmark : a model donor under question	116
5.2. The actual environmental focus areas of donors	120
5.3. Conclusion: is environmental aid for the environment?	125
Chapter 6. Economics and geopolitics in environmental aid	126
6.1. Is environmental aid driven by economic factors?	126
6.1.1. World Bank: a bank not driven by economics?	127
6.1.2. The GEF: hidden economic interests?	128
6.1.3. Are economies important for UNDP?	130
6.1.4. Japan's aid for the environment is linked to its economy	131
6.1.5. The US: a donor with no economic interests?	134
6.1.6. Is Denmark's environmental aid driven by its economy?	134
6.1.7. Conclusions: is environmental aid driven by economic variables?	136
6.2. Environmental aid and geographical distribution	137
6.2.1. Are multilaterals geographically indifferent?	137
6.2.2. Japan and geopolitical variables	143
6.2.3. Do regions matter for the US?	145
6.2.4. Denmark: aid recipient countries as part of a broader policy	150
6.2.5. Conclusion: how important are regions?	156
Chapter 7. Is environmental aid political?	158
7.1. The World Bank and politics	158
7.2. The GEF and politics	163
7.3. Is UNDP free from politics?	165
7.4. Just how political is Japan's aid?	166
7.5. The US: allocation does not confirm the political rhetoric	168
7.6. Denmark links environment and democracy	170
7.7. Conclusion: how political is environmental aid?	173

Chapter 8. Do poorer countries get more environmental aid?	175
8.1. The World Bank connects environment with poverty	176
8.2. The GEF : a green institution for the poor?	179
8.3. How important is poverty in UNDP's assistance for the environment?	180
8.4. JICA's aid : not only for the poor	182
8.5. Do the poor really matter for the US?	184
8.6. Denmark's assistance: indirectly for the poor?	186
8.7. Should the poor receive environmental assistance?	189
8.8. Conclusions	190
Chapter 9. Environmental aid in practice: case studies from Brazil and the Philippines	192
9.1. Are Brazil and the Philippines special cases?	193
9.2. Donors' national environmental policies reflect their global ones	196
9.3. Do donors enforce their policies on recipient governments?	200
9.4. Coordination among donors	213
9.5. How much does the environment matter?	218
9.6. Conclusion: recipient governments and global aid allocation patterns	229
Chapter 10. Conclusions	234
10.1. What is wrong with environmental aid?	234
10.2. The environment and poverty are interconnected	239
10.3. No distinction between multilateral and bilateral donors	240
10.4. Donors' policy coherency and aid volumes	241
10.5. Contributions and scope for further study	244
Bibliography	246

List of Figures

Figure 1. Environmental aid by form, 1995-2006.	32
Figure 2. Aid for environment by policy objective, 1995-2006.	35
Figure 3. Bilateral aid (DAC countries total), 1995-2006.	37
Figure 4. Multilateral aid, 1995-2006.	38
Figure 5. Danish, American and Japanese bilateral aid, 1995-2006.	39
Figure 6. Bilateral aid for general environment protection, 1995-2006.	40
Figure 7. Percentage of aid for the environment (bilateral and multilateral), 1995-2006.	42
Figure 8. IDA's environmental and total funds, 1995-2008.	45
Figure 9. World Bank's ENRM theme divided into sectors, 1995-2006.	47
Figure 10. GEF funds, 1991-2006.	49
Figure 11. World Bank's environmental aid by funding source, 2006.	52
Figure 12. UNDP expenditures, 2005.	53
Figure 13. UNDP expenditures, 2000-2002.	54
Figure 14. UNDP Philippines budget expenditures, 2004-2008.	55
Figure 15. UNDP Brazil's budget by funding source, 2008.	56
Figure 16. GEF funding by implementing partner, 1991-2007.	57
Figure 17. Japanese environmental aid as percentage of total aid, 1995-2006.	59
Figure 18. Percentage of environmental loans according to JICA, 1995-2006.	60
Figure 19. Japanese environmental aid by form, 1996-2006.	65
Figure 20. American environmental aid as percentage of total aid, 1995-2006.	68
Figure 21. Danish environmental aid as percentage of total aid, 1995-2006.	70
Figure 22. Average percentage of environmental aid for six donors, 1996-2006.	72
Figure 23. Average per capita expenditure for environmental aid, 1995-2006.	74
Figure 24. Methodology outline.	83
Figure 25. World Bank's aid for the environment by type (cumulative), 1995-2006.	93
Figure 26. World Bank's aid for the environment by sector, 1995-2008.	94
Figure 27. GEF's focal areas, 1991-2007.	97
Figure 28. Number of GEF focal projects as a percentage, 1991-2007.	98
Figure 29. Number of UNDP country offices engaged in environmental activities, 2004-2007.	101
Figure 30. UNDP's environment and energy budget, 2004-2007.	102
Figure 31. UNDP/GEF focus areas, 1991-2007.	104
Figure 32. SGP focus areas, 1992-2002.	106
Figure 33. The relationship between environmental vulnerability, water and national poverty line (in percentages).	108

Figure 34. Japanese environmental aid by sectors, 1995-2000.	109
Figure 35. Japanese environmental aid by type (cumulative), 1995-2006.	110
Figure 36. Bilateral aid for water and sanitation, 1990-2006.	111
Figure 37. Number of USAID country offices with environmental objectives, 1999.	115
Figure 38. American environmental aid by type (cumulative), 1995-2006.	115
Figure 39. Danish environmental aid by type (cumulative), 1995-2006.	119
Figure 40. Number of environmental variables present in regression outputs.	123
Figure 41. Bilateral aid for selected environmental sectors, 1995-2006.	124
Figure 42. Values of Japanese imports and exports, 1995-2006.	132
Figure 43. Values of imports of selected commodities to Japan, 1995-2005.	133
Figure 44. Regional distribution of the World Bank's aid for the environment (cumulative), 1995-2006.	138
Figure 45. Annual regional distribution of World Bank's aid for the environment, 1995-2008.	139
Figure 46. Regional distribution of GEF funds, 1997-2006.	140
Figure 47. Regional distribution of World Bank/GEF funds, 1996-2006.	141
Figure 48. Regional distribution of UNDP's environmental aid, 1999-2006.	142
Figure 49. Regional distribution of SGP, 1992-2002.	143
Figure 50. Japanese environmental aid by region, 1995-2006.	144
Figure 51. American environmental aid by region, 1995-2006.	146
Figure 52. American environmental aid by region (without Iraq), 1995-2006.	147
Figure 53. American environmental aid by region (without Iraq and Egypt), 1995-2006.	148
Figure 54. Funds for Program Countries as a percentage of environmental aid, 1995-2006.	152
Figure 55. Danish environmental aid by region, 1995-2006.	153
Figure 56. The relationship between corruption and water and sanitation access (in percentages).	161
Figure 57. Correlation of under \$2 a day poverty and water access.	179
Figure 58. The relationship between water and sanitation access and GNI per capita levels (in percentages).	186
Figure 59. Environmental aid to Brazil, 1995-2006.	201
Figure 60. Environmental aid to the Philippines, 1995-2006.	201
Figure 61. Reforested area in the Philippines, 1986-2006.	204
Figure 62. American and Japanese environmental aid to the Philippines and Brazil by channel (in percentages), 2008.	210
Figure 63. Growth of Non-DAC country donors, 1995-2008.	211
Figure 64. Donor concentration in the Filipino and Brazilian environmental sectors.	217
Figure 65. Average annual environmental aid to the Philippines and Brazil, 1991-2007.	219

Figure 66. Percentages of environmental aid in Brazil, Philippines and the global averages, 2000-2008.	219
Figure 67. Foreign assistance loans approved by sector in Brazil, 2009.	221
Figure 68. Foreign assistance grants approved by sector in Brazil, 2009.	222
Figure 69. Aid allocation to the Philippines by sector, 2001 and 2006.	225
Figure 70. ODA loans and grants in the Philippines by sector, 2007.	226
Figure 71. Number of IBAMA licensing personnel by type, 2002-2007.	229

List of Tables

Table 1. Agenda 21 prescriptions for needed aid with actual dose delivered.	4
Table 2. Donor aid commitment coverage in the OECD database.	14
Table 3. Comparison of OECD and JICA databases based on four sample countries.	61
Table 4. Japanese loans to India according to data source, 1995.	62
Table 5. Japanese loans to India according to data source, 2006.	62
Table 6. Top five aid recipients for the six donors, 1995-2006.	71
Table 7. Word usage in donors' annual reports.	75
Table 8. List of variables used in regression analysis.	79
Table 9. Logit regression results for six donors.	85
Table 10. Linear regression results for six donors.	86
Table 11. Comparison of donors' policy focus areas and environmental variables.	121
Table 12. GEF's energy efficiency and renewable energy funds and oil exporting regions.	129
Table 13. Economic variables present in regression outputs.	136
Table 14. Egypt's state of the environment compared to the country sample averages.	149
Table 15. The two top recipients of American aid, 1995-2005.	150
Table 16. Number of Danish environmental aid recipients by continent, 1995-2006.	151
Table 17. Top twenty Danish environmental aid recipients, 1995-2006.	154
Table 18. Comparison of environmental degradation between Asia and Africa.	155
Table 19. Donors' regional priorities and regression outputs.	157
Table 20. The relationship between democracy, corruption and government efficiency levels and JICA's environmental aid.	168
Table 21. The relationship between democracy levels, government effectiveness and environmental sustainability.	172

Table 22. Political variables present in regression outputs.	174
Table 23. The relationship between the size of the population living under \$2 a day and environmental indicators.	178
Table 24. The relationship between CO ₂ emissions, biodiversity levels and the percentage of the population living under \$ 2 a day.	182
Table 25. Average GNP per capita for Denmark's aid recipient countries.	187
Table 26. Correlation between environmental degradation and poverty levels.	189
Table 27. Development variables proved significant in regression outputs.	191
Table 28. Environmental indicators for Brazil and the Philippines.	194
Table 29. Non-environmental indicators for Brazil and the Philippines.	195
Table 30. Donors' stated environmental priorities globally, in Brazil and the Philippines.	196
Table 31. Donors' majority environmental projects globally, in Brazil and the Philippines as percentages of the total project portfolios.	198
Table 32. Donors' and governments' environmental priorities in Brazil and the Philippines, according to official policy documents.	207
Table 33. The number and value of environmental projects in Brazil and the Philippines, 2006.	215
Table 34. Foreign assistance for the environment as stated by different information sources for the Philippines, 2006.	224
Table 35. Regression variables present in the donors' outputs.	240

List of Abbreviations

ABC	Brazilian Cooperation Agency
CARPE	Central African Regional Program for the Environment
COP3	Conference of the Parties 3
COFIEX	Commission for External Financing
CPIA	Country Policy and Institution Assessment
DANIDA	Danish International Development Agency
DENR	Department of Environment and Natural Resources
ENRM	Environment and Natural Resource Management
FDI	foreign direct investments
GEF	Global Environment Facility
IBAMA	Brazilian Institute of Environment and Renewable Natural Resources
IDA	International Development Association
IPCC	International Panel on Climate Change
JBIC	Japanese Bank for International Cooperation
JICA	Japanese International Cooperation Agency
LDC	Least Developed Countries
MDG	Millennium Development Goals
MOFA	Ministry of Foreign Affairs
MPF	Montreal Protocol Fund
NEDA	National Economic Development Authority
ODA	Official Development Assistance
OECD CRS	Organization for Economic Co-operation and Development Creditor Reporting System
OECD DAC	Organization for Economic Co-operation and Development Development Assistance Committee
PEI	Poverty-Environment Initiative
PLAID	Project-Level Aid Database
POP	persistent organic pollutants
SEAIN	Secretariat of International Assistance
SGP	Small Grants Program
UNCEDA	UN Conference on Environment and Development

UNEP	United Nations Environment Program
USAID	United States Agency for International Development
WBG	World Bank Group

Chapter 1. Introduction

At a time when climate change has risen to be one of the most pressing priorities of national governments and multilateral institutions, questions arise about the proposed solutions to tackle the problem. The International Panel on Climate Change (IPCC) has come to a consensus that rapid human led climate change is no longer a hypothesis but a reality (IPCC 2007:2). The number of natural disasters annually has risen dramatically from around 60 in 1975, to 300 in 1990 and to 520 by 2000¹. There is no longer doubt that we are all living in a vastly changing environment, an environment on which we are so dependent for our livelihoods.

At the same time, major donors spend billions of dollars annually trying to decrease the world's environmental problems and attempting to mitigate climate change; for climate change alone, \$ 8.4 billion was spent in the 1990s (Hicks *et al.* 2008:48). Despite these efforts, the global environment is still being extensively degraded. The WHO estimates that over a billion people living in Asia are subject to air pollution which exceeds WHO norms (UNEP 2007:216). In 2002, more than 1.1 billion people lacked access to clean water and 2.6 billion to sanitation (UNEP 2007:17). Ten percent of the world's major rivers no longer reach the sea during some part of the year, because water is excessively used for irrigation upstream. At the same time, drylands cover 40% of the world's surface and sustain 2 billion people². In the year 2025, 1.8 billion people will be living in absolute water scarcity (UNEP 2007:97). The global forest cover has been reduced from 6 billion hectares in 1850 to the present 4 billion hectares (Calvert 1999:122). The list of environmental issues is long for the reason that the world's environmental health has deteriorated. Yet environmental aid is a much needed tool to

¹ Based on EM-DAT. The International Disaster Database. Web. 19 April 2010. <<http://www.emdat.be/natural-disasters-trends>>.

² Igor Schiklomanov, as cited in UNEP 2007:99.

combat these problems. As one researcher stated: “Environmental problems are most serious in those parts of the world with the least capacity to deal with them” (Keohane 1996:3).

The aim of this research is to analyze which factors (environmental and non-environmental) influence the global allocation of environmental aid for six donors. The goal of the study is to address the broader question: who is more likely to get aid for the environment? Thus, the study will look into what characteristics of a recipient country increase the probability of aid allocation.

This thesis also provides two empirical examples of donors’ policies and aid allocation patterns, in two different national contexts: Brazil and the Philippines. The conducted research attempts to reveal the extent of policy coherency for donors’ (both at the national and global level) and the donors’ actual influence on the recipients’ aid agendas. The case studies will help to determine whether global aid allocation patterns are a product of mutual recipient government-donor influence or rather a reflection of donors’ policies and preferences. The study offers a comprehensive outlook on global environmental aid allocation and its prioritization within the aid framework.

During the last four decades environmental degradation has found a permanent place on the global development agenda. Since the debate on sustainable development has taken place, the sustainable use of the Earth’s finite resources has simultaneously been discussed. Development cannot be sustainable if it is based on overexploitation of limited resources. Since the first UN conference on the Human Environment in 1972 in Stockholm, the issues of environmental degradation have gained importance and recognition.

However, during the 1970s environmental issues were seen by developing countries as a threat to their development³. Environmental protection was in opposition to the

³ Researcher Dharendra K. Vajpeyi describes the previous attitude: “Earlier [before the mid 1980s] environmental problems were seen as ‘something that can be addressed only in the aftermath of successful economic

developmental path which the governments wanted to pursue (Ulrich von Weizsäcker 1994:92). A number of emerging economies were based on resource extraction – whether it was oil, gas, timber, diamonds or other minerals (Bryant and Bailey 2000:57). The decrease in the demand of these resources in the name of conservation could endanger the whole economy, because development was understood as the exploitation of these resources⁴. Before 1972, not one state environmental bureaucracy existed in the developing and developed world. They were only created after the UN conference took place; and by 1988 around sixty had been established (Khagram 2004:16).

The developing world also refused to take responsibility for the past and present actions of their richer counterparts. As most of the pollution came from the high consumption patterns of wealthier societies, environmental protection was perceived as a worry for the rich (Rajamani 2003:23). However the consequences of a degrading environment became more and more visible in the developing world. A Filipino researcher writes in her book: “....as the rainy season brought in devastating floods that washed away homes and villages and killed people...it was foolhardy to argue that environmental protection was only for the rich and of the future” (Vitug 1993:57).

Environmental aid became a tool through which richer countries tried to influence the environments of other countries, and thus a way to reduce the potential future environmental consequences for their own societies. One such example is Japanese environmental aid to China which was aimed at reducing the amount of acid rain reaching Japan (Morton 2005:6).

The accumulation of the industrialized world’s environmental anxieties gave way

development’. There is now more and more realization that successful development will be achieved only by protecting the global environment and by balancing population and resources. Economic development without ecodevelopment is inconceivable” (Vajpeyi 1995:30). See also: Reddy 1997:2.

⁴ According to OECD, unprocessed raw materials accounted for around 75% of the exports of the poorest 48 countries in 1995 (Muradian and Martinez-Alier 2001a:287). See also: Lewis 2003:144.

to the 1992 UN Conference on Environment and Development (UNCED) in Rio de Janeiro – also called the Earth Summit. A substantial amount of environmental aid was pledged to resolve the planet’s problems. The Agenda 21 evolved with promised funding from the industrialized world to aid its implementation.

Although bilateral environmental aid experienced an unprecedented boom in history in the 1990s – growing from \$ 5.8 billion in the five years of the 1980s to \$ 27.4 billion in the latter half of the 1990s – it still fell short of the delivered promises of the Earth Summit and Agenda 21(Hicks *et al.* 2008:16).

Table 1. Comparison of Agenda 21 prescriptions for needed aid with actual dose delivered.

Sectors	Dose prescribed \$billion/year	Dose received \$billion/year	Percentage of dose received
Water	6.1	5.6	92%
Land	18.2	0.35	2%
Climate change	20	0.84	4%
Biodiversity	1.75	0.125	7%
Total	46.05	6.915	15%

Source: Hicks *et al.* 2008:52.

However, the aid amount is still significant, especially if one compares it to past contributions –\$ 25 billion in environmental aid was channeled through multilateral agencies in the 1980s and this amount has more than doubled in the 1990s (Hicks *et al.* 2008:185). Due to social pressures multilateral organizations were forced to show themselves as more environmentally friendly (United States Office of Technology Assessment 1993:20 and Rich 1994:166). Heavy civism fell especially on the World Bank which was struggling to improve its image after the implementation of the controversial structural adjustment programs in the 1980s⁵. The World Bank was presented as an institution which had a direct link to environmental degradation (Rich 1994:38). Nonetheless, it is the World Bank that has become

⁵ Among its academic critics concerning environmental issues are: Bruce Rich, Zoe Young, Phillipe Le Prestre, Jonathan A. Fox, L. Dave Brown.

one of the world's largest environmental aid donors as it provides a third of the world's total environmental aid (Hicks *et al.* 2008:17).

Public concern for the environment led to the creation of the Global Environment Facility (GEF) in 1991 as a pilot project. The GEF was designed as a three year, \$ 1 billion program financing actions against: global warming, biodiversity loss, pollution of international waters, and the depletion of the ozone layer in developing countries. Successively, land degradation and persistent organic pollutants (POPs) were added to the list. The World Bank and UNDP were designated as implementing agencies of the GEF, and were responsible for enforcing the projects in the field. It was decided that the Facility would only provide grants, as it would not generate any financial profits. The grants from the GEF aim to compensate developing countries for engaging in activities which demand a substantial amount of capital, but as a result are beneficial for the environment (Fairman 1996:59). As Mark Miller noted, environmental aid received from multilateral and bilateral institutions became a condition for environmental conservation in developing countries (Miller 1995:139).

Environmental aid can have various motivations (not only environmental) as the thesis aims to explore. This dissertation aspires to reveal factors which influence global aid allocation for the environment. It presents a compilation of donors' policies on aid allocation and statistical regression results which confirm or disclaim them. Its guiding thought is uncovering potential non-environmental factors which distort the analyzed donors' environmental aid allocations.

Moreover, the study does not end with econometric analysis as it looks into the global and national aid policy coherency of donors. It also explores the process of environmental aid agenda formulation in the two case study countries to try to determine the actual ownership and influence of donors' over the national aid agendas. Thus, not only

environmental aid can be globally misplaced but also donor-interest driven (instead of recipient-need driven). The thesis additionally discusses the prioritization of aid for the environment with regard to other aid sectors.

1.1. Objectives and research questions

There are various factors which influence the decision about which country will receive aid for the environment. This research aims to determine whether aid is distributed according to environmental, political, economic, geopolitical, poverty or national security factors. It will seek to verify the perception that environmental aid is distributed to the most environmentally impoverished countries which are at greatest need of environmental support. The study will also verify the perception that multilateral donors are more recipient-need driven than bilateral ones.

Furthermore, a question arises whether donors' global environmental policies are reflected at the national level. Thus, the policy coherency of donors will be explored, using Brazil and the Philippines as case studies. The two case studies will provide national contexts and a means of partial verification for donors' global aid allocation patterns.

It is equally important to verify the influence of donors on setting the national aid agendas and the enforcement of their global priorities and interests. The study will attempt to describe the process of environmental aid agenda formulation in the two fieldwork countries as it provides a micro-level analysis of an aid portfolio decision-making process in the Philippines and Brazil. It will help to determine whether aid is recipient-need or donor interest-driven both on the national and global levels.

Overall, this thesis attempts to reveal the level of prioritization given to aid for the environment. It will examine whether aid for the environment is an important, separate sector

for assistance or whether it is linked with aid for other sectors. For this reason the final part of the study comprises a detailed analysis of the whole donor/recipient government cooperation framework.

The term “determinants of environmental aid” refers to factors which influence environmental aid allocation, it is also used to indicate the characteristics a recipient country possesses. The thesis omits internal/domestic factors inside donor countries, which influence donors (such as internal politics, voter behavior and preferences). Internal policy elements are difficult to measure and it is challenging to prove their direct influence on external environmental aid assistance. Donors’ internal reasons for distributing environmental aid will not be explored – different domestic lobbies, pressure groups which may influence the decision of a donor on where to allocate aid will not be taken into account.

Environmental impoverishment (environmental poverty) implies “situations in which the trajectory of environmental degradation threatens to preclude the continuation of current human use systems or levels of well-being in the medium to longer term, and to narrow significantly the range of possibilities for different uses in the future” (Smith *et al.* 1995:8). In this research environmental impoverishment is understood as the substantial degradation of soil, pollution of air and water, and a high number of threatened animal species (compared to other countries). Environmental poverty signifies that the ecological system is no longer sustainable.

The thesis intends to present a comprehensive and holistic outlook on how environmental aid is formulated and distributed at a global and national scale.

The following research questions are formulated:

- What determines environmental aid allocation?
- What are the differences between bilateral and multilateral environmental donor

approaches?

- Who dominates in setting the national aid agendas?
- What role do aid recipient governments play in global aid allocation?
- How much of a priority does aid for the environment have with regard to other sectors?

The following hypothesis will be used as guidelines to answer the research questions:

- Environmental factors are not the main determinants of environmental aid allocation
- Multilateral and bilateral environmental aid donors have different environmental aid approaches
- Donors dominate over recipient governments in aid agenda setting.
- Aid recipients have a minimal role to play in global aid allocation.
- The environment is not a prioritized sector for financial assistance.

1.2. Rationale

Faced with global environmental problems, numerous donors (bilateral and multilateral) are spending around \$10 to \$12 billion annually trying to reduce the consequences of environmental degradation and prevent new problems from arising in the future (Hicks *et al.* 2008:29). There is criticism that this amount is far from sufficient⁶. However, one needs to explore the current environmental aid formulation and implementation process before increasing the aid amount in order to avoid repeating potential mistakes that have been made.

The well-being of societies in developing and developed countries is greatly

⁶ Additionally, to achieve the goals of Agenda 21, \$ 46 billion a year are required. However, only \$ 6.9 billion are distributed annually (Hicks *et al.* 2008:52).

influenced by environmental degradation and its effects (UNDP 1998:68). With environmental aid allocated according to political or economical categories, the environment may be degraded further and the link between environment and poverty in developing countries strengthened.

Environmental aid needs to be explored for the reason that societies of developing countries are heavily dependent on the environment in their livelihoods, thus making them exceptionally vulnerable to environmental degradation and lack of aid to overcome it (UNDP 1998:66). The poorest societies are the most affected by the lack of clean water, firewood and the presence of degraded, unfertile soils, as richer countries have the financial resources to solve these problems. Yet the environment is a public good as the well-being of all the members of a society is influenced by it.

Therefore, the question of aid agenda ownership is a crucial one. If donors dominate the decision-making process, focusing on their environmental priorities, they will undermine the effectiveness of their own funds. Before criticizing the global aid allocation patterns of donors, it is necessary to attempt to understand why aid portfolios assume their present form. Do donors act as their do because of their already set objectives or is their behavior a reflection of an agenda set by a recipient national government? The answer to this question can offer a broader understanding of global aid agenda setting for the environment as well as other areas.

1.3. Methodology

This thesis is based on quantitative and qualitative data. It is a combination of statistical regression analysis and fieldwork conducted in two case study countries: the Philippines and Brazil. It takes into account macro and micro-level data which mutually

enforce the thesis's findings, thus enabling a comprehensive outlook on environmental aid.

In order to capture the global mechanisms of environmental aid allocation six environmental donors were chosen and a database of 100 sample countries, which received environmental aid from 1995 to 2006, was created. Logit and linear regressions were run to reveal statistically significant variables for aid allocation (for detailed methodology see chapter four). The environmental donors chosen were: Japan, USA, Denmark, the World Bank (International Development Association – IDA), UNDP, and the Global Environment Facility (GEF).

Three bilateral donors and three multilateral were deliberately chosen in order to enable a comparison between both types of institutions and to potentially illuminate any differences between them. Some researches, for example, Maizles and Nissanke claim multilateral institutions are less politicized, and are therefore more recipient-need driven than bilateral donors which have clear political interests (Maizles and Nissanke 1984:885). The thesis will attempt to verify this perception.

Japan was chosen because since 1990 it has been the largest bilateral environmental donor (in terms of environmental aid volume). Therefore, the question arises: what are the required characteristics of a developing country in order to receive aid from Japan and how is this amount managed and distributed at the national level? Another reason why Japan was chosen is that it is also perceived as the future environmental leader (Dauvergne 2001:1 and Schreurs 2004:88).

Denmark was chosen because it is the “greenest” donor with the highest level of environmental aid per capita of \$ 181 (Hicks *et al.* 2008:128) and has the highest share of environmental aid (44% in 2004)⁷. Danish environmental projects are very different from the

⁷ OECD. *Aid in Support of Environment. 2003-2004. Denmark*. Web. 20 February 2009. <<http://www.oecd.org/dataoecd/3/38/38023647.pdf>>.

Japanese ones as they are labeled “human-oriented environment strategies”, focusing mostly on resource management and avoiding physical infrastructure projects (Hicks *et al.* 2008:133-134).

The US was selected because it is considered an “environmental laggard” (Hicks *et al.* 2008:132). The US currently spends only 11.2% on environmental aid out of its total aid budget. On a per capita basis it ranks thirteenth (Hicks *et al.* 2008:127). At the same time, the US is a politically influential country, thus its global policies may be reflected in the environmental aid allocation. Moreover, in terms of overall aid volume, it is the third largest donor.

Additionally, three multilaterals were analyzed: World Bank, UNDP and GEF. These are all global institutions that incorporate almost all countries as members. The three organizations also significantly differ from each other in structure, functions and representation system within the organization. These characteristics will be helpful in revealing potential differences between environmental aid allocation strategies between these institutions. For the World Bank the allocation pattern of the International Development Association (IDA) will be analyzed as this part of the Bank is responsible for fund allocation to the poorest countries.

To provide national contexts and means of partial verification for donors’ global aid policies, fieldwork was conducted in Brazil and the Philippines⁸. These two countries were chosen due to their global environmental significance (high biodiversity levels) and the important role they play in global CO₂ absorption (especially the Amazon). Both countries are on the list of the world’s sixteen most biodiverse hotspots. These two countries possess unique ecosystems, notably the Amazon in Brazil and the coral reefs in the Philippines, which

⁸ The author was able to conduct research thanks to the GSID Global Practicum grant.

are under threat (both countries have exceptionally high numbers of threatened mammals)⁹.

Moreover, the case study countries were purposeful chosen from two different continents to account for differences between regions. This makes the sample more representative and adequate to address the matter of global aid allocation. Additionally, the choice decreases the chance of a regional bias (describing a strictly Asian or South American phenomenon). A full comparison between the countries will be made in chapter nine.

The fieldwork data was gathered in the Philippines in March 2009 and in Brazil between December 2009 and January 2010. In the Philippines, fieldwork was conducted at Metro Manila, Los Banios and Cebu; in Brazil, data was collected in Brasília and the states of Piauí and Pará. The case study approach has the advantage of allowing for a more in depth examination of donors' roles and influences at the national level and provides a means of verification of their global actions.

Fieldwork was based on three elements: semi-structured interviews, author's observations and policy analysis. In both countries, a similar group of stakeholders was interviewed, which included the previously mentioned environmental aid donors and officials from the ministry/department responsible for environmental issues. The interviews were semi-structured focusing on political processes which shape aid for the environment. Interactions between different stakeholders were analyzed, as the author tried to uncover informal procedures and practices which would reveal the influence of each of the stakeholders on shaping the environmental agenda. Additional questions were asked about project design, the foreign assistance negotiation process and project implementation. Fieldwork was based on the triangulation of data to validate the findings.

⁹ In addition, the Philippines were listed as the fourth "most threatened forest hotspot" by Conservation International as only 7% of the original forest cover remains (Conservation International. *The World's 10 Most Threatened Forest Hotspots*. Web. 3 February 2011. <<http://blog.conservation.org/2011/02/10-most-threatened-forest-hotspots/>>).

The purpose of fieldwork research was to understand: the extent of donor involvement in the process of aid agenda priority setting at the national level, the consistency of global and national aid policies of donors and the overall prioritization of environmental aid with regard to other sectors. Therefore, this thesis does not cover detailed project descriptions or outcomes, as it represents broader view of the functioning of the donor community along with the government in the Philippines and Brazil.

In this thesis, some stakeholders, at their own request, will remain anonymous. The information provided by them was at times their personal opinion, and did not necessarily reflect the opinion of the institution they represent. Anonymous quotations will be supplemented by additional data and statements of institutions.

1.4. Delimitations and limitations

Regression analysis will be limited to environmental aid received between 1995 and 2006. It will incorporate 100 countries which receive environmental aid or have received it in the past. The attributes of recipient countries will be explored, without going into domestic/internal factors of donor countries which may determine aid allocation.

One of the main challenges of this research was obtaining access to a detailed and extended database which would incorporate all the necessary information and donor details. For information concerning aid amounts the OECD Creditors Reporting system (OECD CRS) was used¹⁰. The OECD CRS database has improved data coverage from 2000, yet the research analyzed the whole 1995-2006 period. At the time of writing this research the OECD database is the most comprehensive, publically available aid database. It is thus the main database used with additional data support from the World Bank Project Database and the

¹⁰ OECD. Creditors Reporting System. Web. <<http://stats.oecd.org/Index.aspx?DatasetCode=CRSNEW>>.

GEF project database¹¹. Using additional databases for the regression analysis (unless containing much specified information, unavailable in the main database) would jeopardize the research because it would mean that other definitions of environmental aid would be utilized, hence producing different data on aid.

Table 2. Donor aid commitment coverage in the OECD CRS database.

	World Bank	GEF	UNDP	Japan	USA	Denmark
Annual aid coverage	Nearly 100% since 1997	unknown	Only 1999, then from 2004	Almost 100% since 2003. Technical cooperation has been reported since 2003.	Almost 100% since 1999	Almost 100% since 2000 (except in 2003 80%)
Reporting institution	IDA	GEF Secretariat	unknown	MOFA reports annually on grants and loans.	USAID	Ministry of Foreign Affairs

Source: Gathered from OECD CRS metadata.

Fieldwork research is delimited to two case study countries with substantial environmental significance. The list of interviewed stakeholders is limited to government officials and donors. Although the fieldwork conducted includes interviews with the academia and NGOs, it does not include specified project beneficiaries such as local communities or companies that play the role of project implementers for some donors like World Bank, Japan or USAID.

1.5. Structure of the thesis

The thesis is divided into ten chapters. It starts, following the introduction, with a literature review of previous research and its relation to the research conducted by the thesis' author. The most important up-to-date findings concerning the perceptions of environmental

¹¹ World Bank. Project Database. Web. <<http://go.worldbank.org/IAHNQIVK30>> and GEF. The GEF project database. Web. <<http://www.gefonline.org/>>.

problems, priorities and aid allocation patterns will be highlighted. Additionally, the gaps which this analysis aspires to fill will be shown.

Next, an overview of donors' understanding of what exactly constitutes aid for the environment is presented in chapter three. Both donors' policy documents and actual aid amounts extracted from different databases will be used to attempt to answer the questions of the actual placement and prioritization of environmental aid. Donors show different perceptions of aid and aid trends.

The subsequent part, the methodology chapter, provides detailed information on the statistical analysis conducted. The way in which the author's country database was created and the types of regressions used are explained. Moreover, in this chapter the logit and linear regression outputs are presented with in-depth explanations on the quality of the findings. The two regression outputs serve as a pillar for the following chapters which analyze them in detail.

Chapter five attempts to answer one of the fundamental questions asked in this research: is environmental aid allocated to the most environmentally impoverished countries? This part of the thesis looks at the environmental variables which were tested and appeared in the regression outputs as significant. Donors' policies are compared against the actual output results, which confirm or disclaim them.

Since donors' allocation is hypothesized to be motivated not only by environmental factors, other, non-environmental variables were tested. Chapter six looks into the presence, both in policy documents and regression outputs, of economic and regional variables in order to assess their level of importance in determining the allocation of environmental aid. Similarly to the previous chapters, figures from databases are extracted to verify the policies and outputs.

Many researchers emphasize the linkage between politics and aid, thus, in chapter

seven the political aspects of environmental aid will be explored and the extent of involvement of political matters in environmental issues. Additionally, the very presence of political matters in an ideally apolitical sector will be questioned.

As many donors stress that the overall goal of their assistance is poverty alleviation, chapter eight is devoted to examining the relationship between poverty levels and levels of environmental degradation. The chapter provides answers to whether poorer countries are more likely to receive environmental aid and whether they should receive environmental aid. There are various types of poverty measurements and various types of environmental degradation.

The previous chapters present a macro-level analysis of donors' global aid flows which require confirmation at the national level. For this reason chapter nine portrays environmental aid in two case study countries. The case studies provide a means of verification for donors' global policies and present micro-level processes of environmental aid agenda formulation in the two countries. They help address the broader issue whether global aid allocation patterns are a product of a mutual recipient government-donor influences or rather a reflection of donors' policies and preferences.

The final chapter draws the main conclusions from the thesis and answers the stated research questions. It also reflects on the drawbacks of the current allocation patterns.

Chapter 2. Literature review

This chapter presents a brief overview of research published on the topic. It has the aim of presenting the main findings of previous researchers in relation to the current study undertaken by the author.

2.1. Environment and development are interlinked

“Environment and development are interlinked and environmental degradation undermines development” (Rasmus and Nielsen 2000:271). If environmental aid is distributed according to non-environmental factors (political, economical etc.), then environmental degradation without sufficient intervention could become irreversible, causing increased stress on developing societies, especially the poorest sectors (Reddy 1997:2 and Clapp and Dauvergne 2005:38). According to the World Bank’s publication *Poverty and the Environment*, the poor are the most severely affected by environmental degradation as they depend on the environment for their livelihood (2008a:6). Yet at the same time they contribute to environmental degradation as they lack other livelihood alternatives – deforestation is one of the most common livelihood sustaining activities in the developing world, where wood is used primary for fuel as there are no other means of obtaining energy. Indeed, 70% of energy use in Sub-Saharan Africa comes from traditional sources (Jehan and Umana 2003:56). The hypothesis of a downward environmental spiral (poverty causes further environmental degradation, which in turn deepens poverty) has been introduced, but some authors, including Sara Scherr, argue that it is too simplistic as other factors are also involved in deepening environmental degradation (Scherr 2005:495).

The question of linking environment and development has been debated especially by developing countries (Ulrich von Weizsäcker 1994:92). Authors like Amulya Reddy and Lavanya Rajamani demonstrated that environmental improvement was not possible without simultaneously linking it to development goals which aimed at promoting economic growth and alleviating poverty. Environmental needs and development requirements frequently overlap (United States Office of Technology Assessment 1993:14). Thus, environmental aid is undermined if it is not connected to development issues. At first, developing countries were reluctant to discuss environmental aid as a goal in itself, fearing that their economic development may be halted due to the industrialized countries environmental concerns. Some aid recipient countries feared that environmental aid would slow their development or even stop it altogether, absorbing the otherwise attributed to “development” funds (Rajamani 2003:25).

During the recent G8 Summit in Toyako, Hokkaido several steps have been made to integrate environmental issues into the development agenda. Although the main focus was climate change, there were also discussions of the Millennium Development Goals (MDG) which incorporated the sanitation issue and the compatibility between economic growth and the environment protection through energy conservation and other technologies.

2.2. The conflict of North-South environmental priorities

As researcher Adil Najam writes “global environmental debates are very much a subject of ‘North-South’ politics” (2005:304). In the view of O’Riordan and others, incorporating Western values into development assistance leads to the misconception of local needs (1981:17). The developed countries have had the task of trying to persuade the developing countries to prioritize their environmental needs according to the developed

countries requests which requires putting local environmental concerns at the very bottom of the national priority list. As Lorraine Elliot points out: it is a divide between global environment needs and local environmental priorities (2004:171).

Studies conducted by Barbara Connolly and Marian Miller demonstrate that donors do use their financial power and dominate the environmental aid agenda (Connolly 1996 and Miller 1995). As Barbara Connolly states: “Environmental aid budgets in donor countries exist only because of donor self-interest” (1996:330). The developed countries formulate the environmental problem. However, due to their ecological richness, developing countries possess bargaining power to “deny the developed world its environmental objectives” (Miller 1995:58). Therefore, environmental aid constitutes a battle for environmental problem prioritization between donors with funds and poorer countries which lack the necessary capital but are abundant in environmentally significant areas.

Researchers like Raghendra Jha and John Whalley stress that the types of environmental problems in developing countries and developed countries differ (1999:6)¹². Much of the soil erosion and water pollution is taking place in developing countries. For example, over 90% of waste water goes back to rivers, lakes and seas untreated in the developing world. This is one reason why there are fifty times more bacteria in Asian rivers than in those in industrial societies, a fact which poses a serious threat to the environment and human health (UNDP 1998:68).

Environmental degradation can be also full of paradoxes. Air pollution is considered to be a problem of industrial societies yet 90% of deaths occur in the developing world, additionally 80% of those deaths occur indoors and in rural areas (UNDP 1998:69). This is caused by indoor cooking with traditional fuels like firewood in badly ventilated housing.

¹² See also: Sherbinin and Martine 2007:5-6; Speth and Haas 2006:114 and Reddy 1997:1.

It is also the case, as Elizabeth DeSombre points out, that developing countries have also different environmental aid priorities (2005:83). The issue of setting priorities is a key one for both developing and developed countries (Lewis 2003:144). Scientists can play an important role in environmental agenda setting but the majority is from developed countries. Environmentalists from developing countries are convinced that there are different interests concerning the environment between the developed world and themselves (Lewis 2003:145). The rich societies are concerned about “global environmental issues” which consist of biodiversity, air pollution, and international water pollution (the so called “green” issues), while the developing world’s concern is more focused on local environmental problems which often do not cross state boundaries such as local water pollution or soil degradation (and other so called “brown” issues) (Hicks *et al.* 2008:60 and Lewis 2003:145). Hence, the question remains whether multinational institutions and bilateral donors are more willing to help biodiverse tropical countries or the countries with significant soil erosion problems. This research aims to answer this question through fieldwork conducted in two case study countries regarding national and donor priorities.

Environmental aid is also linked to the concept of responsibility for environmental degradation. It incorporates the principal of common but differentiated responsibilities for the environment. Both the developing and developed countries are responsible for the well-being of the global environment, but due to the environmental degradation caused by the developed countries throughout history –especially greenhouse gas emissions – the developed societies have additional responsibilities to protect the environment which they have degraded (UNCED 1992: Principle 7; Miller 1995:147 and Matsui 2002:154–155). Roland Muradian and Joan Martinez-Alier suggest that economic growth in the developed countries was achieved due to environmental exploitation of the developing world (2001:183–4). Therefore,

the developed countries also bear the moral responsibility for aiding developing countries with their development.

Richard Tobin is just one of the increasing number of researchers stressing that the developing countries are catching up and, in the near future, they will be main contributors of environmental degradation (2006:350). Most of the world's population and geographical surface area is located in the developing world, so their environmental policies and activities will have an influence on the global environment.

In one of the publications on environmental aid institutions entitled *Institutions for environmental aid*, the authors emphasize that the main responsibility of resolving problems of environmental degradation in developing countries lies with the rich, industrialized countries as only they have the financial capacity to deal with the issue (Keohane 1996:5). They are also capable of creating financial incentives for the developing countries to manage their environments more effectively. Thus, they can create and influence the environmental agenda, thanks to possessing the financial resources which can provide and finance the solution to environmental degradation. This is the reason behind environmental aid allocation.

2.3. Global environmental aid allocation patterns

According to the authors of *Greening Aid?* environmental aid as a percentage of total aid has remained quite stable and at the same time the percentage of what Hicks et al. call "dirty" (environmentally harmful) aid has decreased (Hicks *et al.* 2008:27). Moreover, environmental aid appears to be directed to countries which are globally environmentally significant. In other words, the more a country's environment has a global impact the more aid it will receive. Global environmental impact implies that one country's environmental degradation (such as

excessive air pollution through rapid industrialization, pollution of water systems that traverse several countries like the Mekong River or the Nile, or over-fishing in international waters) can have a significant impact on the environments of other countries. China, India, Brazil and the US are examples of such countries which have great impacts on others. Deforestation, excessive air pollution and water pollution in those areas will be felt by other regions.

However, the countries mentioned may not be in need of aid, as they may not suffer from environmental degradation. Their environments are globally significant, but do not have to be degraded or they may have sufficient national funds to deal with the degradation by themselves. Global environmental significance does not automatically imply that there is a need for aid.

The global impact determinant of aid allocation leaves out a large part of the developing world with environmental problems which are primarily local. This includes countries which have problems with soil erosion, lake pollution, water scarcity, small-scale air pollution. None of these environmental problems affect other countries; therefore aid allocation based on environmental global impact implies strong donor interest over recipient needs.

Another key finding of research conducted by Robert Hicks et al. is that the proximity of the recipient influences the amount of environmental aid (especially for local environmental problems which the donor as a neighbor may feel) (2008:115). The closer the recipient is to the donor the higher the probability that a larger amount of aid will be distributed. The correlation was found to have a positive, although weak, relationship. It was additionally assumed that the higher the local environmental damage the larger the amount of aid. Yet this correlation turned out to be negative. The authors attribute this to measurement error as the only variable used to measure local environmental degradation was water quality. Additionally, there was not sufficient data for all the countries, because the countries that do

have information about their water quality are the ones that are trying to solve the problem of water pollution.

The researchers have also found that environmental aid tends to flow to countries which have ratified fewer environmental treaties. One possible explanation for this is that giving aid to such countries is an attempt to encourage them to rethink their environmental policies. This policy is questionable, because there are doubts to its effectiveness. Moreover, former colonies tend to receive more environmental aid, despite the fact that the need for this type of aid may be minimal, because their environments may not necessarily be degraded. This is linked to the research hypothesis that factors other than environmental impoverishment determine environmental aid allocation.

Additionally, the study revealed that, although the more populated and poorer countries receive more environmental aid, there is a bias. Bilateral donors (the twenty two OECD DAC countries) prefer to distribute aid to poorer countries but multilaterals favor wealthier countries, which contradicts the hypothesis that multilaterals are more objective in aid allocation. The conclusion of Hick's et al. study is that bilateral donors are more responsive to environmental problems of recipient countries because they take into account the factors which are directly linked to environmental poverty to a greater extent than multilaterals.

A common factor is present in environmental aid allocation research. Donors tend to satisfy their interests. Tammy Lewis demonstrates that environmental aid allocation is driven mostly by traditional and environmental interests' of the donor countries (USAID, the GEF and US foundations were analyzed) (2003:157). Results revealed that donor interests –whether they are political, economic or security related – dominate. Additionally she concludes that environmental aid allocation differs from other types of aid allocation, which is also the same finding presented in Hicks et al. (2008:112). There are different determinants

specific to this type of aid (including domestic factors such as voter preferences). Environmental aid allocation also differs between bilateral and multilateral donors as each has different priorities and interests, but this does not imply that multilaterals are more “neutral” to political pressures and interests. Bilateral donors were found to be more responsive to poorer, environmentally degraded countries (enforcing the findings of Hicks et al.). As Marian Miller demonstrates in his book, environmental issues are not separated from politics and global environmental politics are a form of power of developed countries over developing ones (1995:131). Despite being members of multilateral organizations, developing countries are not seen as equal partners. The author of this thesis intends to further explore this point by presenting more aid allocation determinants which influence the six multilateral and bilateral donors.

2.4. Environmental aid and traditional aid

Environmental aid differs from other types of aid which are called “traditional”. Environmental aid addresses an environmental problem of which consequences can be widely felt by donor societies (compared to traditional aid of whose consequences are usually unfelt by the donor countries) (Rasmus and Nielsen 2000:272). Additionally, there are other factors, apart from the political, economical and social factors of traditional aid, that are likely to influence environmental aid allocation. However, it is important to explore traditional aid allocation because it can provide the basis for understanding environmental aid. Moreover, it is easier to spot similarities between both aid allocation patterns.

There are several studies conducted concerning aid allocation in general with researchers sometimes finding different results and reaching different conclusions¹³. In one of

¹³ See: Maizles and Nissanke 1984; White 2004.

the earliest papers, Alfred Maizles and Machiko Nissanke explored the motivations for aid allocation matching the recipient and donor-interest models to bilateral and multilateral aid patterns (1984). Bilateral aid to developing countries appeared to be more donor driven, and multilateral aid was closely linked to the recipient-need model (889), which is in contradiction to the environmental aid findings of the previous researchers. Japan, for instance, fits into the donor-interest model more than the recipient-need (888). This supported the theory that multilateral institutions remain more apolitical and recipient sensitive when distributing aid. I intend to verify these perceptions using regression analysis. Overall, some researchers have found different/conflicting correlations between variables (different correlations were found for aid/population size and aid/GDP) and the amount of aid. There is thus a need for further studies¹⁴.

In the conducted research on traditional aid allocation by Alberto Alesina and David Dollar, strong political considerations became visible (2000:33). Several patterns emerged. Countries which were former colonies, and non-democratic (for example, Sudan, Zambia, Cape Verde, Mali, Ecuador before democratizing) with an inefficient closed economy (for example, Cameroon, Costa Rica, Ecuador, Brazil, Chile, Mexico, Zambia before the transition to an open economy) were more likely to receive aid than any other type of country. The two key factors determining aid allocation were: colonial past and political alliances.

Additionally, if a country underwent the democratization process it had a substantial chance of seeing its aid increase; however, after the full transition to a democracy its aid levels would drop to below the pre-democracy level. A democracy would usually receive less than an authoritarian regime. The results are visibly linked to donor interests. Despite the fact that this study is based on aid in general, it can verify the hypothesis that environmental aid allocation is also driven by other factors than environmental concerns.

¹⁴ Studies conducted by Alfred Maizles and Robert Hicks are such examples .

2.5. Importance of environmental issues in developing countries

Just how relevant are environmental issues on the national development agenda in aid recipient countries? Some researches like Timothy O’Riordan have argued that environmental factors are not prioritized at all: “One must also bear in mind that a recipient government is more interested in cash than in morals. Aid agencies cannot persuade them against their will to take on board environmental considerations” (1981:20). Rajamani enforces this view arguing that the developing countries prioritize market access, trade, technology transfer, development assistance and capacity building (2003:25). Reddy adds that the governments of developing countries perceive challenges associated with development as far more important than climate change (1997:2). Environment appears to be on the bottom of the aid recipient government’s priority list. This thesis will take up the issue of national prioritization, in order to find out to what extent national governments in two fieldwork countries prioritize the environment within their assistance framework and how does this affect the aid agenda.

Other research argues that the environment is finding its permanent place on the developing countries’ agendas as the countries grow (United States Office of Technology Assessment 1993:16). One such example is China, which has “made considerable progress in integrating environmental concerns into development policy-making” (Morton 2005:3). And yet, it is China where, in 2000, 16 out of 46 cities misappropriated funds for the environment (Morton 2005:40). Political will for environmental improvement is filled with contradictions: there are efforts, but not full implementation. The problem of political commitment of recipient countries is a key one as it has large influence on the effectiveness of the funds received (Fairman and Ross 1996:50).

It is Ernst Ulrich von Weizsäcker, who explains in his book that one of the main causes of degradation is the fact that the elites of developing countries have decided to follow

a certain development path regardless of the environmental cost (1994:92). Environmental concerns have been sacrificed for short-term political goals. Therefore, not only is environmental degradation not a priority but it has become a victim of the chosen development model. As Dhirendra K. Vajpeyi underlines, development projects designed to improve economic or natural resources have become the actual cause of environmental deterioration (1995:23). Governments of developing countries frequently ignore the extent of environmental deterioration as it is inconvenient for the development they intend to follow (Ascher 2000:386). The issue of rapid economic growth undermines the arising environmental issues, because they may constitute an obstacle to economic growth.

Some researchers argue that one of the potential causes of inaction towards degradation is because developing countries have not experienced their own industrial revolution, and have therefore not been forced to think about the environmental crisis (Castro 1995:34). For that reason, the effects of severe environmental degradation are likely to be felt in the future when developing countries are faced with increasing air pollution, population and consumption levels. In this research this issue will be explored further using as case studies two countries that both have based their national wealth on natural resource exploitation and agriculture.

2.6. Obstacles to effective aid implementation

As mentioned previously, the level of political determination of a developing country has a substantial effect on aid effectiveness (Fairman and Ross 1996:50). One of the obstacles to effective project implementation is the lack of political will and low capacity for implementation. In the majority of aid agencies, projects are prepared by administrators who have little understanding of environmental issues (O’Riordan 1981:20). As David Feeny

explains: “the professional resource-management infrastructure of the state is usually poorly developed and enforcement of regulations problematic” (1995:60). Additionally, bureaucrats are immune to negative consequences of their actions, they do not suffer directly if the resources are depleted (Ascher 2000:396).

Robert O. Keohane lists many possible causes of environmental failure. Indifference of governments, lack of political and administrative capacity to implement policies, corruption and struggles between the donor country and aid recipient country over control of aid, are among them (1996:6-7). In aid projects there appears to be a conflict between the donors fulfilling their short term interests and fostering institutional development in the receiving country (Fairman and Ross 1996:41-44). There are, therefore, problems with the project design itself and the interests it fulfills. Both these issues will be explored in the fieldwork chapters.

Corruption is also considered one of the principal causes of environmental degradation. The lack of transparency in natural resource utilization creates the incentive for corrupt practices (Ascher 2000:396). In his book, Al Gore gives the example of Malaysia, where the minister of environment was personally selling concessions to cut the rainforest in Sarawak (1992:180). As mentioned previously, the exploitation and export of natural resources constitutes the backbone of many developing countries’ economies; hence, there are lucrative funds to be obtained from the control of these resources.

Lack of effective capacity building components in projects is also a major obstacle. As two researchers state: “Many environmental assistance projects treat capacity building far too casually, assuming that a short term barrage of technical training programs will bring about sturdy environmental institutions in low- and middle-income countries” (Fairman and Ross 1996:44). Projects may focus on resolving current issues, undermining the need to develop skills to battle these same problems in the future without the use of external assistance.

Therefore, donors are obliged to focus on capacity building.

2.7. Multilateral and bilateral aid approaches

Environmental aid is also part of international politics. Multilateral institutions are large environmental aid donors. However, according to Tamar Gunter, although some environmental donors, like the World Bank, are decreasing their environmental aid and trying instead to incorporate environmental components into their projects, few environmental assessments actually influence the project design (2005:778). There is a debate about the neutrality and objectivity of aid allocation by international organizations and the results of studies conducted on the issue have been inconsistent. It is hoped that this present research will contribute to this debate.

Katherine Morton speaks of Japanese, World Bank and UNDP environmental aid approaches (2005). The World Bank concentrates on large loans, omitting the small ground-based environmental projects (8). In contrast the UNDP focuses on small grants which are intended to build human capacity and work on managerial capabilities of the local institutions. The Japanese approach, however, mainly involves building physical infrastructure which is environmentally related (10). The Japanese environmental aid philosophy is rooted in the self-help concept, meaning that it is the developing country's responsibility to address environmental issues and Japan can only aid those efforts. As Japan has expert knowledge and expertise in technology and infrastructure, they have become the primary focus of its aid activities.

Japanese environmental aid has been the focus of much academic interest after Japan made an unprecedented leap into becoming a leading donor of the 1990s, increasing environmental aid from \$ 3 billion to \$14.6 billion. A number of studies have analyzed

Japan's role as the leading environmental donor¹⁵. Japan gave 2.5 times more funds for local "brown" projects than for "green" ones from 1980 to 1999. In addition Japan is one of the top four donors (along with the World Bank, Germany and the Asian Development Bank) to the ten countries which received the most environmental aid in the 1990s (China, India, Brazil, Mexico, Indonesia, Philippines, Egypt, Argentina, Turkey and Bangladesh) (Hicks *et al.* 2008:61-62). As Japan is growing to be an influential environmental donor, it is worth analyzing what are Japan's allocation preferences and environmental aid philosophy.

Denmark is often portrayed as an ideal environmental donor (Hicks *et al.* 2008: 132). It has reached the 0.7% of GDP aid goal and its total aid for the environment ranks fifth in the world. In the sector breakdown of environmental aid, over 30% of it is allocated to social infrastructure¹⁶. A significant characteristic of Danish environmental aid is that it mainly targets the Least Developed Countries (LDCs), mostly in Africa and South Asia. The research will verify the perception that Danish environmental aid is recipient-need driven.

American environmental aid equaled \$ 11.4 billion over the 1980s and 1990s (Hicks *et al.* 2008:148). With a substantial proportion of its aid going to green issues, the US became the world largest "green" project funder. However, while most of the funds financed green projects, local environmental issues were neglected. As Hicks *et al.* describe in their book, US environmental aid is mostly donor-interest driven. One US official was quoted saying: "environmental degradation and inefficient use of natural resources pose a growing threat to the interests of the United States" (Hicks *et al.* 2008:151). The intention of this research is to explore to what extent environmental aid is subordinate to national interest.

¹⁵ These include: Dauvergne 2001; Schreurs 2004; Potter 1994 and Taylor 1999.

¹⁶ OECD. *Aid in Support of Environment. 2003-2004. Denmark*. Web. 20 February 2009. <<http://www.oecd.org/dataoecd/3/38/38023647.pdf>>.

Chapter 3. Understanding of the term: aid for the environment

There is no universal definition of aid for the environment and all its components because each donor has a different understanding of the term and attaches a different level of importance to it. This chapter presents the various interpretations of aid for the environment and aid trends for donors. The aim of this chapter is to ascertain how important is aid for the environment within each donor's aid portfolio. Firstly, the numerous ways environmental aid is defined in research will be explored. Applying various definitions leads to different research conclusions. Secondly, the rising or declining aid trends for donors are shown in order to verify commitments for environmental issues. The trend lines reveal the largest and smallest donors and the stability of their commitments for the environment. Thirdly, each donor's understanding of aid for the environment will be described, followed by the percentage of aid allocated to various sectors. This part of the chapter portrays the "greenness" of donors. Finally, the overall prioritization of environmental issues within the Official Development Assistance (ODA) framework will be explored.

3.1. The definition challenges

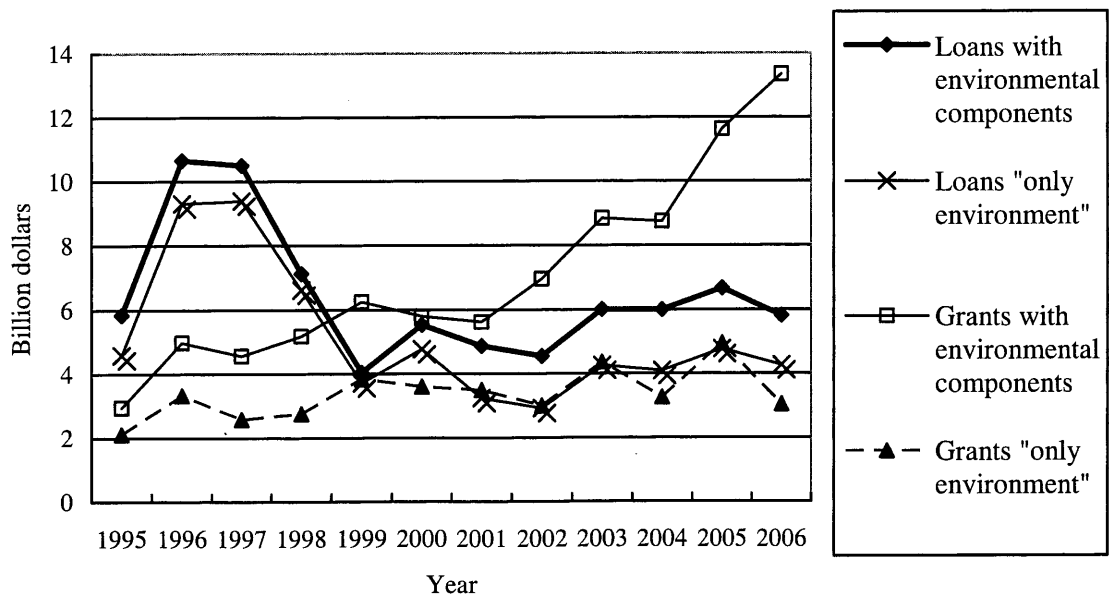
Since the Earth Summit of 1992 a number of researchers have focused on environmental aid. However, writing about environmental aid has been very challenging due to the lack of a common definition and understanding of what exactly constitutes environmental aid¹⁷. Problems arising from environmental aid classification discouraged many academics from exploring the issue of environmental aid allocation (United States

¹⁷ The US Office of Technology Assessment explains that: "The initial effort to develop statistics on environmental aid is still in progress. One major obstacle is that donors and multilateral agencies have yet to adopt common definitions for estimating their environmental aid" (United States Office of Technology Assessment 1993:25).

Office of Technology Assessment 1993:26)¹⁸. Moreover, the quantity of aid tells little about the quality of it. This has led to very different interpretations of environmental aid trends.

Depending on the understanding of aid for environment one may receive different data results. There is a growing amount of projects with environmental components which are overall counted as environmental (this is the practice of the World Bank which doesn't have a purely environmental category). However, the number of environmental projects and projects with environmental components differs substantially (see Figure 1). The majority of aid for the environment is in the form of loans, but if one counts funds with environmental components, grants dominate since 1999. Although aid for the environment has not undergone a large increase, projects with environmental components have.

Figure 1. Environmental aid by form, 1995-2006.



Note: In billion dollars (\$2008). Grants and loans include projects with the policy goals: only for environment, gender and environment, environment and participatory development, and gender and environment and participatory development. Figures are for all multilateral and bilateral donors available in OECD CRS, excluding GEF. Source: calculated from OECD CRS. Accessed 17 October 2010.

¹⁸ OECD DAC questioned the credibility of donor environmental data suggesting that it just might be a result of aid reclassification.

Various definitions in studying environmental aid have been used¹⁹. Aid can be broken down into numerous parts, increasing the range of possible definitions and interpretations. Aid (from the environmental impact perspective) is usually categorized as “dirty”, “neutral” and “environmental”. There has also been a shift in terminology of what is considered to be “neutral aid”, as additional categories of aid were systematically added to the term, for instance, “aid for health”, “aid for education” and other types of aid which do not cause significant environmental impacts. For this reason there has been an increase reported in multilateral neutral aid spending growing from \$8-10 billion a year in 1980s to over \$ 40 billion a year in 1998 (Hicks *et al.* 2008:189).

According to OECD, aid is environmental if:

it is intended to produce an improvement, or something that is diagnosed as an improvement, in the physical and/or biological environment of the recipient country, area or target group concerned; or it includes specific action to integrate environmental concerns with a range of development objectives through institution building and/or capacity development²⁰.

The definition incorporates social infrastructure and services (water protection, water management, sanitation, waste management), economic infrastructure and services (“with comprehensive and integrated environmental protection and management components” and related to energy conservation and sustainable energy use), and production sectors (sustainable management of agricultural land and water resources; sustainable forest

¹⁹ As the US Office of Technology Assessment describes: “Donors do not always define ‘environmental’ in the same way, and countries may vary in the care they have taken to avoid inflating estimates by double counting or counting the full cost of a project when only a part of it qualifies as environmental” (United States Office of Technology Assessment 1993:27).

²⁰ OECD. *Aid to Environment*. Web. 10 June 2009. <<http://www.oecd.org/dataoecd/4/6/38025362.pdf>>.

management, combating land degradation and deforestation; increasing energy efficiency in industries; sustainable use of sensitive environmental areas for tourism). Based on the OECD definition and concept bilateral and multilateral donors are required to submit their annual environmental aid data. As the definition is broad, various interpretations among donors are possible. One such example is the 1995 Danish International Development Agency's (DANIDA's) Renovation/Construction of Roads grant to Benin which is marked as an environmental project (marked as category 2 project– the most “green” category), which means “environmental sustainability was an explicit objective of the activity and fundamental in its design (i.e. the activity would not have been undertaken without this objective)”²¹. In 1997 the environmental marking in OECD CRS was revised.

Because different definitions and interpretations are used, different aid figures are provided. According to the Project-Level Aid (PLAID) database (which in turn has used another classification based on environmental impacts), during 1980-1999 bilateral donors allocated \$ 61.9 billion in environmental aid, which constituted 8.4% of total bilateral aid given. Additionally, there was a sharp rise (371%) in environmental aid during the 1990s (Hicks *et al.* 2008:125). Multilateral institutions allocated over \$ 75 billion in environmental aid in the 1980s and 1990s (Hicks *et al.* 2008:251).

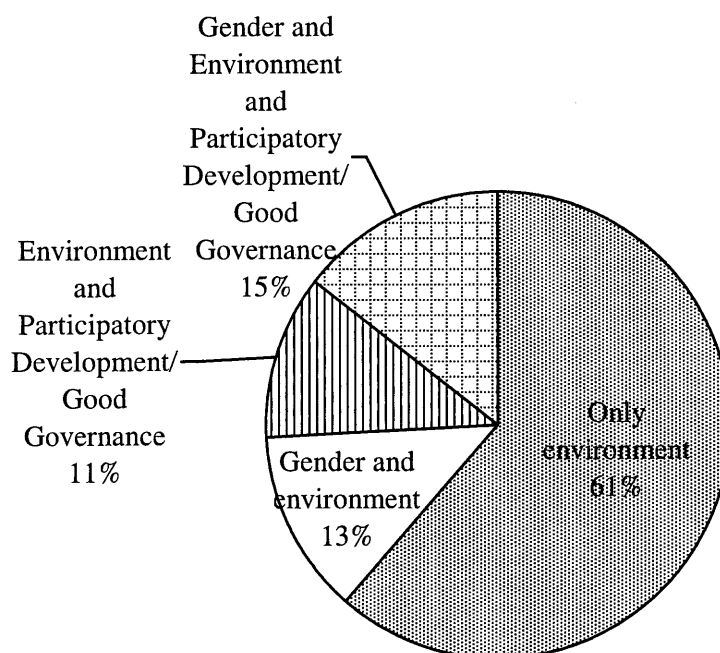
Basing on the OECD CRS database, the sum of environmental aid for bilateral and multilateral donors (except GEF) was derived for 1995-2006²². The total for all DAC countries during this period was over \$ 131.9 billion (which is twice as large as the PLAID figure for 1980-1999). Multilateral donors distributed just over \$30.5 billion, less than half of the PLAID amount. Both types of aid give a total of over \$162 billion for 1995-2006, which produces an annual average of \$ 13.5 billion.

²¹ OECD. *User's Guide to the CRS Aid Activities database*. Web. 19 December 2009. <http://www.oecd.org/document/50/0,3343,en_2649_34447_14987506_1_1_1_1,00.html#a>.

²² Calculated from the OECD CRS database. Accessed 17 October 2010.

The OECD definition has the following categories for environmental aid according to policy objective: aid “only for environment”, “gender and environment”, “environment and participatory development/good governance” and “gender and environment and participatory development/good governance”. The extent of the environmental component within each category is unknown. However, if the assistance for the World Bank, UNDP, Denmark, Japan and the US is pooled together and divided by policy objectives, the majority (61%) of aid for the environment fits into the “only for environment” objective (see Figure 2).

Figure 2. Aid for environment by policy objective, 1995-2006.



Source: Calculated from OECD CRS. Accessed 17 October 2010.

Choosing one or several of these policy objectives provides figures for *environmental sustainability* (which is different from aid for “general environment protection”)²³. This research is based mainly on data for environmental sustainability defined by the OECD,

²³ General environment protection focuses on strictly environmental issues as biodiversity conservation, environmental education or research. Aid for environmental sustainability however, incorporates water resource protection, sustainable forest management, infrastructure projects with environmental components.

because it is a much broader term and one that allows the inclusion of various types of environmental and environment-related projects.

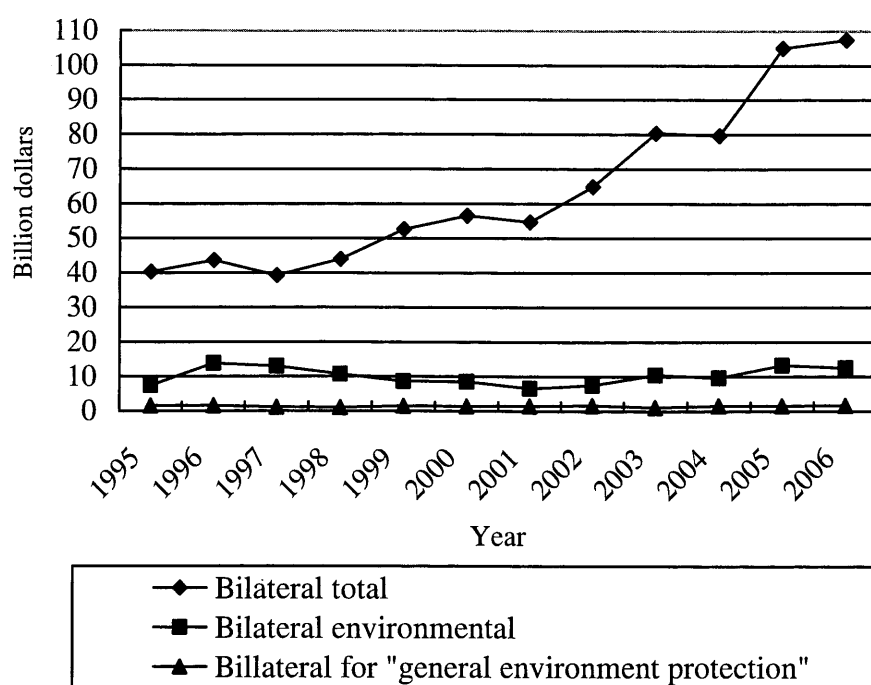
Figure 1 does not show the type of environmental aid that was allocated. Bruce Rich and others have demonstrated that the lack of a common definition of environmental aid between donors can lead to controversial interpretations of the term. Donors may use environmentally labeled funds to finance environmentally devastating projects. The World Bank's use of biodiversity funds in Congo to build roads into fragile ecosystem areas is one example. Another is the building of geothermal power plants in India with environmental aid (Rich 1994:178-180 and 40-42). This raises the question of the value of environmental aid which incorporates environmentally destructive projects.

3.2. Environmental aid trends

As environmental problems have become a permanent element of the global political discourse, the question remains to what extent have concrete actions followed the political rhetoric? Have donors increased their environmental aid budgets during the last decade? Are multilateral institutions "greener" than bilateral ones? This part of the chapter will attempt to answer these questions.

Despite the visible increase in overall bilateral aid (which is mostly caused by the increase of US aid –see Figure 5), aid for the environment remains stable (see Figure 3).

Figure 3. Bilateral aid (DAC countries total), 1995-2006.



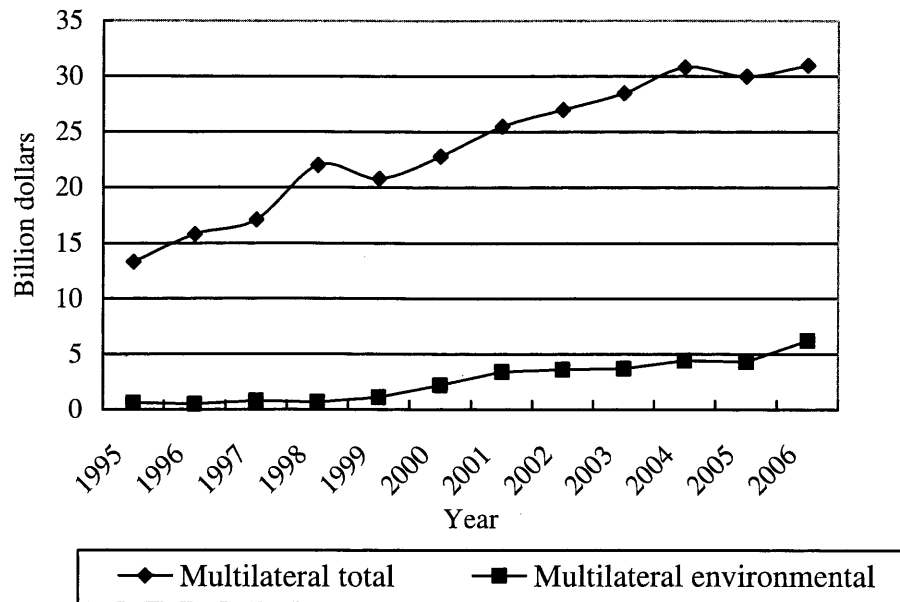
Note: Commitments in billion dollars (\$2007). Source: Calculated from OECD CRS.

The proportion of environmental aid to the overall growing total is decreasing: in 1996 it was 31.6%, plunging to 11.6% by 2006. This number is even smaller if only aid for general environmental protection is taken into account as there is a reduction from 3.6% in 1996 to only 1.54% in 2006. It poses the question of just how serious donors are about the environment and especially about climate change related issues.

Multilateral environmental aid remained stable until 1999, when it experienced a slight increase (see Figure 4). In 1995 environmental aid constituted only 4.5% of total multilateral aid, but by 2006 this figure had risen to 20%. Yet the OECD data base suffers from multilateral donor underreporting; therefore, these numbers do not present the full picture and constitute a weak argument for the claim that multilateral institutions are “greener” than bilateral. According to the PLAID database, multilaterals have spent more on the environment

than bilateral donors (Hicks *et al.* 2008:28)

Figure 4. Multilateral aid, 1995-2006.



Note: Commitments in billion dollars (\$2008). Multilaterals including GEF. Source: Calculated from OECD CRS and OECD QWIDS²⁴ for GEF.

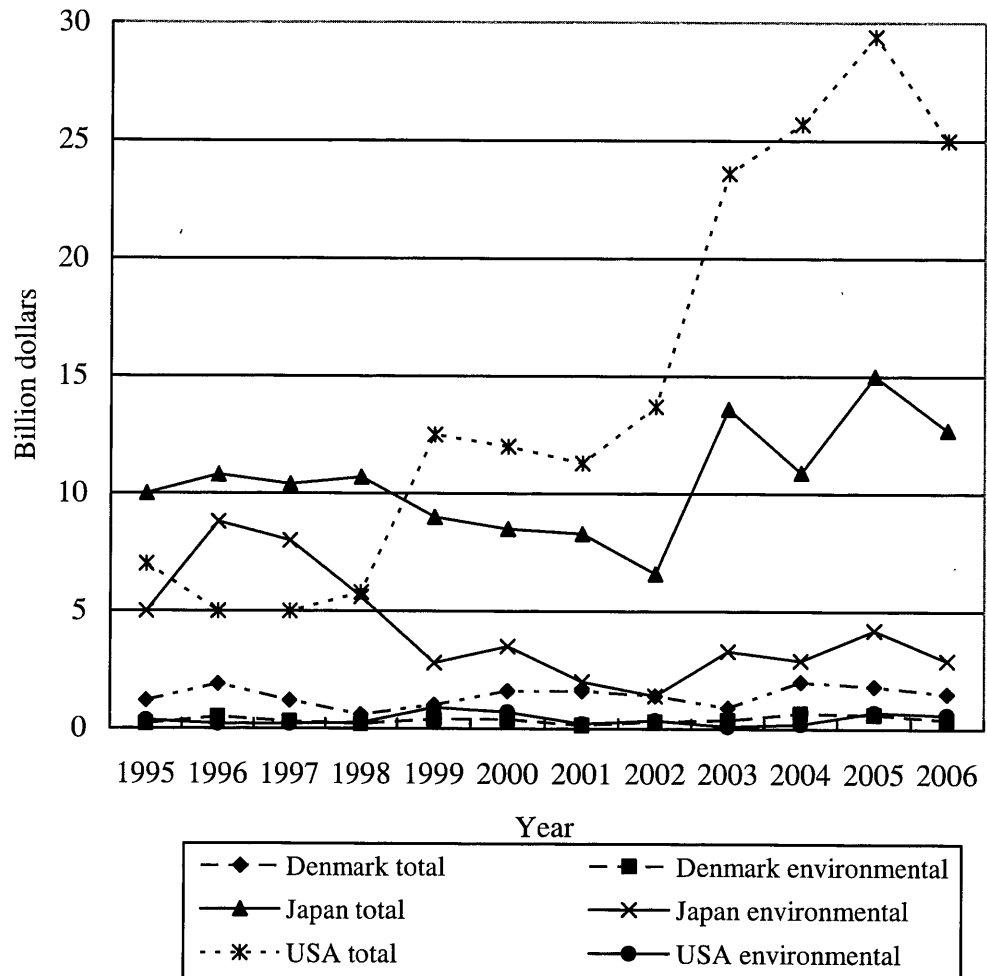
If aid is broken down into particular donors, clearer trends are visible (see Figure 5). There is an unprecedented rise of total US aid from 2001, as the figure skyrockets reaching almost \$ 30 billion in 2005. This significant increase is related to the attacks of September 11th in the US and the new aid paradigm shift with development becoming the new “battlefront”, and therefore requiring heavy investments (USAID 2004:1)²⁵. There is also a visible increase of total Japanese aid after 2002. This is connected to the International Conference on Financing for Development held in Monterrey, Mexico, in March 2002, as

²⁴ OECD. Query Wizard for. International Development Statistics. Web. <<http://stats.oecd.org/qwids/>>.

²⁵ Some researchers like Carol Lancaster, attribute the aid increase more to the raise in influence of Christian groups in the US and President George Bush’s intention to balance the military interventions and unilateral approach in international politics with increased aid volumes (Lancaster 2007:92).

donor countries pledged to increase their ODA levels.

Figure 5. Danish, American and Japanese bilateral aid, 1995-2006.

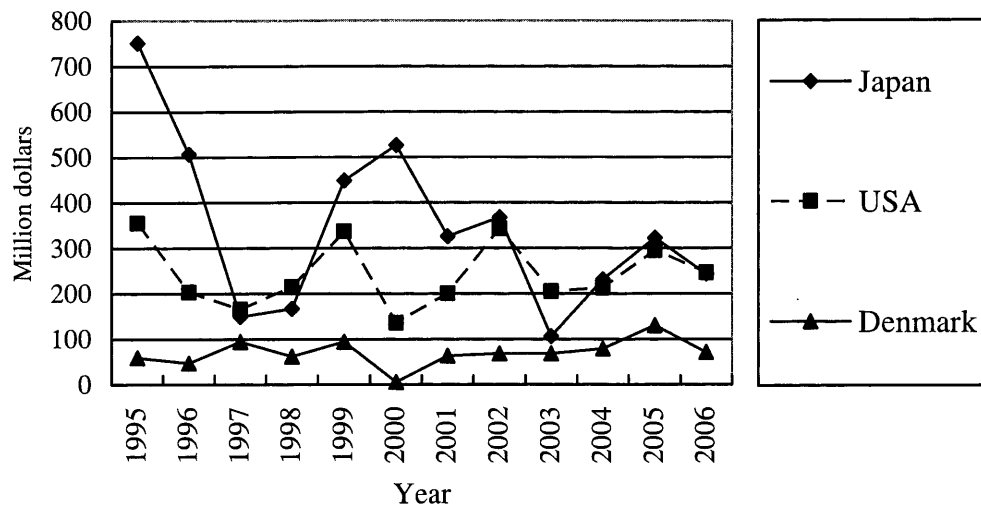


Note: Commitments in billion dollars (\$2007). Source: Calculated from OECD CRS.

Both for the US and Japan the proportion of environmental aid is decreasing. Therefore, the substantial increase of aid is designated for other, non-environmental goals like health or education. This finding is also confirmed by Robert Hicks et al. as a substantial amount of neutral aid is allocated by the donors (2008:29). On the other hand, Denmark has been very consistent with its total aid flow and the proportion of environmental aid, because

no significant shifts are noted. The continuity of aid levels is clearly evident in Figure 6, which shows that there are no dramatic shifts in the aid volumes. This implies a firm and coherent policy concerning Danish ODA allocation.

Figure 6. Bilateral aid for general environment protection, 1995-2006.



Note: Commitments in million dollars (\$2007). Source: Calculated from OECD CRS.

Japan has remained one of the largest (if not the largest in certain years) environmental aid donors for general environmental protection, although the amount distributed in recent years was substantially below the 1995 level when it reached almost \$ 800 million. The Japanese administration has had aspirations since the beginning of the 1990s to become and remain a leader in environmental aid distribution²⁶. In 1997, despite the country's financial crisis, Japan hosted the Third Session of the Conference of the Parties to the Framework

²⁶ In 1997, Prime Minister Ryutaro Hashimoto made the following comments on ODA : "ODA adheres to the principle that environmental conservation and development shall be pursued in tandem. Japan reached the ambitious target it set for itself at the Earth Summit, and actually exceeded the targeted amount of ODA in the environmental field by more than forty percent...Although my government is now facing severe budgetary constraints, it will give the greatest possible consideration to ODA in the area of environment" (Ministry of the Environment. Government of Japan. *Statement by Prime Minister of Japan Ryutaro Hashimoto at UNGASS*. 23 June 1997. Web. 20 June 2009. <<http://www.env.go.jp/en/earth/iec/ungass.html>>).

Convention on Climate Change (COP3) in Kyoto and Prime Minister Ryutaro Hashimoto launched the “Green Initiative”. After 1997, Japanese environmental aid (for general environment protection) started to increase, confirming the promise made by the government not to make substantial cuts despite the ongoing financial crisis. However, the levels were cut after 2000.

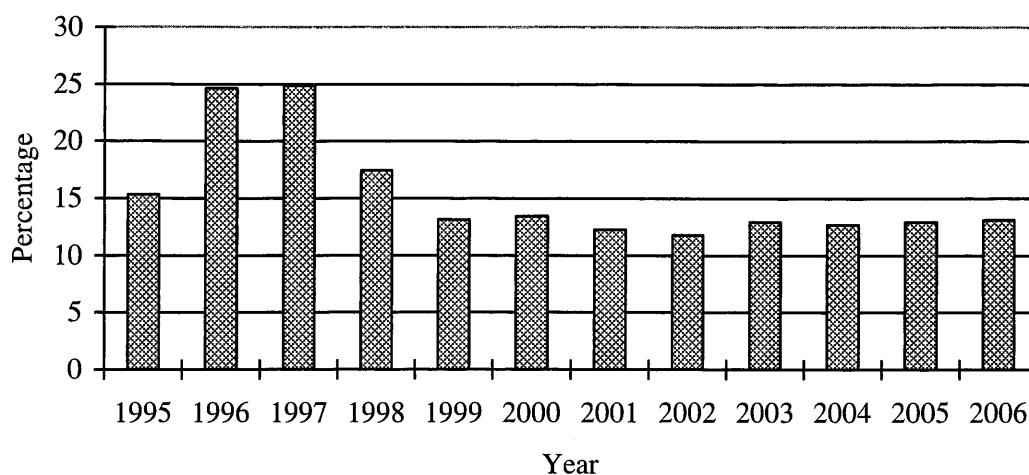
The American environmental aid level (including aid for general environment protection) has (similarly to Denmark) remained quite stable with some fluctuations throughout the decade. Political or economic events did not seem to influence environmental aid allocation. Nonetheless, as noted previously, there has been a large increase of non-environmental assistance which has decreased the proportion of aid for the environment.

Based on the calculations from the OECD CRS, bilateral donors have kept their environmental assistance on a similar level, except for Japan which decreased aid for environmental sustainability from 1996 and aid for general environment protection from 2000. Despite the political rhetoric about the importance of environmental degradation in relation to development, environmental aid has been falling behind non-environmental aid budgets (except for Denmark), as the growth of aid volumes is caused by growth of non-environmental aid. The situation is similar for multilateral donors as they have kept their environmental assistance stable until 1999 when an increase was noted. Non-environmental assistance has experienced strong growth. Yet due to OECD’s underreporting for some donors, such as UNDP, this can only serve as a hypothesis.

The increase in non-environmental aid has caused the percentage of aid for the environment (including projects with environmental components) to drop compared to the total aid amounts (see Figure 7). The percentage of environmental aid (distributed by multilaterals and bilateral) in 2006 was below 1995 levels. Therefore, despite the increase in the volume of projects with environmental components (Figure 1), aid for the environment is

lagging behind other sectors, although the percentage has remained stable since 1999.

Figure 7. Percentage of aid for the environment (bilateral and multilateral), 1995-2006.



Note: Excludes GEF. Source: Calculated from OECD CRS.

3.3. World Bank's understanding of environmental aid

In the late 1990s there was a shift from viewing environmental problems as a separate sector to viewing them as part of development (World Bank 2000:3). Environment started out with its “conservation focus and slowly emanated out to natural resource management, and then further out to infrastructure and reaching the more distant, non-resource sectors”²⁷. As the World Bank decided to mainstream environmental concerns into various projects and not to treat environmental issues as a separate category, it has led to the distortion of environmental aid figures. Projects with doubtful environmental components are found in the World Bank Project Database under the Environment and Natural Resource Management (ENRM) theme.

²⁷ Mark Lundell. Sector Leader of World Bank Brazil. Personal Interview. 14 December 2009.

One such project is the Highway Management Project in the Philippines (Project ID: P004597, dated 1991-2000) which had the main objective of “improving the quality of the arterial highway network, thereby reducing transport costs and increasing the country's economic competitiveness” (sic). This project can be found under the Environment and Natural Resource Management theme, under the category of environment policies and institutions. The major components of the project are transportation (82%) and public administration, law and justice (18%). It is placed there, because it contains environmental components. The corresponding Millennium Development Goal for this project, attributed by the World Bank, is Goal Seven: ensuring environmental sustainability. A similar project is the Mexican Federal Roads Modernization Project (Project ID: P043163, dated 1997-2004) which had the goal of satisfying the needs of traffic growth and reducing road transport system costs. It is also placed under the seventh Millennium Development Goal of ensuring environmental sustainability.

Transportation related projects are not the only controversial projects classified as projects with the goal of ensuring environmental sustainability in the Project Database. One such questionable project under the water and sanitation category is the Armenian Second Irrigation Dam Safety Project (Project ID: P088499, duration 2004-2009). Among the project details one can find the goal of ensuring environmental sustainability next to the project objective of rehabilitating twenty-nine dams. The project is generated under the ENRM theme, despite the fact that environmental benefits of dams are highly questionable²⁸. The World Bank's project classification system can be very misleading.

The World Bank is probably the most criticized institution regarding environmental

²⁸ Hydroelectric dams generate large quantities of methane from rotting sediments, and as Jim Giles estimates, emissions from tropical dams can exceed those of fossil-fuel plants (Giles 2006:524-525). See also: Khagram 2004 and Barlow 2007: 21-22.

concerns and its environmental aid²⁹. As a World Bank document states: “the impact of WBG [World Bank Group] programs on broad environmental trends in the developing world has been limited, and the achievements of various programs have been mixed” (2000:3). The World Bank has been faced with numerous challenges in its efforts to incorporate environmental issues into its operations. The Bank’s environmental interests were largely limited to assessing the potential impacts of projects until the 1980s, when external pressures helped induce a broader approach³⁰.

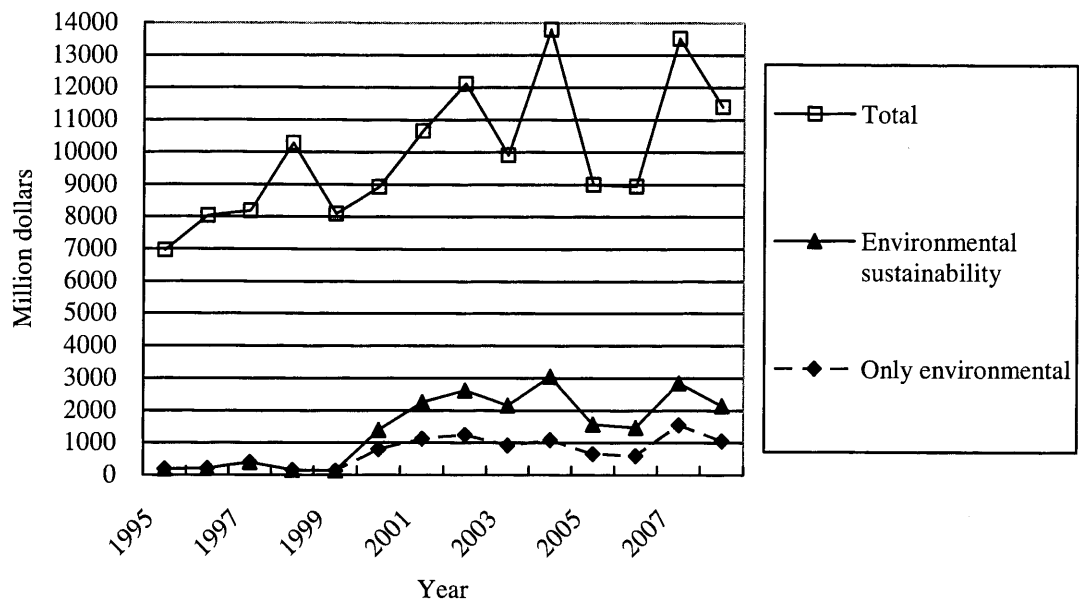
The World Bank’s primary mission is poverty alleviation and environmental issues are viewed within this context, as “the development of the [environmental] strategy is part of a larger process within the Bank to rethink how World Bank development assistance can become more effective in addressing poverty” (World Bank 2000:vii). Environmental sustainability is considered as a part of poverty reduction. In chapter eight this linkage will be illuminated, and the Bank’s assurance of directing environmental funds to the poorest countries, verified.

Although the World Bank is the largest multilateral environmental aid lender, aid for the environment is not one of the top priority sectors. According to the OECD CRS database, between 1995 and 2006 aid for environmental sustainability constituted 14% of total World Bank funds and aid “only for the environment” made up 6% of total funds (Figure 8).

²⁹ Among the Bank’s academic critics concerning environmental issues are: Bruce Rich, Zoe Young, Phillipe Le Prestre, Jonathan A. Fox, L. Dave Brown.

³⁰ As the World Bank 2008 Environmental Evaluation Report states: “World Bank support for the environment has evolved over the past four decades from an initially preventive ‘do no harm’ or safeguards approach to—especially after 1990—a proactive ‘do good’ approach” (World Bank 2008:19).

Figure 8. IDA's environmental and total funds, 1995-2008.



Note: In millions (\$2008). Only IDA funds. Environmental sustainability aid includes: Only environment, Environment and Gender, Environment and Participatory Development/Good Governance and Gender and Environment and Participatory Development/Good Governance policy objectives. There are gaps in aid reporting prior to 1999. Source: Calculated from OECD CRS.

There has been a significant rise of aid for environmental sustainability, which also includes aid with non-environmental components. Between 1995 and 2006 48% of aid for environmental sustainability has the “only environment” policy objective. The majority includes aid with other components, such as gender and participatory development. According to the OECD CRS database, between 1995 and 2006 the Bank allocated over \$ 15.6 billion for environmental sustainability and over \$7.5 billion for projects with the “only environment” policy objective. These figures make the World Bank the second largest (after Japan) environmental donor and the largest multilateral donor in terms of volume.

Measuring aid for the environment is a challenge due to the lack of a universally accepted definition. As Mark Lundell (Sector Leader) in World Bank Brazil explains: “Something that you would define as environment would have: natural resource management, sewage and water treatment, protected areas and conservation, quite a bit of agriculture. It’s a

perennial issue: what's the definition of environment?"³¹.

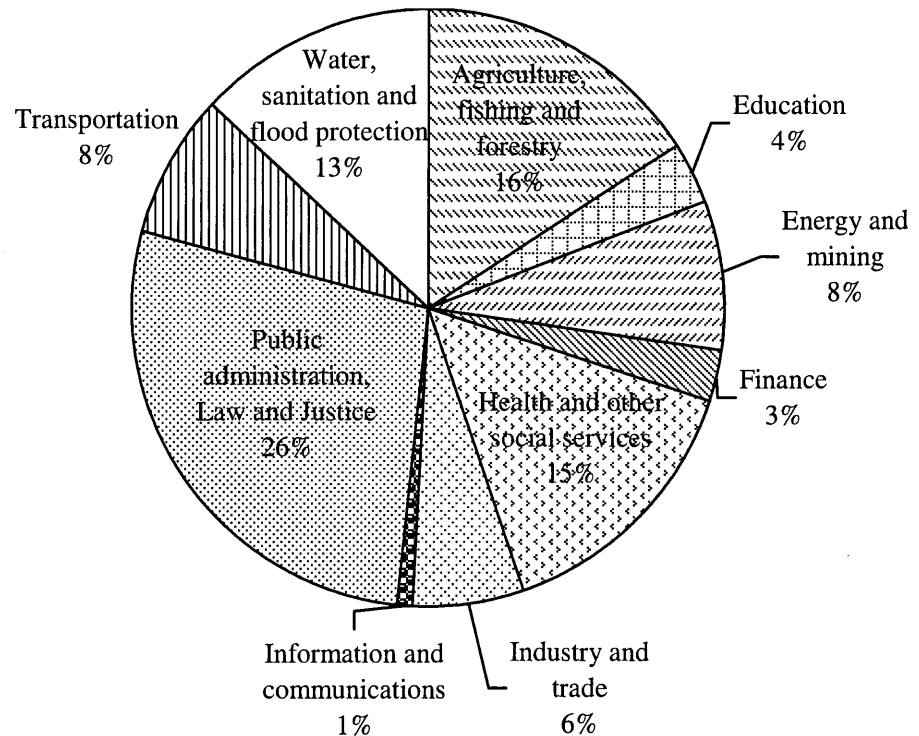
As the World Bank no longer views aid for the environment as a separate entity, environmental issues are intended to constitute an integral part of the broader development framework and environmental considerations are required to be present in every project³². However, researcher Katherine Morton concluded that the Bank has found it challenging to define the meaning of a project with environmental components (2005:127). A World Bank evaluation report confirms the lack of a clear definition, and states that the "priority given to lending for ENRM appears to be modest" (2008:xvii). Moreover, the *2004 Annual Review of Development Effectiveness* estimated a negative 10% growth rate in the Bank's annual commitments for the environment and natural resources (World Bank 2005b:12). From 1991 to 2000, only 32-64% of all World Bank projects underwent environmental assessment (World Bank 2000:19).

The protection for the environment is not as a goal by itself, but sustainable development is. There is no specific sector that deals with environmental issues for the reason that they are dispersed between different sectors: environmental projects are implemented in specific sectoral contexts. However, there is a clear, overall dominance of the law, justice and public administration sector in overall framework of World Bank's aid for environmental sustainability (see Figure 9). Agriculture, fishing, forestry and water and sanitation sectors have also been a primary area of investment. Overall, 35-51% of projects with environmental components are channeled through infrastructure-based sectors. The above mentioned sectors contain the majority of projects with environmental sustainability components.

³¹ Mark Lundell. Sector Leader of World Bank Brazil. Personal Interview. 14 December 2009.

³² There are ten environmental and social policies which are considered as safeguards. For the list see: World Bank 2000:19.

Figure 9. World Bank's ENRM theme divided into sectors, 1995-2006.



Note: Funds for IDA only. The Environment and Natural Resource Management theme is divided into sectors which contain environmental sustainability components. Some projects are duplicated in the database because they contain several sectoral components. Source: Calculated from World Bank Project Database.

To conclude, the Bank considers decreasing environmental degradation as part of its main goal of poverty alleviation and, thus, maintains a broad understanding of the term environmental aid.

3.4. The GEF's understanding of environmental aid

The Global Environment Facility (GEF) was created by the World Bank in 1991 as a pilot project to combat environmental problems of global significance in developing countries. The creation of the Facility was a response to the request of developing nations, which were arguing that they require financial initiatives to protect environments in their own countries (Miller 1995:139). The goal of the GEF is to fund environmental projects in countries whose

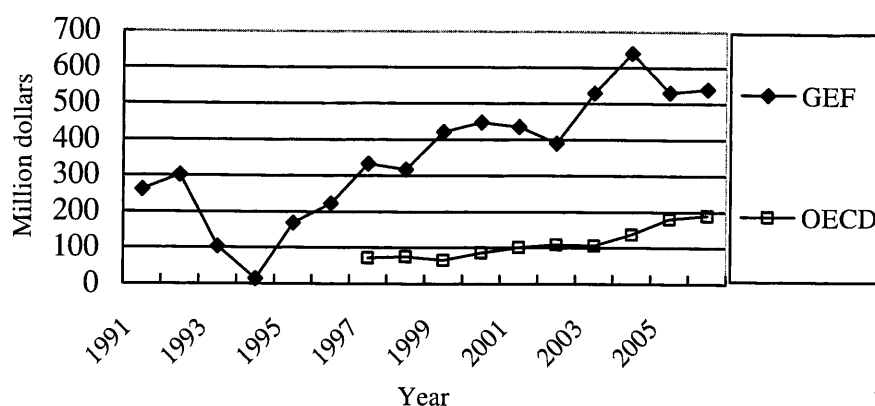
per capita income is less than \$ 4000 (Clapp and Dauvergne 2005:201). As one researcher stated: “GEF is the single most important indication of a shift in policies in the UN agencies and the World Bank to incorporate environmental concerns into development assistance” (Gan 1993:256).

The mission of GEF is to finance the “agreed incremental costs of measures to achieve agreed global environmental benefits” in the areas of biodiversity, climate change, international waters, and ozone layer depletion (GEF 1995:3). Land degradation and persistent organic pollutants have been successively added to the list. GEF does not cover the full project cost but only the “incremental” part³³. Funds are mainly distributed by the World Bank, UNDP and UNEP. The GEF does not issue loans, as it is a non-profit institution, allocating only grants to developing countries. GEF only focuses on environmental issues, because that is its only mission (in contrast with the World Bank which sees environmental problems as part of poverty reduction).

The OECD database and the GEF project database produce different aid figures, because of the underreporting noted in the OECD database. However, the aid trends remain the same (see Figure 10). GEF has experienced a steady growth of its budget with a declining tendency noted from 1991 to 1994. This is explained by the fact that the GEF started out as three year (1991-1994) pilot project with \$ 1.3 billion in available funds and uncertainty to its future and further funding.

³³ A definition of incremental cost is available on GEF's Operational Policies webpage: “GEF funds the ‘incremental’ or additional costs associated with transforming a project with national benefits into one with global environmental benefits; for example, choosing solar energy technology over coal or diesel fuel meets the same national development goal (power generation), but is more costly. GEF grants cover the difference or “increment” between a less costly, more polluting option and a costlier, more environmentally friendly option” (GEF. *Operational Policies*. Web. 16 November 2008. <http://www.gefweb.org/Operational_Policies/Eligibility_Criteria/Incremental_Costs/incremental_costs.html>).

Figure 10. GEF funds, 1991-2006.



Source: Calculated from OECD QWIDS and GEF project database.

In 1994 the critical *Independent Evaluation of the Pilot Phase* was published which outlined flaws within the GEF's operations and the problem of top-down management (GEF 1994:15). Despite these shortcomings, the Conference of the Parties 3 (COP3) decided that GEF will continue its operations as a permanent institution and will receive additional funds, as well as administer Agenda 21 and the Climate Change and Biodiversity Conventions' funds.

On one hand, according to the GEF project database, between 1991 and 2007 there were 1970 GEF co-financed projects with a total value of over \$ 26 billion (GEF financing equaled \$ 6.6 billion). These figures suggest a growing interest of donors (GEF contributors) in environmental issues. On the other hand, according to the OECD database, GEF has spend over \$ 1.1 billion from 1997-2006, which constitutes a fraction of actual GEF spending.

Despite that GEF was founded as an additional institution, that would not gather existing financial resources from other projects and programs, but generate new funds for the environment, GEF has become for some organizations (like the UNDP) the main source of environmental financing (UNDP 2008:16). This issue will be explored further in the

following part of the chapter.

3.4.1. The GEF and World Bank linkage

The GEF has a very close relationship with the World Bank, as the Bank is not only the main founding institution of GEF, but also the main implementer of GEF projects³⁴. However, a World Bank employee emphasizes: “GEF is a separate agency. They have separate project processing and approval sub-steps”³⁵. Nonetheless, GEF’s budget is approved by the World Bank and the World Bank has legal authority over its spending (Young 2002:71). GEF staff salaries also come through the Bank. The GEF is housed in the World Bank building in Washington, but is (according to its legal status) functionally independent³⁶. GEF projects which are administered by the World Bank undergo the same administrative procedures, and as a World Bank employee explains: “The GEF projects are not any different from World Bank projects....Sometimes the projects are blended: we have an IDB project and a GEF grant put together. Ideally that is what the GEF likes us to do: pilot and scale up with loan funds”³⁷.

There has been, however, some controversy around the creation and functioning of GEF as a *de facto* World Bank dependent institution. The financial, localization and implementation dependency of the GEF on the Bank raises serious doubts about the true extent of independent policy formulation by the GEF. Researcher Zoe Young draws a clear conclusion that the GEF actually permits other institutions like the World Bank to externalize their own environmental costs by making their loans “seem more economic by getting the

³⁴ Mark Lundell comments: “I do not like GEF terminology: we are not an ‘implementing agency’, the beneficiaries (states, federal ministries or local communities) implement projects. We supervise the implementation” (Sector Leader of World Bank Brazil. Personal Interview. 14 December 2009).

³⁵ Mark Lundell. Sector Leader of World Bank Brazil. Personal Interview. 14 December 2009.

³⁶ This is one of the reasons that GEF only spend 1.8% of its core funds on its Secretariat (GEF 2009:3).

³⁷ Mark Lundell. Sector Leader of World Bank Brazil. Personal Interview. 14 December 2009.

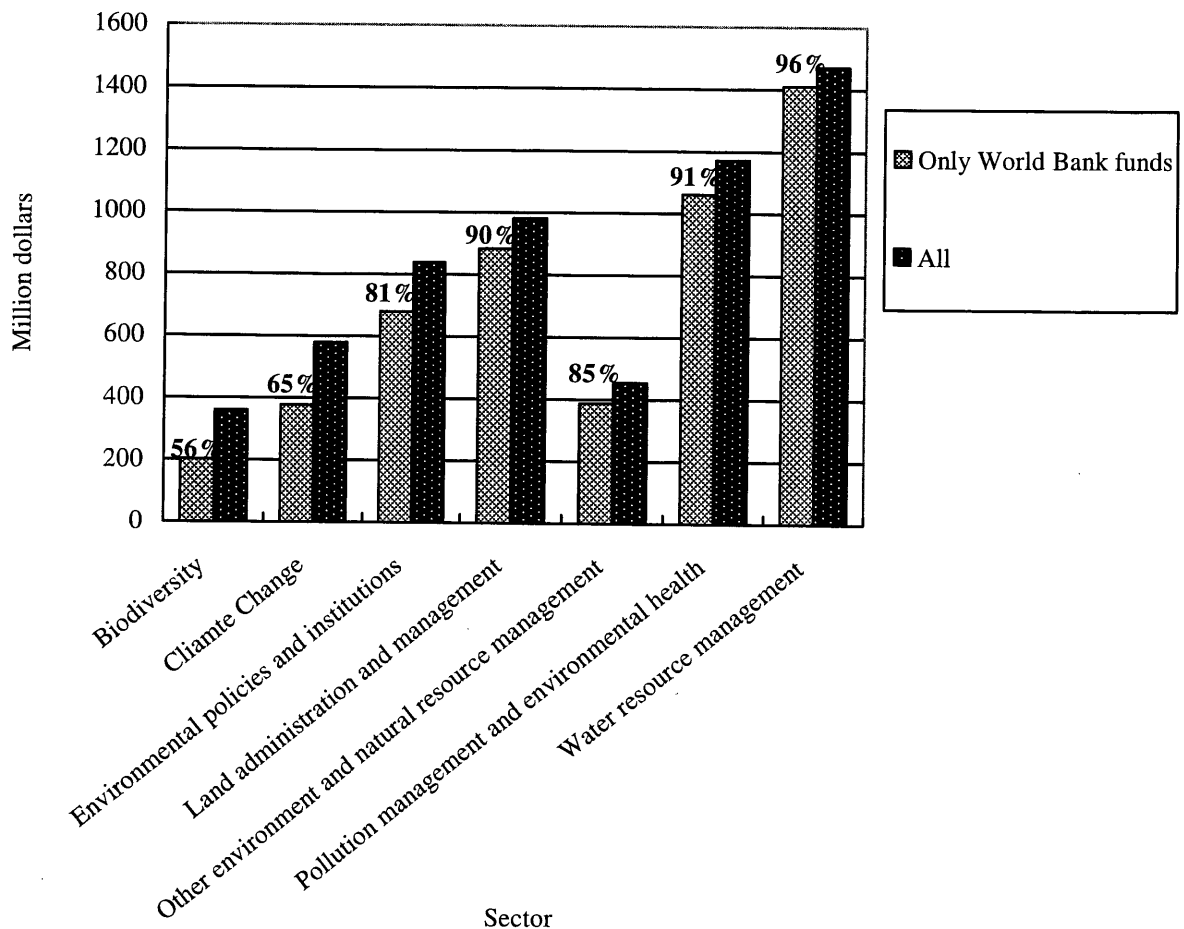
GEF to pay for the costs of any green components required” (2002:15).

Some researchers like Marian Miller have reported that the GEF has also funded environmentally destructive projects, such as the Arun Hydro-Project in Nepal which influenced indirectly the loss of biodiversity in the area; or the GEF project in Congo, where funds were used to build roads in a protected area (1995:140)³⁸. In one WB/GEF biodiversity project in Cameroon (Project nr 85, duration 1995-2003) the GEF grant was aimed at co-funding following activities: the “establishment of fuelwood plantations, agroforestry and soil conservation programs, improved livestock management and ongoing development of local micro-enterprises and environmental awareness programs”. Some of these program components may be questionable with regard to GEF’s mission.

Nevertheless, as the World Bank is a primary implementer of GEF projects, the GEF has also an influence on the Bank’s environmental portfolio (see Figure 11). If the biodiversity sub-theme of the World Bank is broken into strictly World Bank funds and other funds including GEF, Montreal Protocol, Carbon Offset and Rainforest funds, the strictly World Bank funds make up only 56% of the total biodiversity amount. The situation remains similar for climate change with 65% of funds from the Bank itself. This shows that large percentages of certain World Bank environmental sub-themes are financed from other sources.

³⁸ The \$10 million GEF Congo Wildlands Protection and Management Project (Project Nr 48) had several controversial elements from small-scale road building to developing tourist activities (including aquaculture) in one of the nature reserves (GEF. *The GEF project database*. Web. 20 June 2009. <<http://www.gefonline.org/>>).

Figure 11. World Bank's environmental aid by funding source, 2006.



Note: Some projects have several sectoral components and are duplicated. "Only World Bank funds" excludes: GEF, Montreal Protocol, Carbon Offset, Rainforest funds. "All" includes them. Source: Calculated from World Bank Project Database.

Moreover, a crucial question still remains: whether the World Bank, one of the most environmentally criticized multilateral institutions, can effectively manage GEF? This research will explore the aid pattern allocation differences between the World Bank and GEF.

3.5. UNDP's understanding of environmental aid

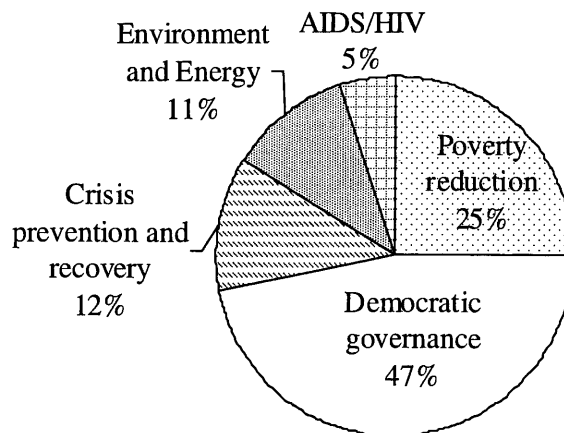
UNDP started showing an increased interest in environmental issues following the 1992 Earth summit. Yet the UNDP Evaluation Report states that from 2000 a new UNDP

Administrator “significantly downgraded environment and natural resource management as having relatively little to contribute to the core UNDP mandates of poverty and governance” (2008:vii). Since then, the number of core environmental personnel has been reduced, with the majority of remaining staff on GEF staff funding as part of GEF project implementation.

Similarly to the World Bank, UNDP views environmental issues within the context of poverty alleviation for the reason that the poor are the primary victims of environmental degradation. The UN Annual Report describes UNDP’s activities as “strengthening national capacities to manage the environment in a sustainable manner while ensuring adequate protection for the poor” (sic) (2008a:28). UNDP, along with UNEP, has also created the Poverty-Environment Initiative (PEI). This initiative aims to mainstream poverty-environment linkages into development planning processes in aid recipient countries.

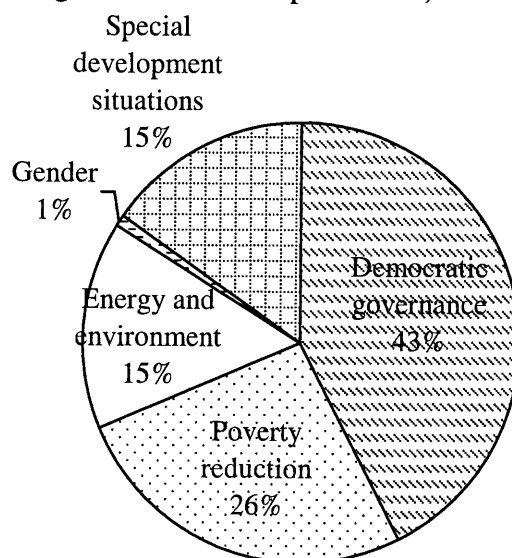
UNDP currently focuses on four areas in its operations: poverty reduction, democratic governance, crisis prevention and recovery, and environment and energy. The main focus themes have changed only slightly during the last decade, with poverty reduction, democratic governance and environment and energy issues remaining unchanged (see Figures 12 and 13). Environment and energy has remained the fourth focus area.

Figure 12. UNDP expenditures, 2005.



Source: UNDP 2006:4.

Figure 13. UNDP expenditures, 2000-2002.



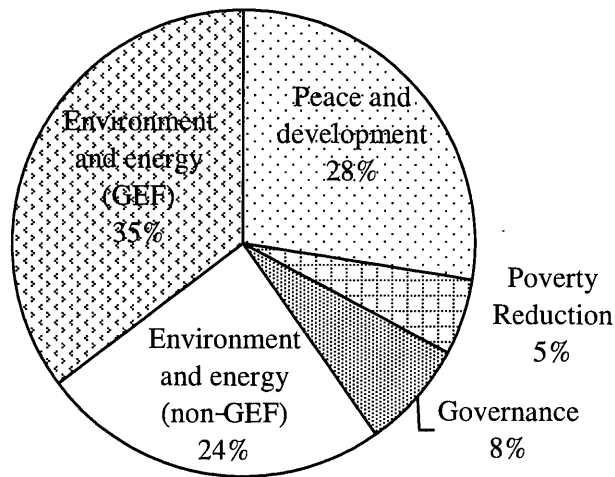
Source: Adapted from UNDP 2003:15.

3.5.1. The UNDP and GEF linkage

Non-core funding from the GEF and the Montreal Protocol Fund (MPF) is a major source of funds for UNDP's environment and energy sector (UNDP 2003:6). There is no data on the exact percentage of GEF funds that constitute UNDP's global environment portfolio. However, in 2005 UNDP's total budget for environment and energy was \$326 million (UNDP 2006:4). During the same year, according to the GEF project database, \$202.5 million in GEF funds were channeled through UNDP, which constitutes 62.1% of UNDP's environment and energy budget.

Furthermore, an example of UNDP's Philippine environmental aid portfolio shows that the GEF funding amount is substantial (Figure 14). From 2004 to 2008 GEF funds constituted the largest source of non-core funds (exceeding \$23 million) (UNDP 2009a:16)

Figure 14. UNDP Philippines budget expenditures, 2004–2008.



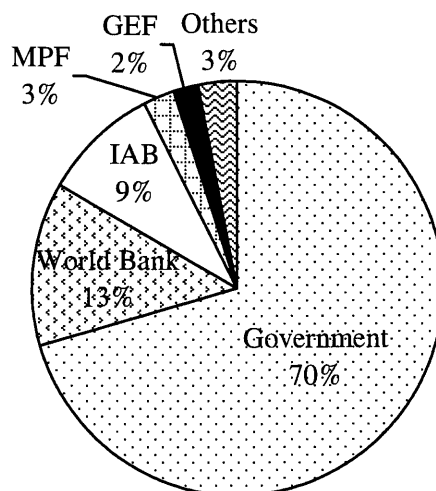
Source: Calculated from UNDP 2009a:16 and 17.

The GEF is also an important source of funding for the UNDP office in Brazil. Yet according to UNDP Brazil staff, the MPF and GEF funds comprise around 15% of the environmental budget, which constitutes a much smaller fraction of funds than in the Philippines³⁹. According to the UNDP Brazil website, GEF funds represent only 2% (\$ 2.9 million) of the total 2008 budget (includes also non-environmental aid). However, the GEF project database shows that in 2008 GEF/UNDP projects amounted to \$10.7 million (in commitments, as disbursements of these funds are unknown). Thus, there is a difference in calculating aid amounts between UNDP and GEF⁴⁰.

³⁹ Carlos Castro. UNDP Brazil Coordinator for the Environment and Energy Unit. Personal Interview. 21 January 2010.

⁴⁰ Interviewed UNDP personnel was unable to explain the difference.

Figure 15. UNDP Brazil's budget by funding source, 2008.



Source: UNDP Brazil. *O PNUD e seus objetivos*. Web. 20 February 2010. <<http://www.pnud.org.br/pnud/>>.

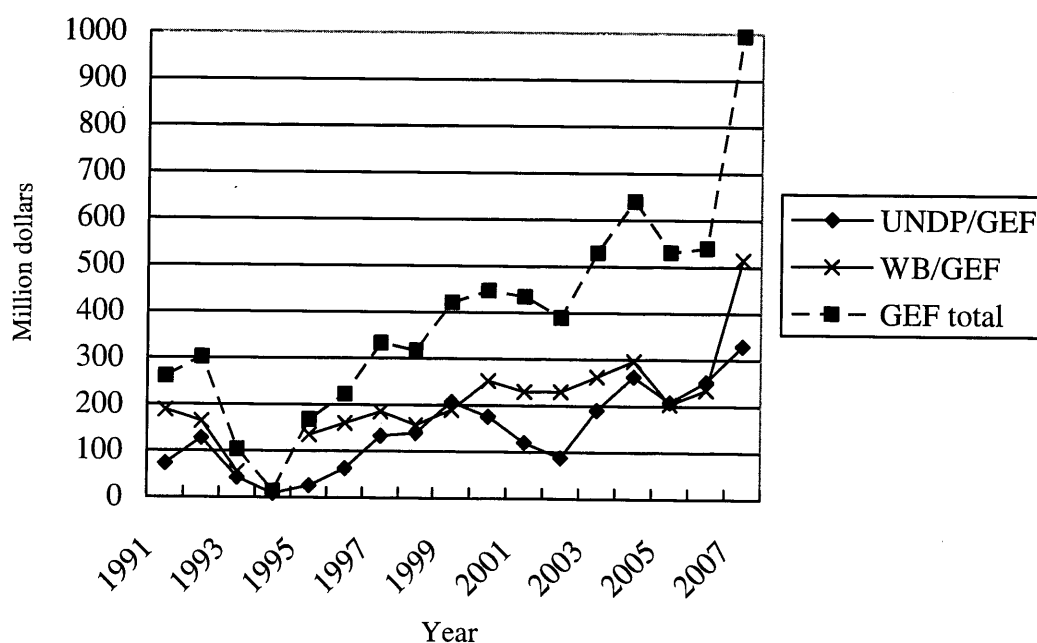
Overall, UNDP's core funding has been used to attract additional funding from donors. On average, UNDP's funding of \$1 has attracted \$6 of donor funding (UNDP 2003:15). The case of GEF's non-core funds illuminates just how crucial they are to UNDP's environment and energy program.

However, there is a significant difference between the mission of GEF (generating significant global environmental benefits) and one of the main goals of UNDP (poverty eradication). Therefore, the increasing reliance of UNDP staff on GEF funding alters the focus and type of UNDP's activities⁴¹. With increasing financial reliance on the GEF and the MPF, the national environmental priorities of aid recipient countries can be replaced by global GEF priorities. Additionally, the coordination of UNDP's environmental and energy activities with its other sector activities is brought into question. Figure 16 shows the mutual dependence of these institutions as UNDP absorbs a substantial portion of total GEF funds

⁴¹ As Craig Murphy writes in his book: "[James Gustave] Speth's first year as [UNDP] Administrator was also the first year that the entire range of environmental funds –from the Montreal Protocol, GEF, and 'Capacity 21' – were available for UNDP's use. They amounted to more than \$ 150 million, three times the core funding of the autonomous programs then embedded within UNDP....Thus environmental issues would quickly become a major part of UNDP's portfolio" (Murphy 2006:271).

(ranging from 15.1% to 49.2%).

Figure 16. GEF funding by implementing partner, 1991-2007.



Note: Excluding the Small Grants Program (SGP). Source: Calculated from GEF project database.

As of 2007, UNDP's GEF funded projects amounted to over \$2.7 billion, representing over 1130 projects. UNDP and the World Bank were both responsible for implementing 88.8% of all GEF projects between 1991 and 2007 (UNDP alone implemented 36.8%). A World Bank employee explains that there is a specialization between GEF implementing institutions, where projects linked to "sustainable environmental investments" are allocated to the World Bank and projects focusing on technical assistance to UNDP and UNEP⁴².

Nonetheless, if the GEF and UNDP aid allocation patterns are compared using the author's database, GEF and UNDP acted identically (by giving or not giving aid to 100 sample countries) in only 47% of the cases. Thus, GEF funds do not have a strong influence

⁴² Mark Lundell. Sector Leader of World Bank Brazil. Personal Interview. 14 December 2009.

on UNDP's aid allocation pattern. However, GEF can (as this research intends to explore in chapter five) influence the types of UNDP's environmental activities.

Apart from medium and full-sized UNDP/GEF projects, UNDP manages the Small Grants Program (SGP) with a portfolio of over 5 000 community-based projects, on behalf of the UNDP/GEF partnership. The SGP, which supports small-scale activities in GEF focus areas and the generation of sustainable livelihoods, has been allocated an additional budget of \$479.7 million (UNDP 2008a:30). The SGP was assessed as "one of the most successful initiatives of UNDP....and is unique among GEF programs in targeting poor and marginal communities" (UNDP 2008:27). The SGP is an autonomous program, independent of other UNDP/GEF activities, as national SGP coordinators report directly to UNDP Headquarters in New York, where the program is coordinated (not by UNDP country staff). Therefore, country offices have little influence on the SGP.

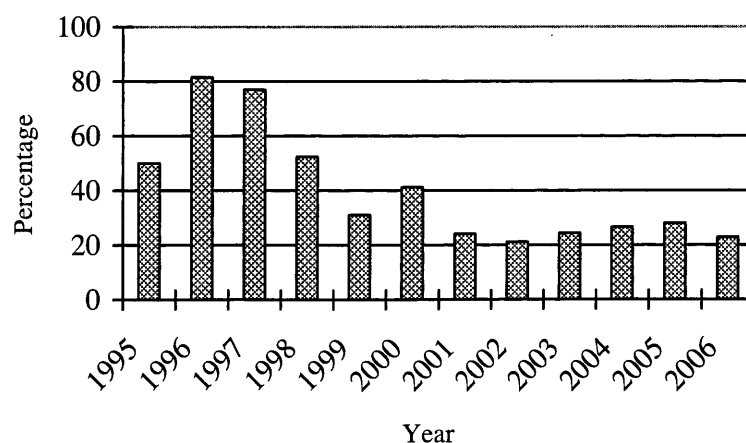
3.6. Japan's understanding of environmental aid

Contrarily to the World Bank and UNDP, Japan does not view environmental degradation as part of the poverty reduction framework, because both these goals should be pursued simultaneously. The first principle of the Official Development Assistance (ODA) Charter from 2003 states: "Environmental conservation and development should be pursued in tandem". Moreover, the main mission of Japanese aid is not poverty reduction. The overall goal of Japanese ODA is to "contribute to the peace and development of the international community, and thereby help to ensure Japan's own security and prosperity" (Ministry of Foreign Affairs of Japan 2003:1).

In the ODA *White Paper 2007*, the Ministry of Foreign Affairs of Japan (MOFAJ) outlined the primary focus areas: addressing environmental and climate change issues;

realizing economic growth of developing countries and furthering economic prosperity in Japan; setting democratization and assisting market oriented-economic reform; peace building and the fight against terrorism and ensuring human security (Ministry of Foreign Affairs of Japan 2008:3)⁴³. With environmental issues set as a priority, Japan has been and still is the largest bilateral environmental aid donor (see Figure 5 and 6). In 1999, Japan allocated \$ 2.8 billion for the environment which constituted 31.1% of its total ODA, which is the largest amount given by any bilateral institution (see Figure 17). Due to the cutbacks in the overall ODA volume in 1999, aid for environmental sustainability was also reduced. Although since 1999 the levels of environmental aid have remained quite stable, they have not regained the pre-1999 levels, because loans for environmental sustainability were cut back with the level of grants remaining stable.

Figure 17. Japanese environmental aid as percentage of total aid, 1995-2006.

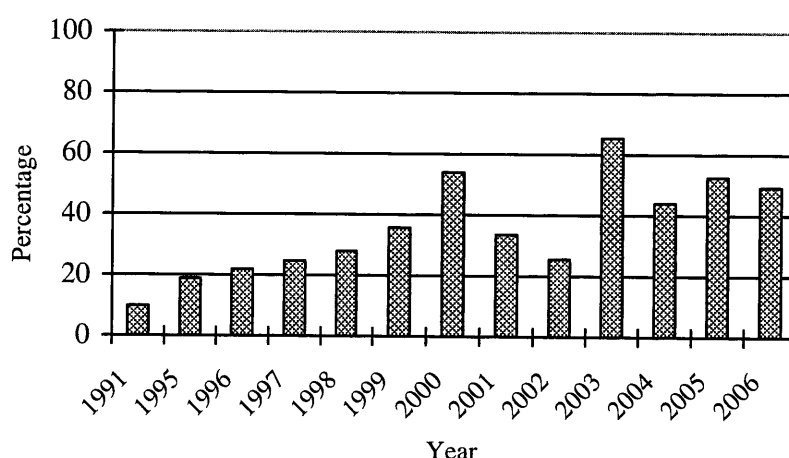


Note: Calculated based on annual aid commitments. The large percentage visible in years 1996 and 1997 is due to an increase in aid amounts to Asian countries (mainly Bangladesh, India, Pakistan, Sri Lanka and Thailand). The Asian 1997 economic crisis decreased the overall aid amounts. Source: Calculated from OECD CRS.

⁴³ Environmental degradation is also prioritized in the ODA Charter under *Addressing global issues* (Ministry of Foreign Affairs of Japan. Japan's Official Development Assistance Charter. Web. 30 June 2009. <<http://www.mofa.go.jp/POLICY/oda/reform/revision0308.pdf>>).

However, if data is extracted from the JICA ODA loan database, and then the percentage of environmental aid is calculated, a very different figure emerges (see Figure 18). The overall aid figures (similarly to the OECD CRS database) are declining since 1999, yet the percentage of environmental projects (as defined by the Japanese International Cooperation Agency - JICA) is not dropping.

Figure 18. Percentage of environmental loans according to JICA, 1995-2006.



Source: Calculated from JICA ODA database⁴⁴.

Despite the different trends, these two databases (OECD CRS and JICA) present a similar understanding of the term “environmental aid”. JICA’s mass transit transport systems, railways, diesel, geothermal, hydroelectric and hydropower power plant projects which have environmental components appear in the database under the word “environmental”⁴⁵.

⁴⁴ JICA. ODA Loan Project DATA. Web. 20 June 2009. <http://www2.jica.go.jp/en/yen_loan/index.php>.

⁴⁵ The 2008 Mass Transit System Project in Bangkok is one example of a project with environmental components. JICA explains: “The project is also expected to reduce vehicle emissions of carbon dioxide, the primary constituent of greenhouse gases”. Another JICA environmental project is the 2007 Samoa Power Sector Expansion Project, which “includes construction and renovation of power plants and improvement and rehabilitation of transmission/distribution lines”. The project has components like “building a new, highly energy-efficient diesel power plant and by harnessing inexpensive and domestically-produced renewable energy through construction of a hydropower plant” (JICA. ODA Loan Project DATA. Web. 20 June 2009).

Similarly to JICA, the OECD CRS has counted the 1995 Albania JICA Hydroelectric Power Plant as a project with environmental sustainability components. Also the 1995 Xian/Ankang railway construction project is counted as a project with environmental sustainability components. So is the 1995 Terminal building in Beijing Airport⁴⁶. Thus, why is there such a striking difference in aid trends if the classification is so similar? The JICA ODA database does not have the full coverage of the OECD CRS database. If aid for Nepal, Bangladesh, Philippines and Indonesia is extracted for the year 2001, the following results appear (see Table 3).

Table 3. Comparison of OECD and JICA databases based on four sample countries.

	Nepal		Bangladesh		Philippines		Indonesia	
Information Source	OECD	JICA	OECD	JICA	OECD	JICA	OECD	JICA
Nr of loans	2	1	5	4	11	10	6	5
Nr of environmental loans	1	1	0	0	3	3	0	0

Source: Calculated from OECD CRS and JICA ODA database.

More information is available in the OECD CRS database, as the number of reported loans is larger. Moreover, the OECD CRS portrays Japan as a “greener” donor than the JICA ODA database, because on average more loans are classified as environmental. This is visible in the example of India (see Table 4).

⁴⁶ In 1997 the environmental sustainability markers were revised by OECD. Yet, the definition did not change as the 1999 Azerbaijan Gas Pipe Construction Project was still classified as a project ensuring environmental sustainability (but not as the primary project objective).

Table 4. Japanese loans to India according to data source, 1995.

Project name	OECD	JICA
Bangalore Water Supply and Sewage Project	Environmental (2)	Environmental
Urban Water Supply and Sanitation Improvement Program	Environmental (2)	Environmental
Pipavav Port Ship-Breaking Project	Environmental (1)	No
Anpara Power Transmission System Project (II)	Environmental (1)	No
Dhauliganga Hydroelectric Power Plant Construction Project	Environmental (1)	No
Kurnool-Cuddapah Canal Modernization Project	Environmental (1)	No
Gujarat Afforestation and Development Project	Environmental (2)	Environmental
Small Scale Industries Development Program (V)	Environmental (1)	No
Attappady Wasteland	Environmental (2)	Environmental

Note: "Environmental" means that the loan has environmental components. In the OECD scale, the components range from 1-2 (with 2 being the maximum). This research takes both into account. Source: OECD CRS and JICA ODA database.

However, the overall average percentage of environmental loans reported for 1995-2006 in the OECD CRS database is similar to the JICA ODA database. The environmental aid percentage average for 1995-2006 is 40% for OECD and 37.8% for JICA. How is this possible if the OECD CRS portrays Japan as a "greener" donor? The answer is visible if Japan's loans to India in 2006 are broken down with more detail.

Table 5. Japanese loans to India according to data source, 2006.

Project name	OECD	JICA
Hussain Sagar Lake and Catchment Area Improvement Project	Environmental (2)	Environmental
Bisalpur Jaipur Water Supply Project	Environmental (2)	—

Improvement of Water Quality and Environment in Yamuna	Environmental (2)	—
Bangalore Water Supply and Sewage Project (II-2)	Environmental (2)	Environmental
Kolkata Solid Waste Management Improvement Project	Environmental (2)	Environmental
Construction of New Commuter Railway	Environmental (1)	—
Dhauliganga Hydroelectric Power Plant Construction Project	No	—
Bangalore Metro Rail Project	Environmental (1)	Environmental
Delhi Mass Rapid Transport System Project	Environmental (1)	Environmental
Visakhapatnam Port Expansion Project	No	No
Meet the Power Demand in Andhra Pradesh	No	—
Enhance the Reliability of Transmission	No	—
Rural Electrification Project	No	No
Construction of a 420MW Power Station	No	—
Umiam Hydropower Station R&M Project	Environmental (1)	—
Purulia Pumped Storage Project (II)	No	No
Swan River Integrated Watershed Management Project	Environmental (2)	Environmental
Rengali Irrigation Project (II)	No	—
Kurnool-Cuddapah Canal Modernization Project	No	—
Haryana Natural Resource Management and Poverty Reduction	Environmental (2)	—
Tamil Nadu Afforestation Project (II)	Environmental (2)	—
Karnataka Forest Management and Biodiversity Conservation Project	Environmental (2)	—
Orissa Forestry Sector Development Project	Environmental (2)	Environmental
Conserve Monuments and Improve Infrastructure	Environmental (2)	—

Source: OECD CRS and JICA ODA database.

Although there are more projects with environmental components in the OECD CRS database, there are more projects *overall* in the OECD CRS database, as an additional eight loan projects were issued with no environmental component data available for them (they are not included in the table). Therefore, the environmental loan percentage is similar in both databases, because more loans are not reported in JICA ODA database and they are less “green” than in the OECD CRS database.

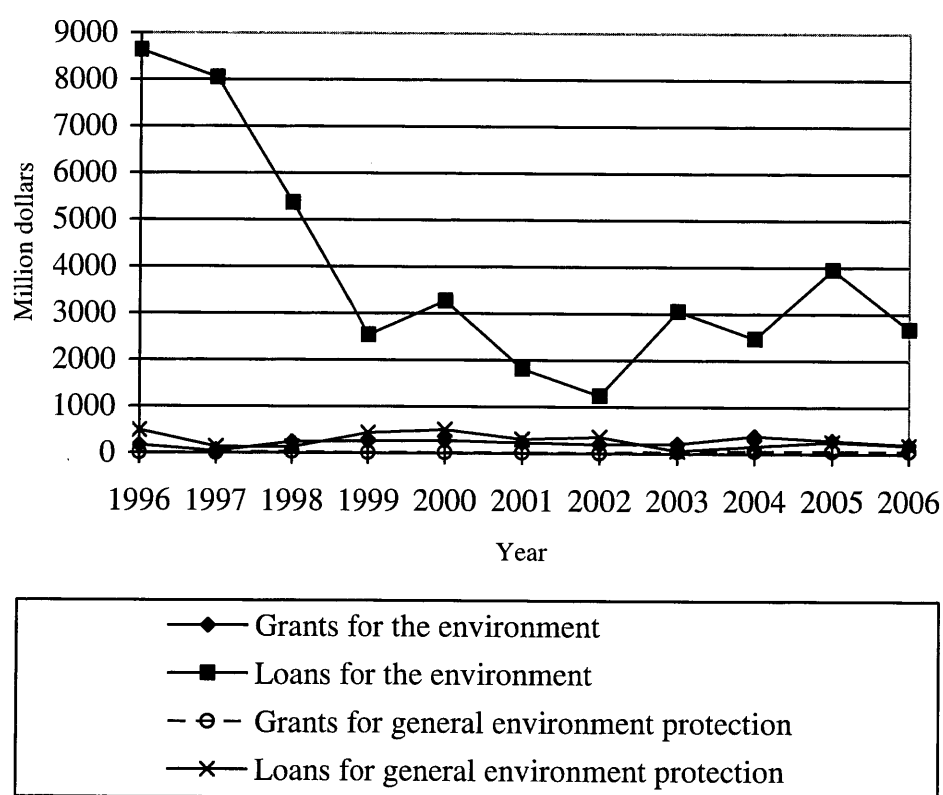
There are several reasons for Japan’s leadership role in lending aid, as one JICA document illustrates: “ODA can contribute to Japan’s economic interests as Japan is highly dependent on developing countries as suppliers of natural resources, energy, and food” (2001:1). Additionally, the *White Paper* emphasizes the importance of assisting in the area of environmental conservation and economic growth by using technology in which Japan has a comparative advantage. Moreover, it is important to “utilize official aid and provide assistance for the natural resource and energy development projects undertaken in developing countries by Japanese private corporations” (Ministry of Foreign Affairs of Japan 2008:4). Japanese aid philosophy is based on the self-help concept, implying that the aid receiving country should mostly rely on its own resources, and small amounts of funding should be able to stimulate technological advances. Thus, the emphasis on loans, which constituted 87% of environmental aid in 1999.

There is a very high percentage of Japanese environmental aid in the second half of the 1990s. As most of Japanese environmental aid is in the form of loans for infrastructure related purposes (see Figure 19), the Asian financial crisis of 1997 affected the loan allocation for environmental sustainability (but not the funds for strictly environmental purposes). The financial crisis changed the prioritization of Japanese ODA as Japan disbursed large financial packages for Thailand, South Korea, and Indonesia, totaling \$19 billion for the three countries

alone⁴⁷.

However, during the crisis, the Japanese Ministry of Foreign Affairs emphasized that renovating existing infrastructure and addressing environmental issues will be a “special priority”. The grant and loan figures for general environment protection, which rise slightly after 1997, do confirm this statement, despite the overall decline in environmental sustainability aid.

Figure 19. Japanese environmental aid by form, 1996-2006.



Note: Commitments in million dollars (\$2007). Source: Calculated from OECD CRS.

Similarly as the World Bank, Japan has also not been able to avoid criticism for the large proportion of loans issued and the heavy emphasis on infrastructure. Researcher Peter

⁴⁷ Ministry of Foreign Affairs of Japan.. “ODA and the Asian Currency and Financial Crisis” Japan’s Annual Report (Summary) 1998. Web. 14 August 2009. <<http://www.mofa.go.jp/policy/oda/summary/1998/3.html>>.

Dauvergne remarked that Japanese environmental aid is partly a reclassification of traditional aid projects and does not constitute an actual increase in funds. Additionally, as Japanese environmental aid is primarily in the form of loans, only “a small amount of environmental aid supports forest conservation, reforestation, and improving tropical logging techniques” (Dauvergne 1997:21).

3.7. American understanding of environmental aid

The United States Agency for International Development (USAID) is the main development agency of the US. Although the OECD CRS database also includes funds distributed by other American agencies, USAID remains the dominant institution and USAID materials will be used as the main reference in this research.

USAID has the objectives of “reducing poverty, spurring economic growth while protecting the environment, and promoting good governance”⁴⁸. Aid for the environment is viewed within the context of poverty reduction and generating economic growth. In relation to this mission, the close linkage between sustained economic progress and environmental protection is emphasized (USAID and Department of State 2003:26). In USAID’s Annual Reports, overcoming environmental degradation is continuously listed as one of the strategic development goals. However, environmental degradation is not distinctively mentioned as one of the five core operational goals of USAID⁴⁹. For USAID country offices, the environmental activities are under economic growth. As Eric Stoner (USAID Brazil Deputy Director and Environment Coordinator) explains:

⁴⁸ USAID. “Land Management” *Environment*. Web. 20 June 2009. <http://www.usaid.gov/our_work/agriculture/landmanagement/>.

⁴⁹ The five core goals are: promoting transformational development, strengthening fragile states, providing humanitarian relief, supporting U.S. geostrategic interests, mitigating global and transnational ills (USAID 2004a:5).

Two or three years ago, a Foreign Assistance Framework was established. The Foreign Assistance Framework tries to fit everything of foreign assistance into one box....So both renewable energy project and biodiversity conservation fit under the foreign assistance principle objective of economic growth, so almost all of the USAID offices around the world, have the environment team now called the economic growth team⁵⁰.

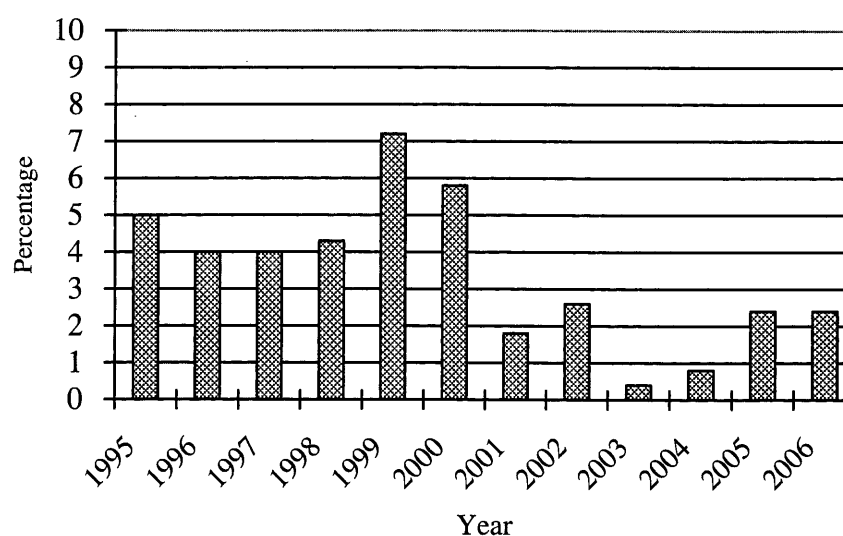
Similarly to Japan, the US also considers the allocation of environmental aid as part of its national interest. According to the USAID Strategic Plan, the US has both humanitarian and security interests in helping developing countries in regard to social and environmental problems, because if the problems are “left unresolved...[they] will aggravate social and political instability and could reverse the development advances made over the last several decades” (USAID and US Department of State 2003:24). Moreover, the US recognizes that environmental issues can be one of the causes of social unrest which could affect its interests. The USAID’s *2000 Performance Overview* emphasizes that natural resource exploitation can be a significant component of a civil war or conflict, which would become a threat to US interests (2001:78). The American society and industry are also affected by the degrading global environment (USAID 2000:107). Additionally, through providing aid, the US can also fulfill its economic interests as developing countries have the most dynamic markets for U.S. exports (USAID 2004a:7).

Despite these declarations and the overall increase of total aid, the environmental aid percentage has been decreasing since 2000 (see Figure 20). The percentage of aid strictly for

⁵⁰ Eric Stoner. USAID Brazil Deputy Director and Environment Coordinator. Personal Interview. 7 December 2009.

general environment protection is even smaller. Therefore one cannot defend the argument that environmental protection is indeed a priority issue for the US (especially after 2001).

Figure 20. American environmental aid as percentage of total aid, 1995-2006.



Source: Calculated from OECD CRS.

USAID does not distribute any loans, because all of its environmental aid is in the form of grants. Grants are more beneficial for recipient countries and they also allow donors to have a greater flexibility in designing and implementing projects than if donors were lending funds which would have to be repaid (the issue will be explored further in chapter nine).

3.8. Denmark's understanding of environmental aid

Denmark, alongside the other two bilateral donors analyzed, emphasizes that as a donor country it also has its own national interests in allocating aid, because it cannot isolate itself from the consequences of inaction (DANIDA 2007:2). Environmental sustainability is

necessary to maintain global stability; hence, aid has also become an issue of global security and development (DANIDA 2004:5). Denmark also underlines that without combating environmental degradation, poverty reduction will be undermined and poverty reduction is the “fundamental challenge for Danish development assistance” (DANIDA 2003:1). Therefore, environmental problems are seen in the context of reducing the levels of poverty (which will be explored in chapter eight).

The focus of Danish International Development Agency’s (DANIDA’s) assistance is: women, HIV/AIDS and good governance. Aside from these issues DANIDA addresses climate change, migration, stability and democracy as they appear on the international aid agenda (DANIDA 2008a:40). Therefore, environmental issues which include climate change and energy are one of DANIDA’s priorities, because they have been cross-cutting issues since the end of 1980s (DANIDA 2008:16).

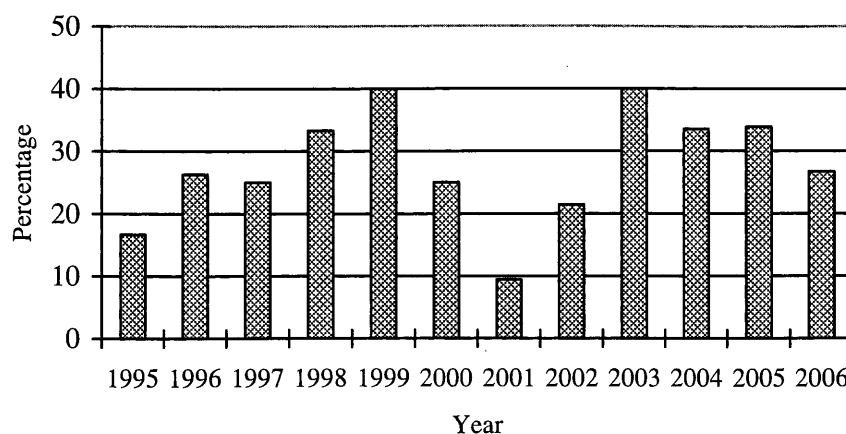
Environmental (especially climate change) issues are mainstreamed to eradicate poverty through different sectors of aid, because they by themselves are not a separate sector of DANIDA interventions. The problem of environmental degradation is present in every DANIDA Annual Report. Additionally, DANIDA distributes “special environment assistance” to Asian and African countries. The focus of these additional funds is industrial pollution, energy and sustainable use of natural resources⁵¹.

As Figure 5 confirms, DANIDA’s commitment to environmental issues has been quite stable during the period analyzed. Moreover, this conclusion is enforced by the high environmental aid percentage with Danish environmental aid reaching 40% in 1999 and 2003 (see Figure 21)⁵².

⁵¹ Ministry of Foreign Affairs of Denmark. *Special Environmental Assistance*. Web. 20 November 2009. <<http://www.um.dk/en/menu/DevelopmentPolicy/DanishDevelopmentPolicyCountries/EnvironmentalAssistance/>>.

⁵² The 2001 aid drop is not confirmed by DANIDA aid data. Therefore, aid is underreported in the OECD CRS database for that year.

Figure 21. Danish environmental aid as percentage of total aid, 1995-2006.



Source: Calculated from OECD CRS.

Similarly to the US, Denmark only distributes grant aid for the environment and this has always been Denmark's policy. According to DANIDA documents, environmental grant aid is distributed to lower and middle-income countries, which will be verified in chapter eight (2004:6).

3.9. Does the environment really matter to donors?

The previous parts of this chapter analyzed the various perceptions of donors' on aid for the environment. Overall, donors perceive aid for the environment as a part of their broader aid framework. Environmental aid is a tool which will enables donors to achieve their institutional goals, whether it will be poverty alleviation (World Bank, Denmark, US, UNDP), national security (US, Denmark, Japan) or economic growth (US, Japan). The only donor which treats the environment as a priority focus of overall aid is the GEF, which has the sole mission of addressing global environmental issues.

Since aid for the environment is not treated as a separate category of aid with special

privileges, one should ask: how different is aid for the environment from other types of aid? Environmental aid is closely interconnected with other types of aid, which is illustrated by Table 6. If five top environmental and total aid recipients are extracted for the six donors, a significant overlap occurs. From one to four countries, out of five, overlap the two categories of aid. The largest environmental aid recipients are also usually the largest overall aid recipients.

Table 6. Top five aid recipients for the six donors, 1995-2006.

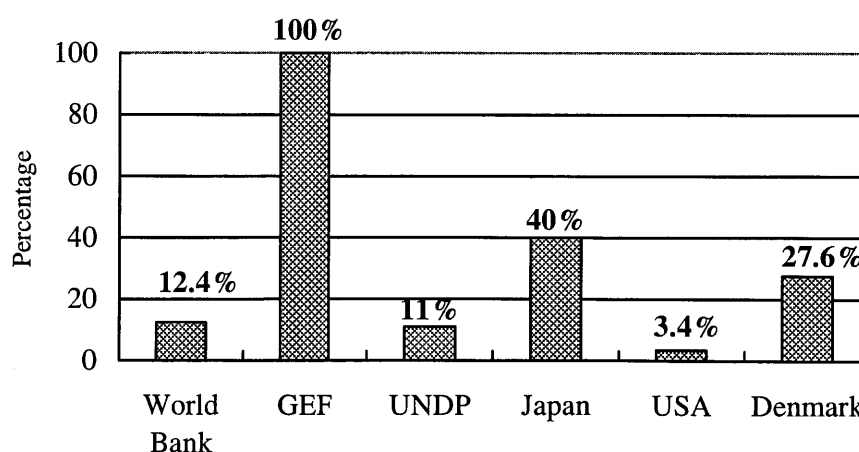
	General aid	Environmental aid
World Bank	<i>India</i> <i>Vietnam</i> Bangladesh Pakistan <i>Ethiopia</i>	<i>India</i> <i>Vietnam</i> Tanzania <i>Ethiopia</i> Sri Lanka
GEF	China Mexico Brazil Philippines India	
UNDP	India Bangladesh <i>Ethiopia</i> Myanmar <i>China</i>	<i>China</i> Burundi Burkina Faso Cambodia Nepal
Japan	<i>Indonesia</i> <i>China</i> <i>India</i> Vietnam <i>Philippines</i>	<i>China</i> <i>Indonesia</i> <i>India</i> Thailand <i>Philippines</i>
USA	<i>Iraq</i> <i>Egypt</i> Afghanistan Colombia Pakistan	<i>Iraq</i> <i>Egypt</i> Mexico Honduras Indonesia
Denmark	<i>Tanzania</i> <i>Bangladesh</i> Mozambique <i>Vietnam</i> <i>Uganda</i>	<i>Vietnam</i> <i>Bangladesh</i> <i>Tanzania</i> Ghana <i>Uganda</i>

Note: Countries in italics are both top general aid recipients and environmental aid recipients. Source: Calculated from OECD CRS and OECD QWID for GEF.

The comparison illustrates that aid for the environment is closely interconnected with other types of aid. Aid for the environment is mainly allocated to the countries which are already the largest recipients of overall aid amounts. Thus, is environmental aid reaching the most environmentally impoverished countries? Chapter five will provide an answer to this question.

Although the environmental aid trends have not been rising in a continuous manner, some bilateral donors, such as Denmark and Japan, already spend a substantial percentage of their aid on the environment (see Figure 22). In these cases, the lack of increasing funds is compensated by the already large amounts of environmental aid distributed. The US has still to prove its commitment as it has experienced a decreasing percentage of environmental aid and a low average percentage overall (3.4%), making it one of the least “green” donors analyzed.

Figure 22. Average percentage of environmental aid for the six donors, 1996-2006.

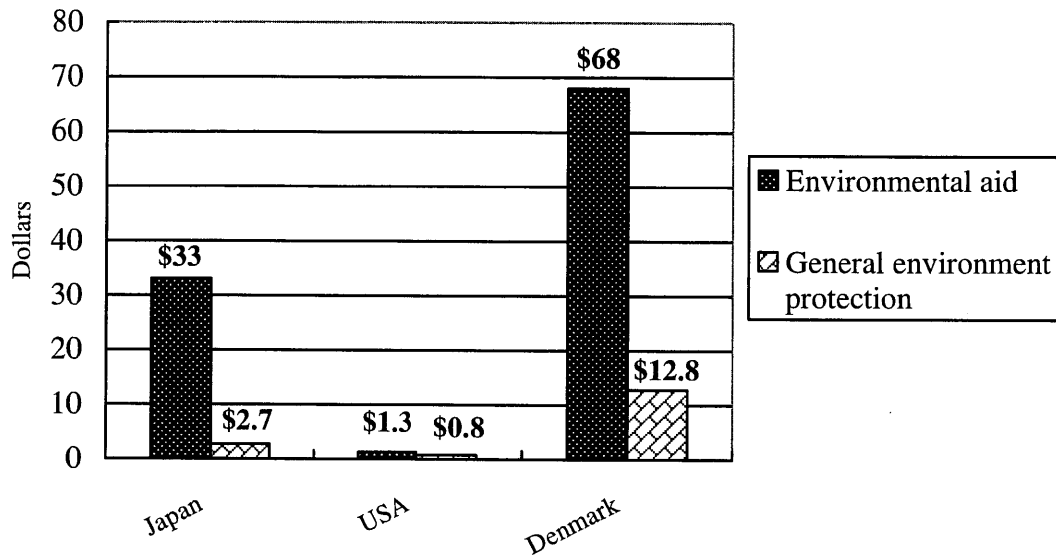


Note: The figures are based on commitments. If actual disbursements were to be analyzed the percentages would be much lower. The World Bank has calculated that disbursements for the environment from 1995 to 2004 constitute only 2% of the disbursements (World Bank 2005b:59). The figure for World Bank is IDA only. Source: UNDP 2006:4 and calculated from OECD CRS database.

However, these are figures for aid for environmental sustainability. If only the percentage of aid for general environment protection is calculated for the period 1995-2006, the bilateral donors receive scores from 5% (Japan) to 1.7% (USA). Denmark is placed in the middle with over 3.3% of total aid directed for general environment protection. The reason behind the large percentage drop for Japan and Denmark is the narrower definition of environmental aid used, as general environment protection does not include water and other environmental infrastructure. As will be explored in chapter five, these sectors are important for both donors. USAID has a larger focus on biodiversity and environmental policies; therefore, the drop is much smaller for this donor. Nonetheless, Japan remains the bilateral donor with the largest percentage of assistance dedicated to environmental issues.

In comparing the average per capita environmental aid expenditure of bilateral donors, one can find much diversified commitments to environmental issues (Figure 23). Despite having a population of only 5.5 million and GDP of \$ 203.6 billion, Denmark scores the highest average, confirming the strong commitment it has to environmental aid. On the other end, the US with a population of over 307 million and GDP of \$ 14.26 trillion spends only \$1.3 per capita on environmental sustainability. This finding enforces the argument that for the US environmental degradation is not a priority aid sector.

Figure 23. Average per capita expenditure for environmental aid, 1995-2006.



Note: Amount in dollars (\$2007). Source: Calculated from OECD CRS and CIA. The World Factbook. Web. 13 March 2009. <<https://www.cia.gov/library/publications/the-world-factbook/>>.

There is also a clear disparity visible between aid for environmental sustainability and general environment protection (except in the case of the US). A larger portion of aid is spent to support environmental sustainability projects than strictly environmental protection projects. This is related to the broader definition of environmental sustainability used and the type of aid distributed (for example in Japan, it is mostly loans).

An additional method of verifying the emphasis made on environmental issues is through the terminology and word frequency used in annual reports of donors. Although the result of such an approach cannot be used as evidence of the actual commitments of donors (as a lot can be said about an issue but no activities undertaken, or on the contrary), it can be used as an illustration of the extent of the environmental discourse in donors' publications, especially if environmental terminology is compared to other specialized words.

In Table 7, annual report descriptions are placed alongside word counts for terms used in the table headings. Various reports have different lengths; however, some patterns do

emerge. In the case of the US, two additional reports were added to show the different vocabulary emphasized after the 2001 terrorist attacks.

Table 7. Word usage in donors' annual reports.

Donor	Document type	Year	Nr of pages	"environment"	"climate change"	"poverty"	"fragile states"	"terrorism"
World Bank	<i>Annual Report (vol.1)</i>	2004	128	26	6	195	1	7
GEF	<i>Annual Report</i>	2004	88	184	22	1	0	0
UNDP	<i>Annual Report</i>	2004	32	14	1	52	0	0
Japan	<i>Annual Report</i>	2004	162	63	2	124	0	5
US	<i>USAID Performance Overview</i>	2000	189	63	34	43	0	0
US	<i>USAID Performance Overview</i>	2003	294	44	17	39	1	6
US	<i>US Foreign Aid. Meeting the Challenges of the 21st Century</i>	2004	40	0	4	6	73	6
Denmark	<i>Annual Report</i>	2004	128	79	18	147	0	30 ⁵³

Source: Author.

The environmental rhetoric is present in all the donors' documents analyzed, except the US *White Paper on US Foreign Aid*. As this paper is focused on US strategies and challenges related to security and fragile states (a term frequently used), it does not treat the environment as a primary strategic issue for the US.

Climate change is also a term which has been frequently used by donors. Yet the main focus of the reports is on poverty (especially for the World Bank, UNDP, Japan and Denmark).

⁵³ This number is equally high for the following years 2005 and 2006 (twenty times and nineteen).

In the GEF document it was mentioned only once, as poverty is not related to GEF activities which are solely focused on environmental issues.

Despite that Denmark has shown a stable commitment to resolving environmental problems (as documented throughout this chapter), it additionally focuses on issues like terrorism (a word mentioned more times than climate change). DANIDA materials stress that Danish aid to developing countries is also in the nation's own interest, and as national interest also incorporates security interests, it involves the issue of terrorism.

Based on the presented findings it is challenging to defend the argument that the environment is on top of the aid agenda. Both Denmark and Japan allocate high percentages of their aid to combating environmental degradation, yet on a per capita basis Japan falls behind Denmark. The US allocates only a symbolic amount. Moreover, donors in their aid publications tend to emphasize other types of issues rather than environmental (except GEF). Thus, is environmental aid and ODA priority? The following conclusions summarize the chapter's findings.

3.10. Conclusions : is environmental aid an ODA priority?

A question remains about the extent of commitments shown by the analyzed donors in aiding other countries to overcome environmental degradation. The answer to this question is best illustrated by the percentage of total aid allocated to environmental sustainability and the overall decreasing or increasing trend of such aid. As is visible from Figures 5 and 6, there is neither a clear increasing trend for bilateral environmental aid, nor an increasing trend for bilateral aid for general environment protection. There is however, a slight increase of multilateral aid. Therefore, despite the annual bilateral donor commitments and assurances about the importance of environmental issues, which are visible in donors' annual reports,

there is no sign of increasing funds following these assurances. This is only partly true for multilateral donors as they have noted increases in their environmental aid amounts (after 1999).

Environmental aid has not gained any additional importance during the period analyzed, as the aid volume and overall environmental aid percentages do not undergo any significant increases. Environmentally committed bilateral donors, such as Japan and Denmark, have continued their policies and still allocate a large percentage of their aid for environmental sustainability. Yet at the same time Japan has increased the volume of non-environmental aid and decreased the volume of environmental aid questioning the future of Japanese aid for the environment. In terms of environmental aid percentages, the US has been lagging behind and investing heavily in other non-environmental sectors.

Donors do not view aid for the environment as a separate and prioritized category, but as a part of their broader aid policies. Although there is emphasis put in donors' policies on the importance of the environment, the understanding of environmental aid and the aid allocation questions the actual importance attached to the issue. The largest environmental aid recipient countries are also usually the largest overall aid recipient countries. The following chapters will verify the extent of prioritization of environmental aid.

Do multilateral donors present a different approach to environmental aid? Multilateral donors have raised their environmental aid trend line. However, this is due to the increasing GEF budget as donors like the World Bank have been experiencing fluctuations of their aid volume (after the 1999 aid increase). UNDP has also used GEF funds to boost its environmental aid activities as GEF grants have become the main funding source for UNDP's environment projects. UNDP's dependence on GEF will be explored further in the following chapters. Nonetheless, the figures for multilateral donors are underreported, hence it is challenging to draw a clear conclusion. Overall, there are no strong arguments supporting the

hypothesis that multilateral institutions are “greener” than bilateral donors.

Chapter 4. Econometric methodology and statistical regression outputs for donors

This chapter presents a methodological outlook on the conducted econometric study. Firstly, the methodology of the two types of regressions is described in detail with a complete table of used variables. Secondly, the regression results are presented with a follow up on the quality of the regression outputs. The detailed interpretation of the regression outputs is presented in the following chapters (chapters five to eight).

4.1. Methodology

A set of thirty political, geopolitical, economic, environmental, developmental and national security (in the case of the US) variables (see Table 8) was tested using the logit and linear regression analysis to find patterns of global environmental aid allocation. The variables were categorized into six topic categories, ranging from political to developmental issues, as environmental aid could also be determined by non-environmental categories. The thirty variables used incorporate variables cited by donors as key elements in their environmental policies and variables with potential explanatory power due to political, economic or security reasons (especially for the US). There has been a special emphasis put on environmental variables in order to capture the exact variable which affects the allocation of funds. The variables tested in this paper also contain previously tested variables by other researches to validate their findings.

Table 8. List of variables used in regression analysis.

Category:	Subcategory:	Variable:	Stand. Dev.	Mean	Median	Min.	Max.	Variable name
Political	Corruption level	Corruption Index	1.12	3.12	2.8	1.7	7.3	CI

	Democracy level	Economist's Democracy Index	1.81	5.09	5.53	1.6	8	DI
	Historical alliance with donor	Colonial past						CP
	Government effectiveness	Government Effectiveness Index	0.67	-0.47	-0.57	-2.16	1.27	GEI
	Religion	Muslim						MU
Geopolitical	Geopolitical	South America						SAM
		Africa						AFR
		Asia						ASIA
		Middle East						ME
		Egypt						EGYPT
		Program Countries (Denmark)						PC
		Population (million)	170	51	13	0.5	1305	PP
Economic	Resource dependence	Oil exporter						OEX
	Ties with donor's economy	Export amount (general)(million US\$)	85207	33000	5000	43	655800	EX
		Export amount (Japan) (million US\$)	12916.5	4375.9	434	2	80340	
		Export amount (USA) (million US\$)	12076.1	3096.8	221.4	5.5	110835	
		Import amount (general) (million US\$)	78595	30738	7111	175	606543	IM
		Import amount (Japan) (million US\$)	16070	5160	150	0	109105	
		Import amount (USA) (million US\$)	25892.5	6967.2	312.05	0	196682	
		Foreign Direct Investment (general)(million US\$)	6295	1870	310	0	54940	FDI
		Foreign Direct Investment (Japan) (million US\$)	4870.1	1833.2	27.5	0	28084	
		Foreign Direct Investment (USA) (million US\$)	8132	3035.2	207	-4	63384	
		Gross Domestic Product(million US\$)	276327.2	100453.5	15266.5	461	2234297	GDP
National Security	Military ties (USA)	Number of military personnel	3014	353.4	10	0	29982	NMP

Development related	Level of wealth	Gross National Income per capita (in US\$)	3784.3	2580.3	1040	100	18580	GNI
		Percentage of population under the national poverty line	16.4	38.7	37.3	4.6	71.3	PNPL
		Percentage of population living on \$ 2 a day	28.8	44.2	41.6	2	92.4	P\$2D
Environmental	Energy	Percentage of energy usage as clean energy	8.4	6	2.8	0	43.8	CE
	Water	Percentage of population with access to improved water source	18.9	77.5	83	22	100	PIW
		Percentage of population with access to improved sanitation	25.9	59.4	59	9	100	PIS
		Water quality index	23	55.4	56.4	0	96	WQI
	Air pollution	CO ₂ emissions (million metric tons)	380	103.4	8.8	0.1	3507.4	CO2
	Biodiversity	Number of threatened mammals	21.5	19.9	12	0	146	NTM
		GEF biodiversity index	18.1	10.5	3.9	0	100	GEF
	Deforestation	Deforested area in km ²	4557	871.7	196	-26766	28219	DFA
		Annual deforestation rate	1.3	0.3	0.3	-4.4	3.2	ADFR
	Environmental policies	Number of environmental treaties ratified	0.94	8.2	8	4	9	NETR
		Environmental Policy Index	0.5	3.1	3	1.5	4	EPI
	Natural wealth	Natural Capital Index	4537.5	4233.1	2971	514	27227	NCI
	Environmental sustainability	Environmental Sustainability Index	7.1	48.3	47.6	33.1	71.8	ESI
	Environmental vulnerability	Environmental Vulnerability Index	50.1	289.4	287	181	402	EVI

Countries used in the sample include all the recipient countries in the OECD Creditors Reporting System (OECD CRS) database which have sufficient data available for them with regard to the key indicators chosen and that have not received any special political attention during the period analyzed. These two conditions have led to the exclusion of

countries such as Swaziland, Puerto Rico, Montenegro, Kosovo, Afghanistan and Iraq. Therefore, the country sample is biased towards countries with adequate data availability. For this reason it also does not include small island states such as Palau, Samoa, Tuvalu, and Barbados. Additionally, countries like Cuba, East Timor, Palestine and Somalia were often omitted from country samples for the same reasons.

Annual environmental aid amounts and the environmental definition used in the data were taken from the OECD CRS⁵⁴. According to which, aid is considered environmental if:

- a) it is intended to produce an improvement, or something that is diagnosed as an improvement, in the physical and/or biological environment of the recipient country, area or target group concerned; or b) it includes specific action to integrate environmental concerns with a range of development objectives through institution building and/or capacity development⁵⁵.

Figures were derived from the database for aid for environmental sustainability, a broader term than general environmental protection. Aid for environmental sustainability includes: infrastructure projects designed with integrated environmental protection components, water resources protection or sustainable forest management. These types of projects could not be classified as general environment protection. Moreover, aid for environmental sustainability encompasses aid: only for the environment, aid for gender and environment, aid for environment and participatory development/good governance and aid for gender and environment and participatory development/good governance.

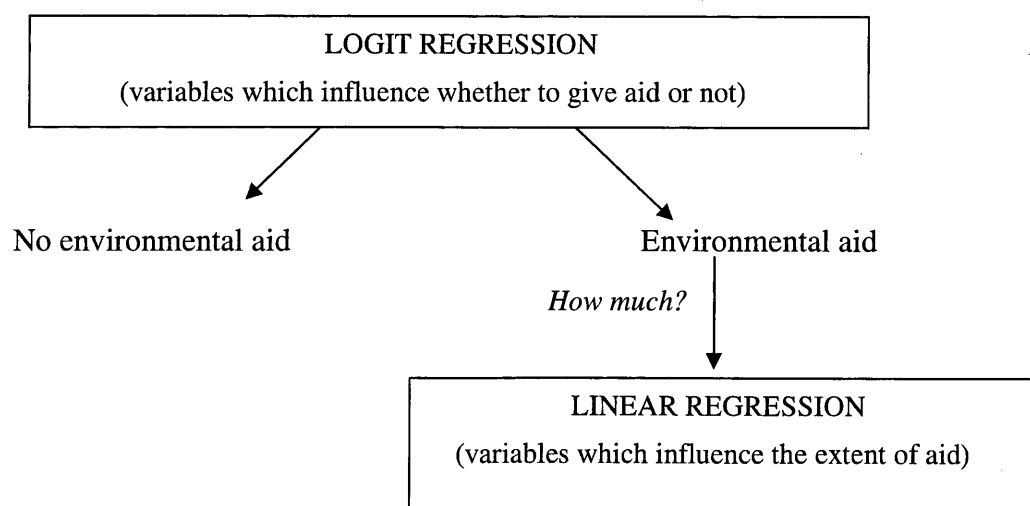
⁵⁴ OECD. Creditors Reporting System. Web. May–July 2008. <<http://stats.oecd.org/Index.aspx?DatasetCode=CRSNEW>>.

⁵⁵ OECD. *Aid to Environment*. Web. 12 June 2008. <<http://www.oecd.org/dataoecd/4/6/38025362.pdf>>.

The data was collected for the period 1995 – 2006 as a cumulative sum of aid, in order to avoid any potential annual variations. The aid amounts are in commitments (US\$ 2006), for the reason that commitments have a higher coverage in the OECD database than disbursements. Moreover, commitments are more easily attributed to a given year than disbursements which can take place over a multiyear period. Commitments also make comparison between donors more feasible. The data is not a time-series data (but cross-section), because it represents cumulative figures of aid for the sample countries. Linear and logit regressions, and correlations were run using the SPSS program.

This research presents a two-level analysis of donors' environmental assistance allocation patterns. The logit regression revealed the variables which influence whether a country will receive aid or not and the linear regression provided variables which were significant in determining the extent of aid allocated (see Figure 24). Stepwise regression was used (forward elimination) to uncover statistically significant variables.

Figure 24. Methodology outline.



Source: Author.

Outliers have been eliminated from the regression to avoid any data distortions. The results have been additionally checked for multi-correlation, eliminating any variable with the correlation coefficient higher than 0.499.

There were, however, numerous limitations to using the OECD CRS database, because a substantial number of environmental aid is underreported. Therefore, some donors only reported a fraction of the original sum allocated (this mainly concerns multilateral agencies). Additionally, as the OECD CRS environmental aid definition is quite broad, it is understood in different ways between donors, hence, the discrepancies between the sums reported. Despite these drawbacks, the OECD CRS database is the only comprehensive database publicly available at the time of conducting this research (May 2008 – September 2010).

It has to be remembered that correlation does not imply causality. Variables analyzed show a relationship based on data correlation, yet no proof exists that one variable determines the other. Additionally, statistical significance also does not prove causation. Furthermore, statistical regression analysis cannot measure the level of donors intentions, thus, the aid allocation patterns uncovered may be intentional or unintentional. Donors may be unaware of the pattern that their global allocation of aid for the environment follows. Therefore, donor policies are also analyzed to check if aid has been purposefully allocated to the intended areas.

4.2. Regression outputs

This part of the chapter presents the results of logit and linear regressions for six donors. The logit and linear regression outputs differ, implying that there are different patterns to both types of aid allocation. Different factors are correlated to environmental aid allocation

(logit regression) and allocation of increased aid amounts (linear regression). Moreover, the regression outputs present a mixture of variables from different categories, revealing that not only environmental issues matter. Yet only in one case was there only one variable significant, which shows the complexity of aid allocation which is not driven by solely one factor. Environmental aid is placed in the broader framework of donor activities.

The following regression outputs have been obtained from the author's database (see Table 9 and 10).

Table 9. Logit regression results for six donors.

Donor	Variable	Coefficient	t statistic	-2 log likelihood	Sample size
Japan ⁵⁶	PNPL	-0.117	1.602*(10.95%)	13.21	64
USA	GNI	-0.388	3.247***	33.43	95
	ADFR	0.426	1.411**		
Denmark	DI	0.490	2.327**	75.01	71
	NCI	-0.246	2.447**		
	EVI	-0.020	2.697***		
	ASIA	2.731	2.820***		
World Bank	P\$2D	0.049	3.122***	66.37	72
	CI	-1.042	2.059**		
	fdi	0.643	2.816***		
GEF	ESI	0.243	2.619***	39.07	90
	CI	-1.648	3.405***		
	OEX	-2.399	2.484**		
	NETR	0.864	1.929**		
UNDP	NTM	0.027	1.982**	90.73	73
	P\$2D	0.019	2.117**		

***significant at 1% error, ** significant at 5% error, * significant at 11% error

Note: The number in brackets under the t statistic column presents the level of statistical significance which exceeds the 10% error benchmark, but which the author believes is nonetheless important for the aid allocation pattern of the donor. Capital letters represent linear variables and small letters are the logs of the variables.

⁵⁶ The logit regression output for Japan is very weak as Japan allocates aid to 62 of the 64 analyzed countries in the output. Therefore, the one present variable is a weak indicator of Japans allocation to only two countries.

Table 10. Linear regression results for six donors.

Donor	Variable	Coefficient	t statistic	Adjusted R ₂	Sample size
Japan	IM	62.202	7.556***	0.843	48
	NTM	33.510	6.564***		
	EVI	9.555	3.516***		
	ASIA	814.923	3.180***		
USA	GEF	1.098	5.973***	0.893	85
	EGYPT	859.9	26.298***		
Denmark	PC	169.401	6.331***	0.482	43
	co	16.004	2.690***		
World Bank	P \$2D	0.635	4.083***	0.511	32
	ASIA	36.030	3.974***		
	co	6.463	2.731***		
GEF	NTM	0.480	8.617***	0.541	82
	DI	1.790	3.179***		
UNDP	PIS	-0.854	-3.806***	0.284	35

***significant at 1%, **significant at 5% error

Note: Capital letters represent linear variables and small letters are the logs of the variables.

As mentioned previously, environmental aid allocation is complex, involving numerous factors. The number of significant variables per donor ranges from one to four, usually presenting a set of environmental and non-environmental variables. It is also relevant for some donors (as in the case of the CO₂ emissions variable present) that outliers like China and India are taken out of the sample, because China's and India's large economies and populations can significantly alter the results (discussed in the following section).

Moreover, among the group of diverse variables, there is not one particular set that would be dominant among the bilateral and multilateral donors, as both groups are very heterogeneous. Not one dominant allocation pattern emerges. Therefore, the outputs support the hypothesis that there are no substantial differences between the group of bilateral and multilateral donors as both groups are highly internally diversified. The detailed analysis of each donor's regression output will be carried out in chapters five, six, seven and eight, which present a theme-based analysis of the outputs. The regression outputs will be checked against

donors' policies in order to confirm or disclaim them.

4.3. Quality of the regression outputs

The regression models have been checked for robustness, and they do not undergo substantial changes if the sample size is decreased or increased. The country which has the most influence on the models is China. This is especially relevant in the linear and logit regression outputs for the World Bank. China has very high CO₂ emissions and FDI levels; therefore it distorts the regression outputs. For this reason China was taken out of some of the linear regression outputs, as it falsely increased the adjusted R² levels.

The test for robustness causes some variables to weaken, lose their statistical significance. This applies to the weakest variables in the output: the percentage of the population under the national poverty line (Japan logit output) and the annual deforestation rate (USA logit output). The two variables have a significance of 10.9% and 5% error, which further increases if the sample size is increased or decreased. However, due to the policy focus of the two donors, the author believes that the two variables have an influence on the allocation of aid.

The variables presented in the outputs have a mutual correlation of under 0.499. Statistically significant variables with higher correlations have been eliminated from the outputs. Thus, all the outputs have been checked for multi-correlation.

For some donors like UNDP and the World Bank, the country sample size is small due to donors' aid underreporting in the OECD CRS database (as for UNDP, data was only available for four years). The smaller samples can question the credibility of the outputs, yet all donors have at least thirty two countries as samples. The US and GEF have the largest country sample size, which increases the strength of the regression outputs.

The linear regression outputs explain (adjusted R^2) from 28% to 89% of aid allocation patterns. The lower adjusted R^2 for Denmark and UNDP show that among the thirty variables tested there was not a set of variables that could explain more than half of the aid allocated. This implies that donors have policies that are either difficult to capture using the key category variables (potentially some important variables for these two donors could have been omitted) or that donors' aid policies may not be coherent and predictable⁵⁷. The high levels of data explained for donors like Japan and the US show the high levels of policy coherency and predictability. Thus, these donors' environmental allocation patterns are guided by clear principles.

The linear outputs have high statistical significance with statistical error ranging from under 1% to under 5%. Linear outputs are also more statistically significant than the logit outputs and explain higher percentages of data. There are two reasons for this phenomenon. Firstly, it is easier to explain larger amounts of environmental aid allocated than to answer why a country received aid. Secondly, some donors like Japan allocate aid for environmental sustainability to almost all countries (in the Japan logit output only two countries out of sixty-four did not receive aid). Therefore, the allocation output is weakened due to insufficient data and a larger number of aid recipients (compared to non-recipients).

Overall, donors are influenced by more than one variable (except UNDP in the linear output). Donors like Japan, Denmark and GEF have up to four statistically significant variables which explain aid allocation patterns for the environment. There are various variables from different categories that influence donors (thus, not only environmental variables are present). Moreover, donors have different logit and linear outputs, revealing that the two stages of aid allocation are explained by different factors. There is also not one

⁵⁷ As will be presented in following chapters, a DANIDA employee states that no statistical analysis can capture Denmark's aid allocation patterns.

dominant variable that would be present in the majority of outputs. The following chapters will present an interpretation of the regression results.

Chapter 5. Is environmental aid for the environment?

This chapter has the aim of assessing the importance and role of environmental factors in global environmental aid allocation. It attempts to answer the question whether environmental aid is determined by problems of environmental degradation. This question is an important one, because a potential negative answer would cast serious doubts on the efficiency of whole aid systems which would be driven by the wrong motivations and would constitute an argument against increasing environmental aid budgets.

Although the assumption that environmental aid is driven solely by environmental issues is unrealistic, as other factors are also present (like geopolitical, economic or political) and at times justifiably so (as the type of environmental aid given justifies those factors), it is important that environmental issues remain the primary driving force behind global aid allocation. The presence of environmental factors is crucial, for the reason that environmental aid without environmental components, will not solve or attempt to solve the problems of degraded ecosystems, deepening the extent of their environmental deterioration. If environmental aid is omitting the most vulnerable areas, the very existence of such aid is questioned as it does not fulfill its main purpose.

In the following part of the chapter, global environmental focus areas of donors will be analyzed as their official environmental policies will be compared with logit and linear regression results and actual types of environmental aid allocated. The importance of particular environmental variables in aid allocation will be revealed. Other, non-environmental variables which prove statistically significant in the regression outputs will be analyzed in the following chapters. This chapter looks only at the environmental variables which prove statistically significant in the regression outputs.

5.1. Policy focus areas of environmental aid

Environmental aid can be divided into numerous types: from urban environmental issues, to biodiversity protection or climate change. There is no required prioritization, as all the types of environmental aid are important, because they keep the complex ecosystems intact. A potential dominance of only one type of aid could disturb the balance of ecosystems: if aid is solely focused on sewage treatment and there are no funds for watershed protection or forestry, due to the ecosystem linkage, the area where the sewage treatment is taking place, could find itself without adequate water supplies. Therefore, it is important that there is an adequate level of diversification of environmental aid, to make sure that all aspects of ecosystems are covered.

5.1.1. Is the Bank green?

The World Bank has a clear set of environmental objectives. It has been a part of its policy to focus on: pollution management and urban environmental improvements related to environmental health, sustainable resource management (which includes land management, soil conservation, sustainable forest management and watershed management), environmental capacity building and global environmental issues (which include biodiversity and international waters) (World Bank 2000:21-23). Thus, the Bank represents a wide variety of priority sectors, targeting the many areas of environmental assistance.

The logit and linear regressions were run to reveal which environmental variables play a statistically significant role in determining aid allocation (logit regression) and the extent of aid given (linear regression). The logit regression output showed no environmental variable to be significant. Therefore, no environmental variables influence whether a country will receive

funds for the environment.

The linear regression results for the World Bank showed that countries with large CO₂ emissions have a better chance of receiving larger amounts of aid (this variable had a high statistical significance). Thus, the Bank distributes increased aid to polluting, industrializing countries, as

air pollution is an important public health problem in most cities of the developing world (...) air pollution in developing countries accounts for tens of thousands of excess deaths and billions of dollars in medical costs and lost productivity every year. These losses, and the associated degradation in quality of life, impose a significant burden on people in all sectors of society, but especially the poor⁵⁸.

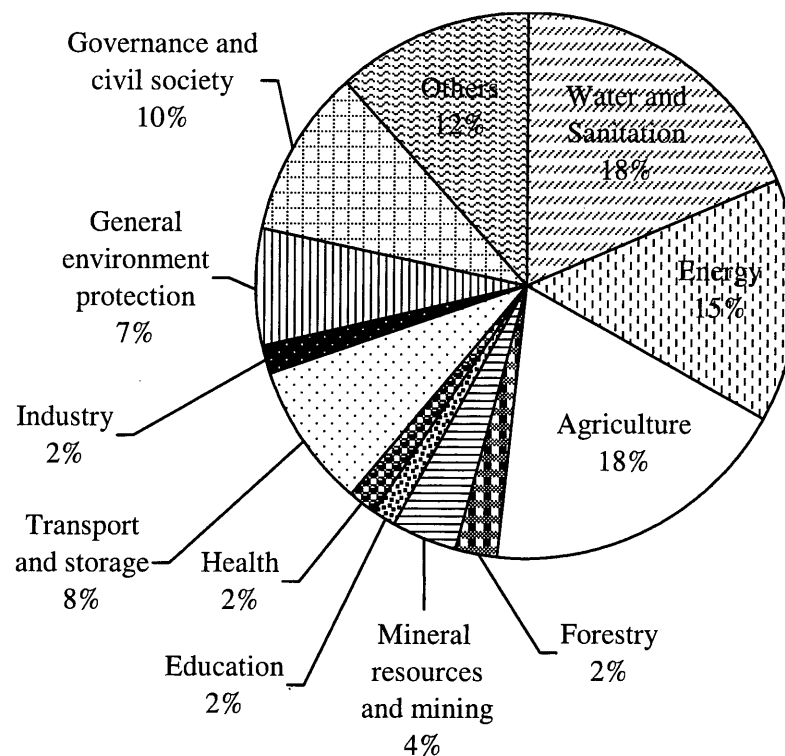
The focus on pollution is justified as “a key challenge for sustainable development”, which has the goal of “breaking the linkages between continued growth and the quantities of pollutants discharged to the environment”⁵⁹. Moreover, the CO₂ indicator is an indicator of the contribution to global air pollution (in contrast to local air pollution); pollution that significantly affects the environments of other countries. Thus, countries which receive increased environmental assistance are usually the largest polluters of the common atmosphere.

⁵⁸ World Bank. “Transport and the Urban Environment” *Urban Transport. Energy & Environment*. Web. 29 November 2009. <<http://go.worldbank.org/HO8SIKM690>>.

⁵⁹ World Bank. *Pollution Management*. Web. 29 November 2009. <<http://go.worldbank.org/HINX1JVCK0>>. Additionally, the Bank emphasizes the severity of pollution problems: “....acute respiratory infections from indoor air pollution—from burning wood, animal dung, and other biofuels— are estimated to kill one million children annually in developing countries.....This has prompted the World Bank to include reduction of indoor air pollution as a critical element of its environment strategy” (World Bank. *Indoor air pollution*. Web. 29 November 2009. <<http://go.worldbank.org/NHFEVXQFE0>>) .

Since more polluting countries are more likely to receive increased funds from the Bank, what are the dominant project types of the World Bank? The primary interest has been in water and sanitation, energy and agriculture as the largest amounts of the Bank's funds were dedicated to these sectors (see Figure 25). In the context of the Bank's mission this prioritization is also justified because all of the above sectors are related to poverty and productivity of the poor. Thus, countries with larger CO₂ emissions, which attract more aid, are more likely to receive increased funds in the form of water, sanitation, energy and agriculture projects.

Figure 25. World Bank's aid for the environment by type (cumulative), 1995-2006.

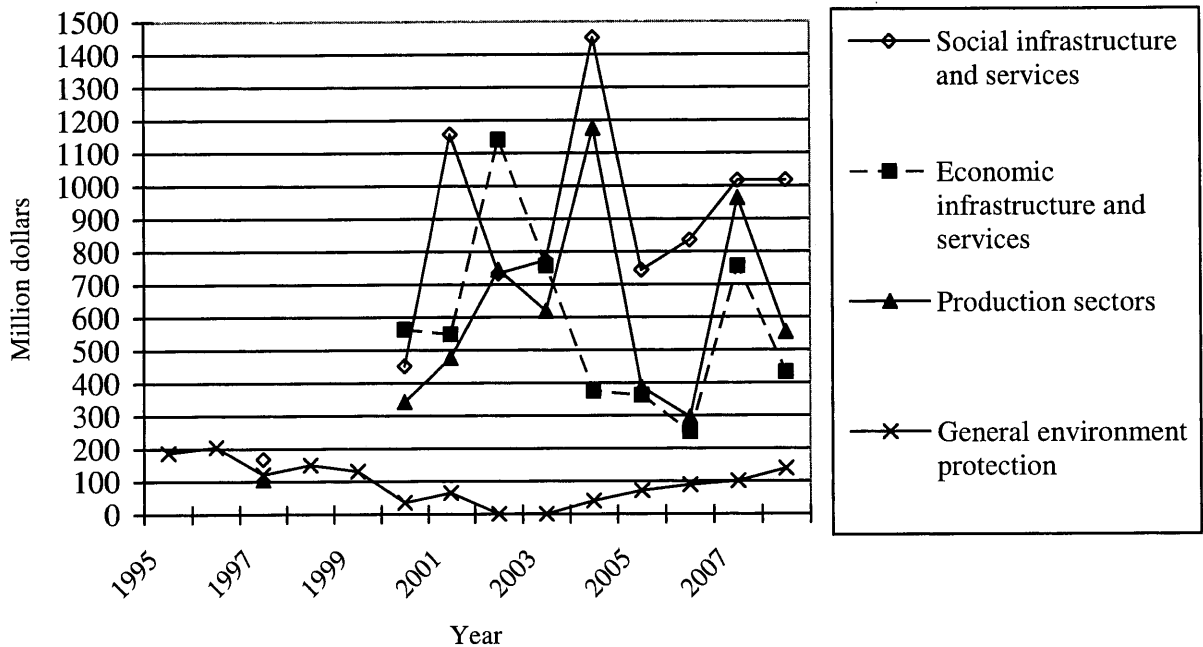


Source: Calculated from OECD CRS.

Moreover, there has been a slight increase in environmental aid for social infrastructure (which includes water provision), with a simultaneous decrease of

environmental aid for economic infrastructure during the period analyzed (see Figure 26).

Figure 26. World Bank's aid for the environment by sector, 1995-2008.



Note: Social infrastructure and services includes: education, health (including water), government and civil society. Economic infrastructure and services includes: transport, communication, finance and energy. Production sectors include: agriculture, forestry, fishing, industry, mining and construction. Amounts in millions (\$2008). There are gaps in reporting prior to 1999. Source: Calculated from OECD CRS.

Agriculture, energy and water management require investments in infrastructure and development, thus, there is a concentration of funds for these activities as the Bank mainly issues environmental loans⁶⁰. Yet despite the large sums gathered for the above sectors, they are not the dominant force determining environmental aid allocation, as only one (energy - regarding CO₂ emissions) had any explanatory power for the logit and linear regressions. They do represent, however, the types of projects IDA focuses on.

⁶⁰ The percentage of infrastructure projects has been rising since 1991. In 2008 it reached 40% of all projects (World Bank 2008a:58).

Therefore, out of all the environmental policy focus areas, it is air pollution which is the key focus area for the Bank when it allocates aid. There was no other environmental variable which showed any statistical significance, hence, the regression outputs did not confirm any of the other environmental focus areas as important determinants of environmental aid allocation of the Bank. Despite the variety of priority policies, the Bank has actually limited environmental focus areas.

5.1.2. The GEF is not only for the environment

Similarly to World Bank, the Global Environment Facility (GEF) has stated multiple policy focus areas which include: biodiversity, climate change, international waters, ozone depletion, land degradation and persistent organic pollutants (POPs). The last two focus areas are fairly new, because they were added to the list in 2004. The environmental mission of GEF is its main and only mission, thus, the environmental variables are expected to be the dominant explanatory factors.

Logit regression analysis verified the importance of these sectors in determining aid allocation. Environmental sustainability and the number of ratified environmental treaties are the only statistically significant environmental variables. In both cases the correlation is positive, implying that the more sustainable an ecosystem is and the larger the number of environmental treaties ratified (which is a sign of environmental commitment of a recipient government), the larger the chance of receiving funds. Environmental sustainability is part of GEF's vision, as GEF considers the next decade to be a "unique opportunity to ensure that environmental sustainability is fully and effectively integrated into actions designed to achieve the Millennium Development Goals" (2002:89). Environmental sustainability is also related to environmental capacity building, as stated by the CEO of GEF, Len Good (GEF

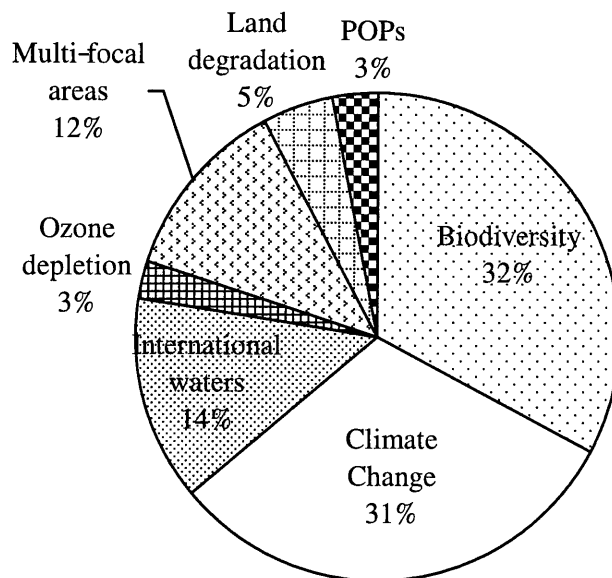
2005:2). Countries which additionally show larger levels of environmental commitment (measured by the number of ratified environmental treaties) are more likely to be GEF grant recipients. Moreover, GEF is the funding mechanism for some environmental conventions (the Biodiversity Convention, Climate Change Convention) (GEF 1995:1). The two regression output variables fit into the GEF's operational context, but they do not specifically point to one of the six GEF policy focus areas, as they partially incorporate all of them. In addition, the logit regression variables do not influence the extent of funds allocated.

The number of threatened mammal species is the only statistically significant environmental variable which proved important when increasing aid amounts. It is an indicator both of biodiversity levels and the vulnerability of the ecosystem. Biodiversity loss emerges as one of the greatest environmental challenges, as it threatens “the life support systems that sustain societies and economies” (GEF 2009a:1). This finding is a confirmation of previous research, which has found that GEF is not driven by local environmental problems (like water pollution or land degradation), since biodiversity loss is considered a global environmental issue (Lewis 2003:156).

If GEF aid allocation is determined partly by environmental sustainability and government environmental commitment, and aid increases are influenced by levels of threatened mammal species, then what are the main GEF project types? The GEF project database shows that 32% of funds were spent on biodiversity projects (see Figure 27). The second category was climate change with 31% of funds. Therefore, 63% of aid goes only into these sectors, which demonstrates a clear specialization of the GEF. Countries with larger numbers of threatened mammals are more likely to receive increased funds from GEF in the form of biodiversity and climate change projects which dominate the project portfolio. GEF

describes biodiversity as “one of the GEF’s greatest priorities”⁶¹.

Figure. 27. GEF’s focal areas, 1991-2007.

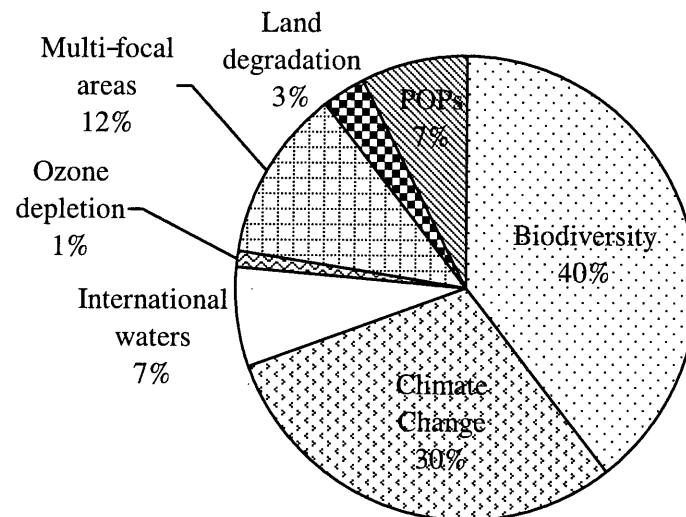


Source: Calculated from GEF project database.

The number of projects also confirms and enforces this trend as 70% of projects are in the biodiversity and climate change categories (Figure 28). Biodiversity levels and CO₂ emissions have a high correlation with GEF’s aid amounts (correlation 0.73 and 0.79 respectively). Despite the six policy focus areas, the majority of funds and projects go into two.

⁶¹ GEF. Projects. Biodiversity. Web. 30 September 2009. <http://207.190.239.143/projects/focal_areas/bio/bio.html>.

Figure 28. Number of GEF focal projects as a percentage, 1991-2007.



Source: Calculated from GEF project database.

Therefore, the GEF policies are not fully confirmed by the regressions and actual project data, because there is the strong sectoral dominance of the two focus areas. This finding places GEF in a similar position as the World Bank. Both institutions have a wide spectrum of activities demonstrated in policy materials, but regression outputs and aid percentages show an emphasis only on two (GEF) and one (World Bank) environmental sectors.

Among the six variables present in the regression outputs, only three are environmental, questioning the extent of the environmental mission of GEF. Thus, other, non-environmental variables proved significant when distributing GEF aid. These variables will be explored in the following chapters.

5.1.3. UNDP's environmental focus

Some donors, such as UNDP, link the environment to energy matters and treat it as one

common group labeled “environment and energy” (since 2001, before it was labeled “environment”). UNDP has set policy priority areas for its environment and energy activities. These include: water governance, sustainable energy, land management, conservation of biodiversity, environmental mainstreaming and chemicals management (mainly POPs), which again presents a wide variety of focus policies (UNDP 2005:14).

One environmental variable is statistically significant when deciding whether to allocate funds: the number of threatened mammals. The number of endangered mammals is correlated to biodiversity levels (0.865) and as UNDP assures, biodiversity is an important area of its activities. Biodiversity is “an essential ingredient to...reducing the vulnerability of poor people” (sic) in 90% of UNDP program countries (UNDP 2003:5). The number of threatened mammals is also a part of the seventh Millennium Development Goal, sub-point 7.7 which aims to “reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss of proportion of species threatened with extinction”. UNDP’s aid allocation is partly directed by the seventh Millennium Development Goal (as other non-environmental variables proved significant).

Despite UNDP having such diversified policies, the linear regression output did not find any environmental variables statistically significant, except access to adequate sanitation. The smaller the percentage of the population with access to adequate sanitation, the more environmental funds a country will receive. Sanitation issues are a sub-point of the seventh UN Millennium Development Goal. Furthermore, UNDP emphasizes that “sanitation is the foundation of health, dignity, and development” and it is indispensable for achieving all the Millennium Development Goals⁶². However, it has to be remembered that regression output variables do not imply causality. Thus, the UNDP linear regression output shows that

⁶² UNDP. “Water Governance” *Environment and Energy*. Web. 29 November 2009. <<http://www.undp.org/water/>>.

countries with smaller access to adequate sanitation are more likely to receive increased environmental assistance from UNDP, not that UNDP purposefully targets these countries, as such a hypothesis cannot be proved.

From the UNDP environment and energy policy focus list, only sanitation related issues are of key significance to UNDP when allocating increased aid amounts. Moreover, this was the only variable present in the regression output, explaining 28% of the aid data. The low explanation percentage reveals the complexity behind UNDP's aid allocation and the challenges faced when attempting to find an allocation pattern for UNDP.

However, the linear regression output fits well into UNDP's mission of reducing poverty, as water issues are related to human well-being and the poorest groups of society are the most severely affected by inadequate water supplies⁶³. According to the 2005 Millennium Ecosystem Assessment, 1.7 million people die annually due to inadequate water, sanitation and hygiene (Millennium Ecosystem Assessment 2005:13). UNDP emphasizes that the management of water resources is of central importance for the reason that it is an essential part of poverty reduction⁶⁴. Moreover, "UNDP's niche in this regard lies in supporting effective systems of water governance" (UNDP 2003:5).

UNDP funds are correlated to large amounts of threatened species and inadequate levels of sanitation. In the context of UNDP's mission of poverty alleviation, the threatened mammals' variable does not seem to fit (although biodiversity is important for the livelihoods of the poor) as it is largely a global environmental issue. Thus, a hypothesis can be stated that the GEF focus areas are influencing UNDP's, because GEF is a significant environmental funder of UNDP's environmental projects (discussed in chapter three). The UNDP/GEF

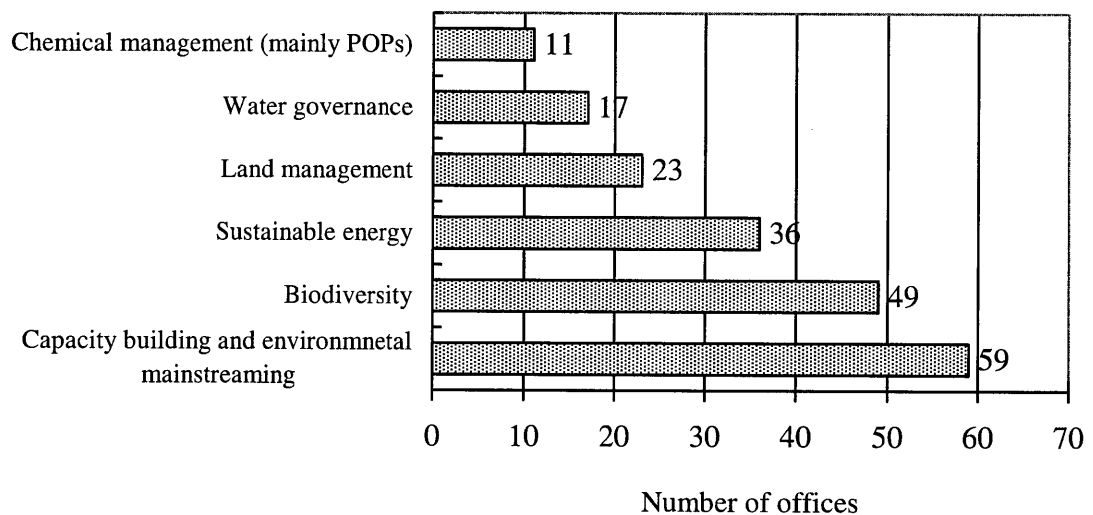
⁶³ As a World Bank study revealed in the Philippines, an average poor household is destined to pay 80% more on water (as it is obliged to buy water from vendors due to the lack of alternative sources), than a rich household (World Bank 2004:34).

⁶⁴ UNDP. "Water Governance" *Environment and Energy*. Web. 29 November 2009. <<http://www.undp.org/water/>>.

linkage will be explored further.

What types of projects dominate the UNDP environmental portfolio? Although there is no focus area database on strictly UNDP environmental activities made available (which is a drawback for UNDP itself), there is country-level data available on how many UNDP country offices engage in the analyzed activities (see Figure 29) (UNDP 2008:vii). Out of ninety-five UNDP country offices, fifty-nine are engaged in environmental capacity building and mainstreaming, with biodiversity closely following at forty-nine offices. Carlos Castro (UNDP Brazil) confirms the focus on capacity-building in UNDP's non-GEF related projects⁶⁵.

Figure 29. Number of UNDP country offices engaged in environmental activities, 2004-2007.



Source: Based on UN 2003:36-41.

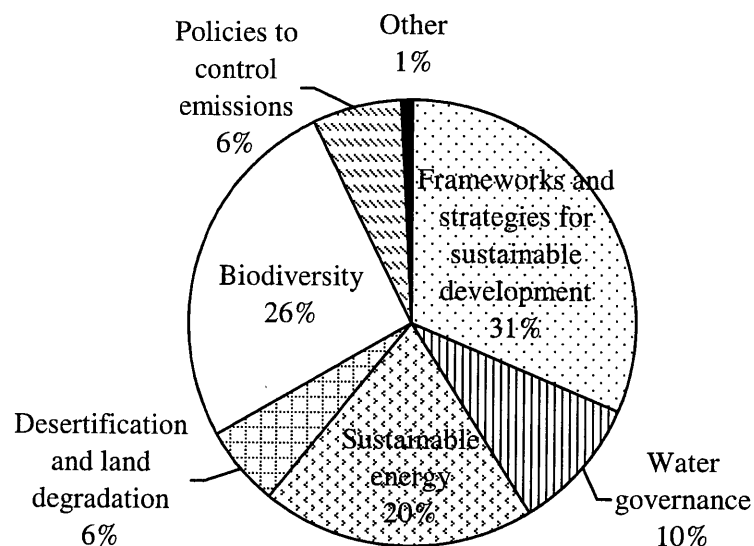
The focus on capacity building is also visible in the project descriptions. The UNDP office in Brazil implements environmental projects with the following descriptions: “Support to the formulation of public policies”, “Promotion of public policies”, “Development of a

⁶⁵ UNDP Brazil Coordinator for the Environment and Energy Unit. Personal Interview. 21 January 2010.

system of evaluation of the performance and results”, “Implementation of a system of environmental monitoring”, “project aims to enable the Brazilian electric sector to obtain scientific information”⁶⁶. Therefore, capacity building is an important area of UNDP’s environmental activities.

The distribution of focus areas is very unbalanced, ranging from 62.1% of offices dealing with capacity building and environmental mainstreaming to 11.5% of offices engaging in chemical management. UNDP’s main actual focus area within its environment and energy portfolio is capacity building and environmental mainstreaming, hence, capacity building projects are the largest in number with biodiversity projects succeeding. This focus is equally apparent in the 2004-2007 UNDP environment and energy budget distribution (see Figure 30), as 57% of all funds were allocated for strategies for sustainable development and biodiversity.

Figure 30. UNDP’s environment and energy budget, 2004-2007.



Source: UNDP 2008a:12.

⁶⁶ UNDP Brazil. *Energy and Environment*. Web. 20 January 2010. <http://mirror.undp.org/brazil/energy_env/newtable.htm>.

Despite UNDP's merger of environmental activities with energy matters, and the allocation of 20% of the environmental aid portfolio to sustainable energy, the clean energy variable did not prove statistically significant. Thus, the percentage to which a country uses clean, non-carbohydrate energy (hydropower, solar, geothermal and nuclear) does not influence whether it will receive environmental aid from UNDP. The CO₂ emissions variable was also not statistically significant. The regression outputs do not confirm UNDP's policies.

UNDP influenced by the number of threatened mammals, allocates increased funds to countries with poor sanitation in the form of capacity building and biodiversity related projects. UNDP materials do confirm this approach as in the case of the global water and sanitation crisis which "is mainly rooted in poverty, power and inequality, not in physical availability. It is, first and foremost, a crisis of governance and thus governance reform must be a key pillar of any strategic approach to addressing the crisis"⁶⁷. Capacity building is, according to UNDP, the answer to water and sanitation issues.

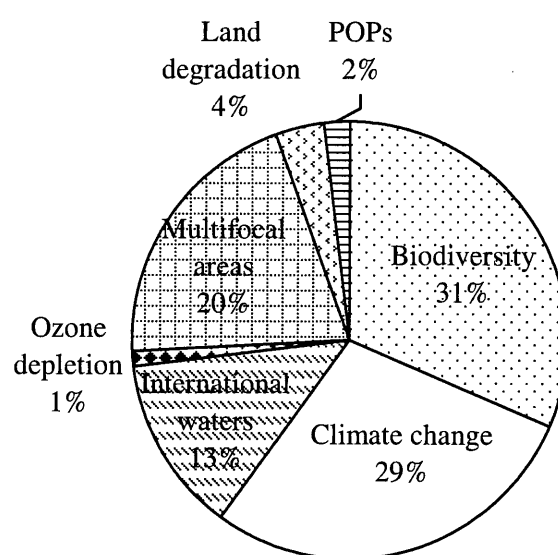
Out of the three variables present in the logit and linear regression outputs, two variables are environmental, giving UNDP a "green" image. Nonetheless, the multiple focus area policies are not all confirmed by the regressions, which places UNDP in the same position as the World Bank and GEF with the dominance of specified environmental determinants. Thus, some policy focus areas like: chemical and land management are not significant variables neither in the aid allocation decision-making process, nor in actual project types.

UNDP is one of the main implementing agencies of GEF projects and their common aid portfolio has a different focus area distribution to UNDP's focus areas (see Figure 31). The influence of the GEF is visible in the UNDP/GEF portfolio. In the common portfolio,

⁶⁷ UNDP. "Water Supply and Sanitation" *Environment and Energy*. Web. 13 June 2009. <<http://www.undp.org/water/priorityareas/supply.html>>.

biodiversity is the main focus area, followed closely by climate change (the same as in the GEF project portfolio). Most of UNDP's biodiversity work is within the UNDP/GEF portfolio, because GEF is the principal funder of UNDP's biodiversity budget⁶⁸. Moreover, climate change is new to UNDP, appearing only in the UNDP/GEF portfolio.

Figure 31. UNDP/GEF focus areas, 1991-2007.



Note: Excluding SGP. Source: Calculated from GEF project database.

The dependence on GEF funds is also confirmed in UNDP's evaluation report as the GEF's financial influence has "caused high-priority national environmental issues—such as environmental health, water supply and sanitation and energy management—to be replaced by GEF priorities related to climate change mitigation, biodiversity and international waters" (2008:viii). Moreover,

significant efforts in the area of renewable energy, energy efficiency and clean energy technologies...are supported in over 70% of country operations through

⁶⁸ For details see: UNDP 2008:xi and 17; also UNDP 2005:20.

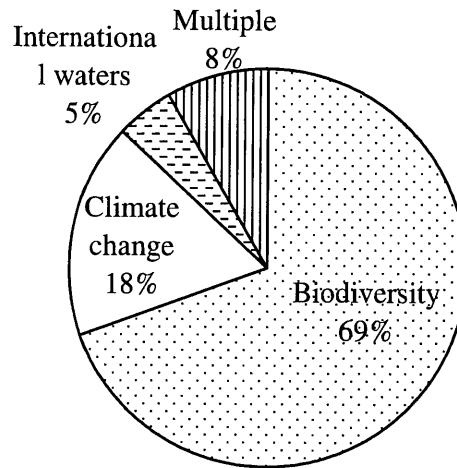
support from the GEF (emphasis added). As in the case of water, the predominance of GEF program funding in this area...has in some regions, particularly Africa, limited program development to addressing local poverty linkages (UNDP 2003:5).

In another document, UNDP reveals that its focus activities are driven by the availability of GEF funding for them, which has shifted the focus from low-cost energy for the poorest countries to carbon mitigation (2008:xiii). GEF is a large funder of grants for climate change, having allocated over \$ 2 billion between 1995 and 2008, of which UNDP used \$ 674.5 million (33.7%)⁶⁹. There is a strong allocation similarity between GEF and UNDP/GEF focus areas (and to some extent UNDP's overall environmental work, as biodiversity is also present there), revealing the close linkages between the two organizations.

The domination of GEF's focus areas is even more visible in the SGP distribution (see Figure 32). Biodiversity and climate change make up 87% of the portfolio, questioning the relationship between the environmental activities of UNDP and its main mission of poverty reduction.

⁶⁹ This figure is only for GEF grants, without UNDP projects with GEF co-funding. Calculated from GEF project database.

Figure 32. SGP focus areas, 1992-2002.



Source: Based on UNDP 2003a:3.

5.1.4. Is Japan the “greenest” bilateral donor?

Japan has set its environmental policy priorities on: nature conservation, environmental management (pollution control) and water and disaster prevention (JICA 2007:85). Nature conservation is divided into biodiversity conservation, sustainable use of resources and rehabilitation of degraded land. Additionally, Japan has made it a part of its policy to engage in climate change issues, and in 2008 it launched the Cool Earth Partnership, a forum of cooperation between countries aiming to reduce their carbon emissions.

However, none of the three policy focus areas determine aid allocation, as they do not appear in the logit output. Yet the logit output for Japan is a weak indicator of aid allocation due to the wide aid coverage of Japanese aid (discussed in the methodology chapter).

The linear regression output reveals two environmental variables as statistically significant: the number of threatened mammal species and the environmental vulnerability

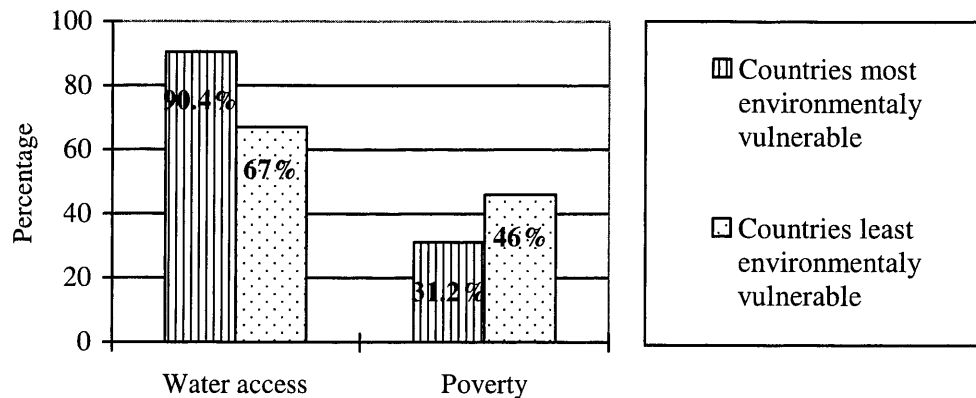
index⁷⁰. The correlation for both of the variables is positive, therefore, the larger the number of threatened mammals and the more the environment is at risk, the more aid the country will receive. Both variables fit into the designated priority areas as they are part of nature conservation and environmental management. JICA has made strong statements about the importance of nature conservation:

nature conservation is now a global-scale issue contributing not only to the further growth of developed countries, but also to halting the vicious cycle of environmental degradation and poverty in developing countries, and to contributing to the development of healthy local communities. International cooperation for nature conservation is thus an important issue related to the security of humankind today (2003:1).

The other significant variable in the linear regression – environmental vulnerability – has two significant correlations: a positive correlation with the percentage of the population with access to clean water variable (correlation coefficient 0.44) and a negative correlation with the percentage of population under the national poverty line variable (correlation coefficient - 0.42). Thus, the larger the population with access to clean water the *more vulnerable* is the environment and the poorer the population the *less vulnerable* is the environment. This relationship is visible in Figure 33, where the average for fifteen of the most environmentally vulnerable countries is compared with the average for fifteen countries which are the least vulnerable.

⁷⁰ The environmental vulnerability index measures the risks to the environment and the environment's response to these risks.

Figure 33. The relationship between environmental vulnerability, water and national poverty line (in percentages).



Source: Calculated from author's database. Based on World Bank 2007b: table 2.6:60-62 and 2.15:96-98 and South Pacific Applied Geoscience Commission. *Environmental Vulnerability Index*. Web. 19 March 2009. <<http://www.vulnerabilityindex.net/>>.

Japan allocates larger amounts of aid to countries with greater environmental vulnerability, which, by correlation, will most likely have populations with greater access to clean water and smaller proportion of the population under the national poverty line. Therefore, these are wealthier countries. This finding will be enforced by the logit regression results related to poverty which will be explored in chapter eight.

However, the linear regression output does not imply that Japan specifically targets these regions with aid projects to tackle environmental vulnerability. On the contrary, some environmental projects (such as dam construction) may actually exasperate the problem. Expansion of environmental infrastructure in vulnerable environments may deepen the degradation of the ecosystems⁷¹.

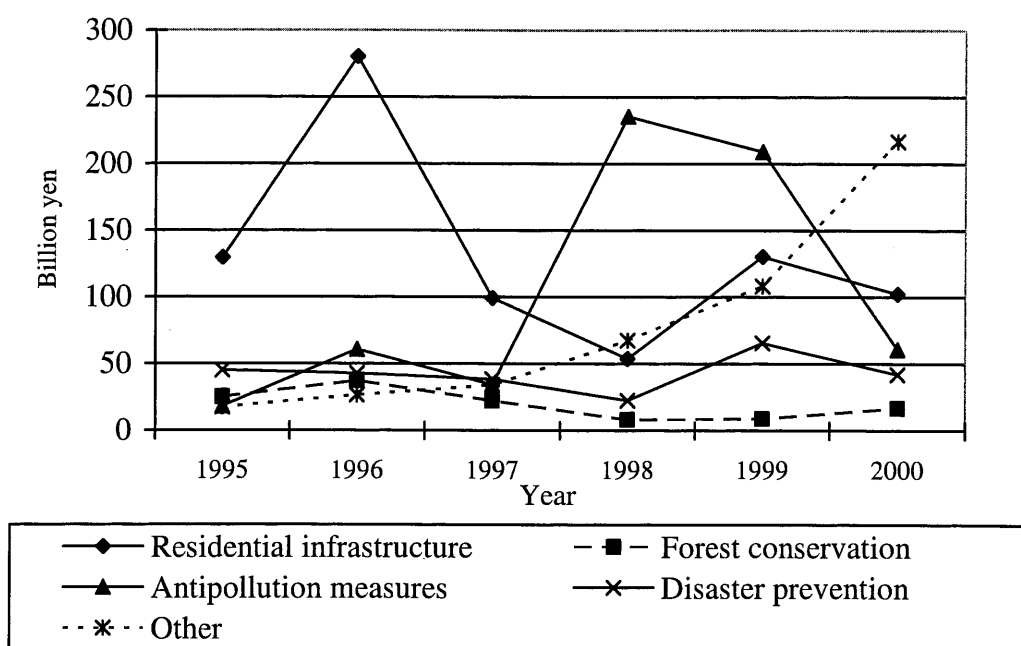
As for the remaining Japanese policy focus areas - pollution and water issues- they have no explanatory power in either of the regressions. Therefore, these focus policies are unconfirmed. Countries with more vulnerable environments and higher levels of threatened

⁷¹ According to the OECD Environmental Review of Japan, all ODA projects are assessed for environmental and social feasibility. However, the response to the exposed risks and dangers is unclear (2010:9).

mammals are more likely to be aid recipients.

According to Figure 34, the main project focus was set on residential infrastructure (until 1998, when antipollution measures were highly endorsed, because the Kyoto protocol was signed the year before). Biodiversity plays a very minor part in JICA's environmental aid project portfolio as projects are delegated to other sectors (see Figure 35). The forestry sector has also not received balanced attention: the 2000 level of aid was below the 1995 level.

Figure 34. Japanese environmental aid by sectors, 1995-2000.

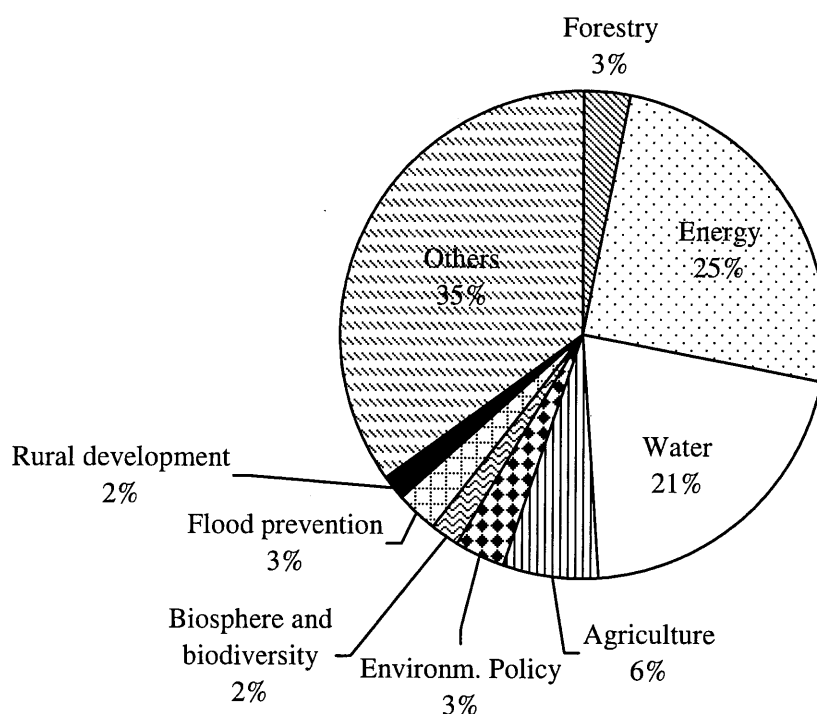


Note: Includes grant aid, loans and technical cooperation (excludes aid to multilateral institutions). Other incorporates: natural environment, environmental administration, water pollution and global warming. Source: Ministry of Foreign Affairs of Japan 2002:78.

Thus, energy (related to the issue of climate change and pollution) and water are the two focus areas which gather the majority of funds. Energy has risen to be one of the most important focus areas of Japanese aid obtaining 25% of the cumulative aid amount. However, the percentage of clean energy in a country's energy portfolio has no statistical significance in either of the regression outputs. The countries that receive the most Japanese ODA for the

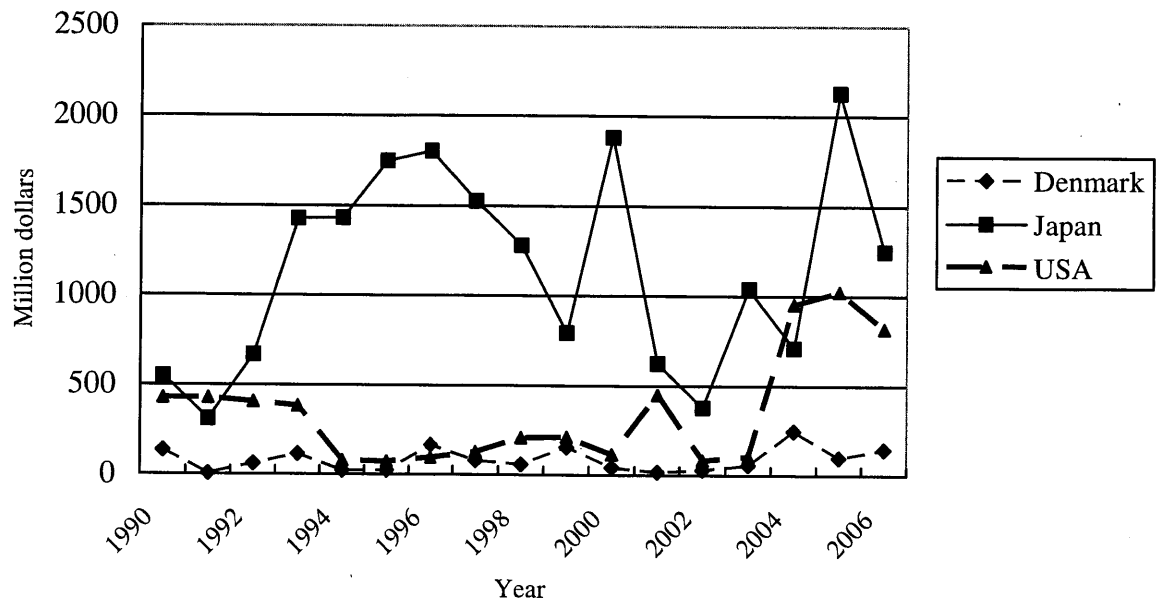
environment are not the ones with the “greenest” energy portfolios. Large investments have also been made in the area of water management. From 1995 to 2006 Japan has invested over \$ 15 billion in water issues.

Figure 35. Japanese environmental aid by type (cumulative), 1995-2006.



Note: Others include: industry, trade, mining, tourism, multi-sector aid, humanitarian aid, other social and economic infrastructure and services, education, health, government and civil society and unspecified. Source: Calculated from OECD CRS.

Figure 36. Bilateral aid for water and sanitation, 1990-2006.



Note: In million dollars. Source: Calculated from OECD QWIDS.

The linear regression output reveals that regions which are environmentally degraded and have a larger amount of mammals under threat have a higher probability of receiving increased aid amounts. Nature conservation, as mentioned previously, is a focus area of JICA policies (JICA 2003:3).

Nevertheless, despite the fact that countries with larger amounts of threatened mammals and increased environmental vulnerability are more likely to receive increased amounts of aid, Japan is allocating the majority of its aid in the form of water and energy projects. Japan justifies the increased usage of these types of projects as projects which allow assistance to reach the maximum number of people (JICA 2001:19). Moreover, water and energy projects lie within the area of Japan's know-how and own development experience, therefore, Japan possesses the required expertise to transfer such knowledge and technology

abroad (especially energy efficiency)⁷². However, implementing water and energy infrastructure projects in the most vulnerable environments may not be an adequate solution which might additionally have questionable outcomes.

Among the five variables which appear in the regression outputs, two are environmental. Although not all of Japan's policy focus areas have found confirmation in the regression outputs as key variables in Japan's environmental assistance allocation, they do find confirmation in the project types. Yet the proportion of biodiversity projects is very symbolic. Thus, nature conservation, pollution management and water issues are all present either in the aid allocation patterns or the types of projects implemented with an emphasis put on environmental infrastructure.

5.1.5. Is the US an environmental laggard?

USAID has set for itself six environmental goals: recipient country commitment to national and international programs, biodiversity, climate change, sustainable urbanization (which is understood as the increase of access to environmental services), sustainable use of energy and natural resource management (forest and water management) (USAID 2000:109). USAID also concentrates its efforts on capacity building and environmental policies (USAID 2000:105).

From the six policy focus areas, the logit regression output only confirms the forest and biodiversity-related goals. The only environmentally significant variable is the annual deforestation rate variable. The higher the deforestation rate, the more probable it is that a

⁷² This justification is found in Japan's Mid-Term Policy: "Japan will provide support to developing countries by making use of its experience and know-how in overcoming environmental problems and its scientific technology in combating complex environmental problems" (Ministry of Foreign Affairs of Japan. *Environment*. 19 November 2007. Web. 13 September 2009. <<http://www.mofa.go.jp/policy/oda/sector/environment/action.html>>).

country will receive assistance funds⁷³. This variable confirms USAID's area of interest, because USAID views deforestation as part of climate change and 20% of global greenhouse gas emissions originate from deforestation (USAID 2008:6). Moreover, USAID provides a plan of action to address deforestation as "it is important to have an integrated response that includes promoting sustainable economic development, alleviating poverty, strengthening forest governance, and conserving biodiversity" (US Senate 2008:1). Thus, are environmental capacity building and biodiversity part of the linear regression output or majority project types?

The linear regression finds the GEF biodiversity index variable the only statistically significant environmental variable. As biodiversity is one of the designated policy focus areas, the variable fits into USAID's policy framework and confirms the importance of deforestation issues to USAID. The prioritization of biodiversity is also present in USAID's policies and has been made a key goal in the program to protect the environment⁷⁴. Other policy focus areas, such as water, air pollution and clean energy did not prove to be significant in the linear regression output. The results do not confirm previous studies, which showed that the US is more likely to fund nations with a greater natural capital (Lewis 2003:153).

Why is biodiversity the chosen focus area? The answer lies within US domestic politics as environmental aid is specifically tagged for biodiversity protection by the US Senate⁷⁵. Senator Patrick Leahy (member of the Democratic Party) from Vermont is the key

⁷³ The American interest in tropical forests dates back to 1961, when the Foreign Assistance Act of 1961 (which created USAID) underlined in Section 118.97(c)(1) that the President shall "place a high priority on conservation and sustainable management of tropical forests" (US Congress. Foreign Assistance Act. Public Law 87-195. 1961).

⁷⁴ USAID. "Biodiversity" *Environment*. Web. 14 December 2009. <http://www.usaid.gov/our_work/environment/biodiversity/>.

⁷⁵ In the 2009 US Senate Consolidated Appropriations Bill, out of the energy and environment sector, only biodiversity and clean energy are specially tagged: "\$424 million for clean energy and biodiversity programs worldwide, including funding for the Global Environmental Facility and international conservation programs to work with developing nations to reduce greenhouse gas emissions, preserve parks, and protect wildlife" (US Senate 2009:2).

promoter of biodiversity issues⁷⁶. His important role is visible in his public speeches. In March 1993 Senator Leahy addressed the Senate:

What are the specific U.S. national interests that can be served or advanced by foreign assistance?...If, working with the international community, we cannot stop global warming, pollution of the air and water, destruction of the world's biodiversity, and the unsustainable exploitation of the world's natural resources, our standard of living and the lives of our children and grandchildren will suffer (Leahy 1993:40).

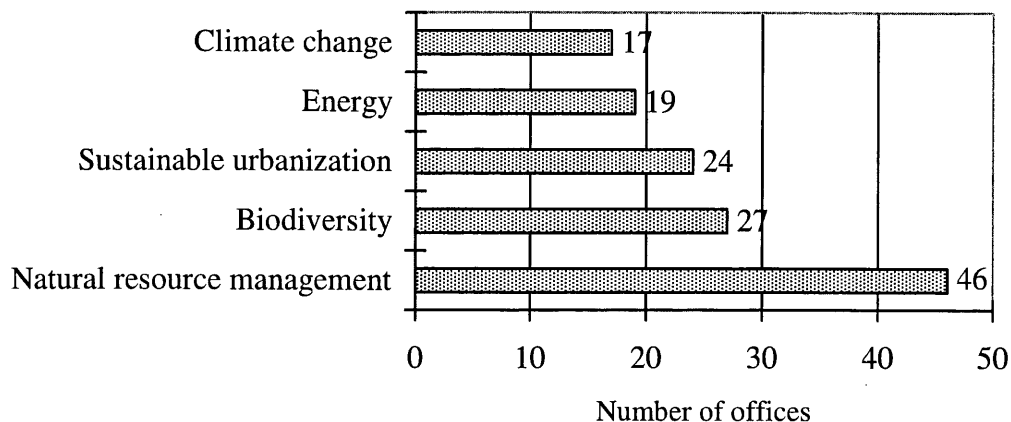
An anonymous USAID employee summed up: "Senator Leahy and his staff, they almost singlehandedly have kept us operating here [in the aid recipient country] with the biodiversity program...We got funding from a congressional earmark written into law [by Senator Leahy's staff] and pushed through the Senate by Senator Leahy"⁷⁷.

If the number of USAID offices with environmental objectives is compared to the policy focus areas, one dominant focus area arises (see Figure 37). Natural resource management is the key area, with biodiversity following behind.

⁷⁶ USAID Brazil and USAID Philippines. 7 December and 18 March 2009. Personal Interviews. Moreover, a study conducted in 2004 found that environmental organizations are in majority the supporters of the Democratic Party, while the oil, gas, chemical and manufacturing industries support the Republicans (Sussman 2004:359).

⁷⁷ Personal Interview. 7 December 2009.

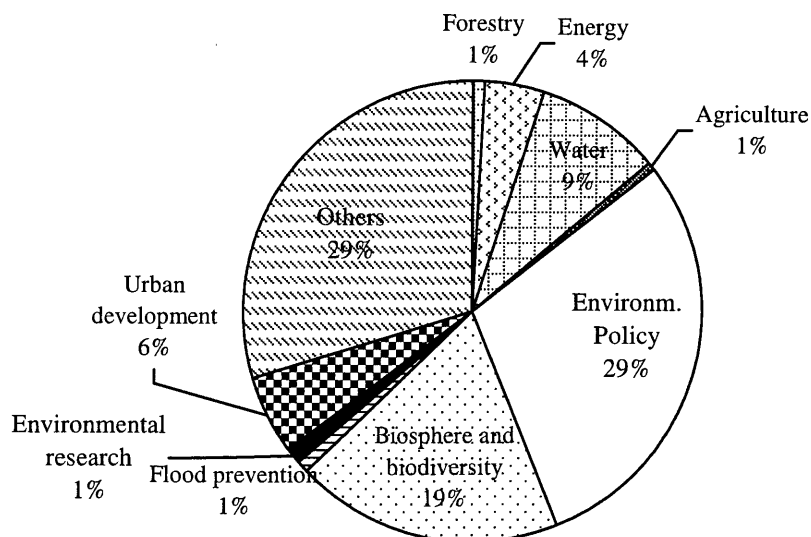
Figure 37. Number of USAID country offices with environmental objectives, 1999.



Source: Based on USAID 2000:119.

A similar picture arises in Figure 38. Environmental policy and biodiversity projects account for 48% of funds. Despite the policy diversification of focus areas, there is the clear dominance of these two sectors with biodiversity remaining the key determinant in aid allocation.

Figure 38. American environmental aid by type (cumulative), 1995-2006.



Note: Others include: industry, trade, mining, tourism, multi-sector aid, humanitarian aid, other social and economic infrastructure, education, health, government and civil society and unspecified. Source: Calculated from OECD CRS.

Thus, countries with higher biodiversity levels are more likely to receive increased funds in the form of environmental policy or biodiversity projects. This finding obtains confirmation in the donors approach as USAID works to “develop environmental policies and management practices that conserve biodiversity and, at the same time, sustain local livelihoods”⁷⁸. Therefore, USAID has a very coherent policy, despite the fact that not all of the policy focus areas proved significant. The deforestation rate plays a key role in increasing the chances of aid allocation, with biodiversity levels influencing the extent of aid given, followed by biodiversity and environmental capacity building projects. In contrast to Japan, the US has a sector policy focus linked to biodiversity issues.

Out of the four logit and linear regression output variables present, two are environmental. Thus, the US environmental aid efforts are only partly driven by environmental concerns. Additionally, the US is an environmental laggard due to the small percentage (average of 3.4%) of total aid allocated for environmental sustainability. The US environmental policy is very coherent, but it constitutes a very small amount compared to the growing, overall volume of total aid distributed.

5.1.6. Denmark : a model donor under question⁷⁹

Denmark’s policy target areas are climate change and energy related issues (DANIDA 2007:11). As DANIDA’s report states: “Climate change, pressure from migration, and export

⁷⁸ USAID. “Biodiversity” *Environment*. Web. 26 July 2009. <http://www.usaid.gov/our_work/environment/biodiversity/>. As W. M. Adams explains: “The idea that environmental conservation underpinned development was the basis for a substantially increased flow of funds into conservation work in the 1990s- for example, through the Global Environment Facility and the work of bilateral donors such as USAID” (Adams 2009:275).

⁷⁹ According to the Center of Global Development, which ranks donors according to the quality of aid, Denmark was the world’s best donor agency scoring 12.3 points in 2005. USA was placed at 1.9 points. Japan took the last place of only 1.4 points. Various factors were taken into account: the amount of aid going to Africa, meeting the 0.7% GNI aid target, the amount of tied aid, which countries receive aid, the amount of small projects (Center for Global Development. *Commitment to Development Index 2005*. Web. 11 January 2010. <<http://www.cgdev.org/doc/cdi/CDI2005scores.pdf>>).

of instability from weak and fragile states are issues that the Government would like to see pushed higher up the international development policy agenda” (2007:4). However, the additional “special bilateral environmental assistance” to Africa and Southeast Asia encompasses various key areas as: urban environment and industrial pollution, sustainable production and use of energy, sustainable use of natural resources (including water).

The logit regression output reveals two environmental variables with strong statistical significance: the environmental vulnerability index and the natural capital index (which is a measure of natural resource wealth valued in US\$ per capita). Yet the two variables show a negative correlation, which means that the lower the level of natural resource wealth and the lower the level of environmental vulnerability, the larger the chances of receiving aid. DANIDA acknowledges the importance of natural capital, as “natural capital constitutes an estimated quarter of total wealth in low-income countries, greater than the share of produced capital. This suggests that better management of ecosystems and natural resources is a key to sustaining development and growth” (2009:9). Nevertheless, DANIDA allocates funds to countries with smaller levels of natural capital. Why?

Both environmental variables show a positive correlation with the water and sanitation variable (the correlation coefficient ranging from 0.343 to 0.480). Thus, the higher the percentage of the population with access to clean water and sanitation facilities, the higher the environmental vulnerability level and natural capital. Therefore, if the logit regression output shows a negative correlation to the two variables, it will also show a negative correlation to water and sanitation issues. Hence, the lower the percentage of the population with access to clean water and sanitation, the larger the chance of receiving aid. Moreover, one of DANIDA’s objectives is to support water management which “contributes to long-term environmentally sustainable economic and social development” (2000:3). However, the correlation with water issues only offers a partial explanation of the presence of the natural

capital variable in the regression output.

DANIDA sees the environment “as the source of natural capital...the foundation for all economic activity”. Therefore, “the depletion of natural capital must be reduced by changing the resource use and waste generation of many non-poor groups, as well as improving poorer communities’ access to, and benefits from the natural resources they require for their livelihoods” (2006:11). Thus, DANIDA aims to increase natural capital partly through capacity building projects for the poorer communities. As a result, it targets countries with smaller amounts of natural capital, which are poorer (coefficient 0.473). Fifteen of the poorest countries (counted as the percentage of the population living under \$2 a day) have the average natural capital level of \$ 956 per person, while fifteen of the richest have an average of \$ 10 800 per person.

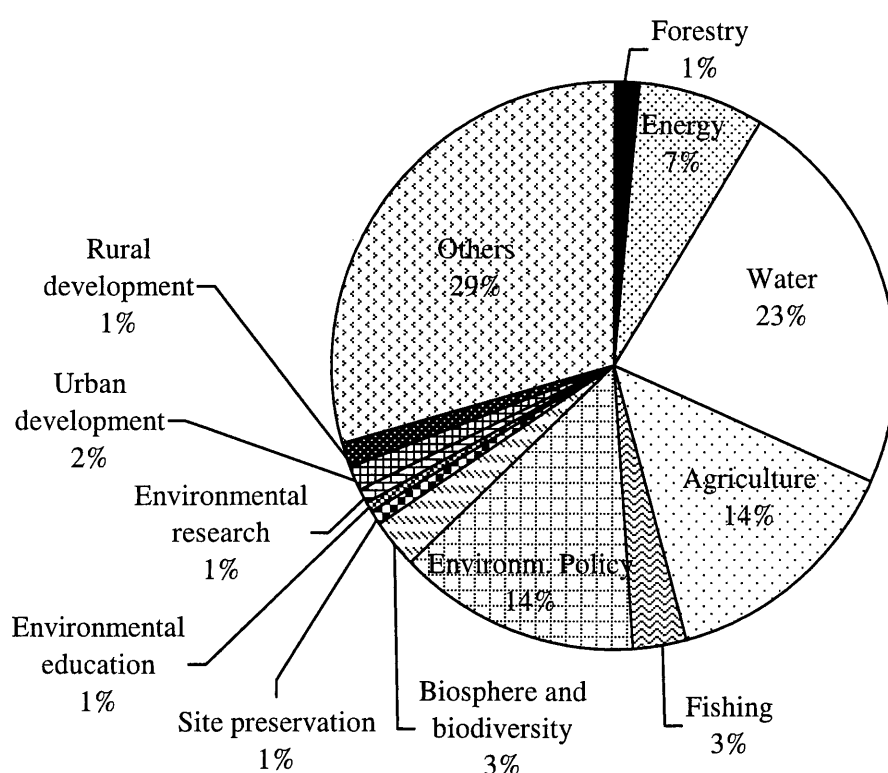
As for environmental vulnerability, apart from the water and sanitation variables, it also has a significant correlation with the percentage of the population under the poverty line. However, the correlation is negative (correlation coefficient -0.417), meaning that the smaller the amount of poor, the larger the ecosystem vulnerability (already explored in the case of Japan). Contrarily, the smaller the level of environmental vulnerability, the more people are under the poverty line (Figure 33 has presented the relationship). The difference between the fifteen most environmentally vulnerable countries and fifteen of the least vulnerable is on average 15% of the population under the national poverty line. Therefore, allocating fund to countries with low environmental vulnerability, implies allocating funds to poorer countries and “all environmental assistance must contribute towards fulfillment of the overriding goal of Danish development cooperation, namely poverty alleviation” (DANIDA 2006:6).

In accordance with the Danish environmental focus policies, in particular the promotion of the climate change on the development agenda, the CO₂ emissions variable proved significant in the linear regression output. Thus, countries with a higher level of air

pollution are more likely to receive increased environmental funds. However, is Danish environmental aid in the form of pollution management projects?

If Danish aid is broken into sectors, the dominance of water projects becomes visible, receiving one third of all environmental funds (see Figure 39). The second largest focus areas are agriculture and environmental policies with 28% of aid.

Figure 39. Danish environmental aid by type (cumulative), 1995-2006.



Note: Others include: industry, trade, mining, tourism, multi-sector aid, humanitarian aid, other social and economic infrastructure and services, education, health, government and civil society and unspecified. Source: Calculated from OECD CRS.

Denmark allocates its environmental funds to countries with lower environmental vulnerability (which are countries more likely to have higher poverty levels and an increased need for water assistance projects) and smaller natural capital. Denmark also distributes increased aid amounts influenced by the level of air pollution, in the form of water,

agriculture and environmental policy and management projects. Thus, Denmark's assistance policies are only partly confirmed.

DANIDA links agricultural issues to water and environmental protection, because agriculture and forestry can contribute to conservation of biological diversity, protection of water resources and also combat desertification (DANIDA 2004:24-25). Environment is also included as a cross-cutting issue in agricultural programs (DANIDA 2004:18).

Denmark has the most balanced aid portfolio out of the bilateral donors. The policy focus areas are narrowed down to three in the "special environmental assistance" (urban environment and industrial pollution, sustainable production and use of energy, sustainable use of natural resources) with a wide variety of project types responding to these policies. Yet concerning aid allocation, variables describing broader environmental issues are significant (environmental vulnerability and natural capital). Contrarily to other donors, Denmark presents a more holistic focus on environmental degradation, as it does not single out any specific variable (except CO₂ emissions) to be the determining variable in aid allocation. Does this make Denmark a model donor?

Out of the six variables present in the regression outputs, three variables are environmental, which questions the motivations of Danish environmental aid allocation and its role as a model donor, as non-environmental variables constitute half of the regression outputs. However, due to the small sample size and small explanatory value (adjusted R² of 48%), the linear regression output cannot be a sound guide to Danish environmental aid distribution, it can only presume a certain trend for aid allocation.

5.2. The actual environmental focus areas of donors

There is a wide diversification of environmental variables which proved to be

significant for donors (see Table 11). The variety reveals the diversity of donors' motivations and the different project responses. Different specialization areas and different project types are beneficial to achieving a balanced global environmental aid distribution, because all essential areas of ecosystems will be covered by some form of aid.

Table 11. Comparison of donors' policy focus areas and environmental variables.

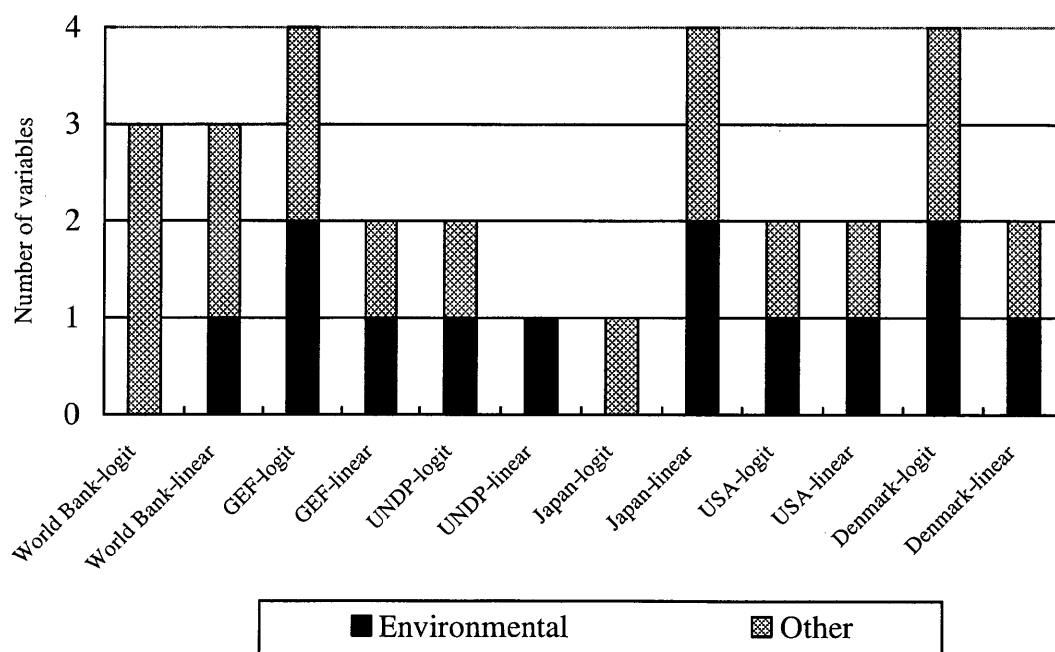
Donor	Policy focus areas	Environmental variable (logit)	Environmental variable (linear)	Majority projects
World Bank	<ul style="list-style-type: none"> ➤ pollution management ➤ urban environment ➤ sustainable resource management ➤ capacity building ➤ global environmental issues 	none	CO ₂ (pollution)	<ul style="list-style-type: none"> ➤ water and sanitation ➤ agriculture ➤ energy
GEF	<ul style="list-style-type: none"> ➤ biodiversity ➤ climate change ➤ international waters ➤ ozone depletion ➤ land degradation ➤ persistent organic pollutants (POPs) 	ESI (environmental sustainability) NETR (treaty ratification)	NTM (biodiversity, environmental vulnerability)	<ul style="list-style-type: none"> ➤ biodiversity ➤ climate change
UNDP	<ul style="list-style-type: none"> ➤ water governance ➤ sustainable energy ➤ land management 	NTM (biodiversity, environmental vulnerability)	PIS (sanitation)	<ul style="list-style-type: none"> ➤ environmental mainstreaming ➤ biodiversity

	<ul style="list-style-type: none"> ➤ biodiversity ➤ environmental mainstreaming ➤ chemicals management 			
Japan	<ul style="list-style-type: none"> ➤ nature conservation ➤ environmental management ➤ water and disaster prevention 	none	NTM EVI (biodiversity, environmental vulnerability)	<ul style="list-style-type: none"> ➤ water ➤ energy
USA	<ul style="list-style-type: none"> ➤ country commitment to national and international programs ➤ biodiversity ➤ climate change ➤ sustainable urbanization ➤ sustainable use of energy ➤ natural resource management 	ADFR (deforestation)	GEF (biodiversity)	<ul style="list-style-type: none"> ➤ environmental policy ➤ biodiversity
Denmark	<ul style="list-style-type: none"> ➤ urban environment and industrial pollution ➤ sustainable energy ➤ sustainable use of natural resources 	NCI (natural capital) EVI (vulnerability)	CO ₂ (pollution)	<ul style="list-style-type: none"> ➤ water ➤ agriculture ➤ environmental policy

Source: Author.

If the numerous donor policy focus areas are compared to the number of statistically significant environmental variables and the number of major project types, donors are actually concentrated on a limited amount of policy issues. Despite the wide range of policies, four out of six donors were driven by only one environmental variable in their linear regressions, and responded with a specialized project portfolio with two or three project types forming the majority of projects. The logit regressions present similar results as four donors had one or two environmental variables and the other two donors had none present in their regression outputs (see Figure 40). However, the actual influence or extent of impact of environmental variables (over other, non-environmental present in the outputs) cannot be proved.

Figure 40. Number of environmental variables present in regression outputs.



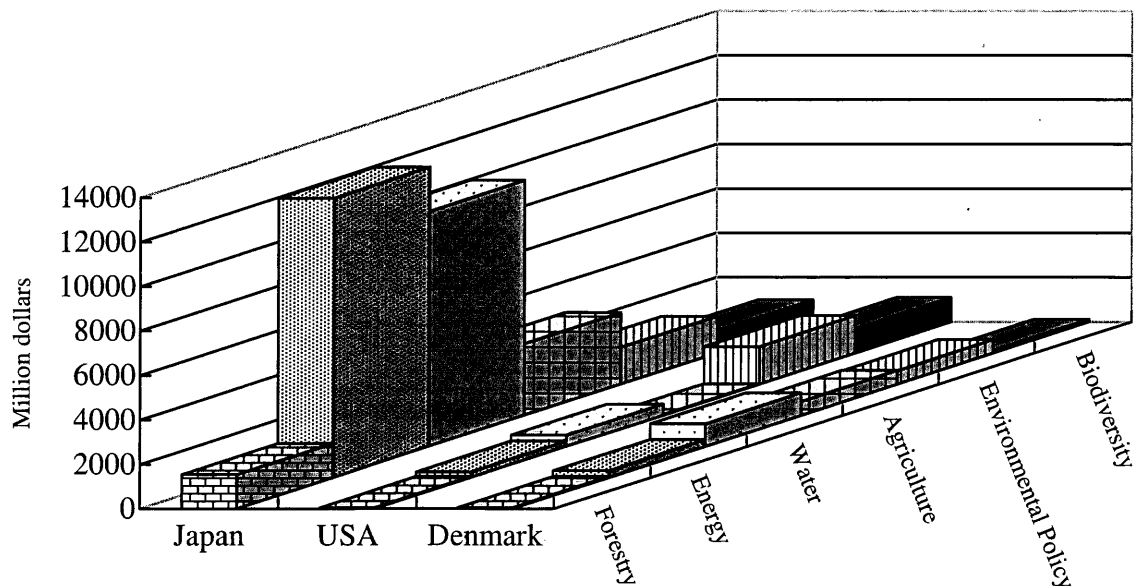
Source: Author.

All the analyzed environmental variables are present in at least one donors' regression output. Therefore, all the thematic variables used in the regression, like water, deforestation,

air pollution, are significant in determining environmental aid allocation for at least one donor.

Nonetheless, environmental aid remains unbalanced due to the volume of aid allocated to certain sectors. There is a diversification of significant environmental variables and majority project types, but the volume of aid distorts this variety of focus areas. Although biodiversity-related issues are the most common linear regression output variables, it is water and energy that have received the bulk of funds in the case of bilateral donors (see Figure 41). No other sector, including forestry, can compare with the amounts spent for these two focus areas. Therefore, aid is not “green”, it is “blue” and “brown”.

Figure 41. Bilateral aid for selected environmental sectors, 1995-2006.



Note: Energy includes: energy policy and management, energy research, power generation, gas-fired power plants, coal-fired power plants, nuclear power plants, hydroelectric power plants, geothermal, solar and wind power plants. Forestry includes: policy and management, forestry development, fuelwood/charcoal, training and research, forestry services. Water includes: policy and management, water resources protection, water supply, river development, waste management and research. Source: Calculated from OECD CRS.

5.3. Conclusion: is environmental aid for the environment?

All the donors analyzed revealed at least one statistically significant environmental variable in both the logit and linear regression outputs (except World Bank and Japan), which implies that environmental issues play a role in determining aid allocation for each donor. Thus, all donors are at least partly “green”. There is a wide diversification of environmental variables which proved to be significant for donors, which reveals donor specialization or interests in certain environmental problems. The two most common environmental variables which appeared in the regression outputs were: the number of threatened mammals and level of CO₂ emissions.

However, there is no donor driven by environmental variables exclusively as other non-environmental factors play a role in the allocation pattern. Moreover, despite the numerous policy focus areas emphasized in policy documents, the donors’ policy focus areas are quite limited. Thus, the remaining chapters of this research will attempt to show what are the other determinants of aid allocation for the six donors.

Are multilateral donors “greener”? The regressions and data do not confirm this hypothesis. Multilateral institutions are not driven by a larger number of environmental variables than the bilateral donors. There is also no common environmental variable present in the regression outputs for the multilateral donors, which is a sign of their diversification. Thus, no clear difference exists between the multilateral and bilateral donors in terms of the number of environmental variables significant and the policy focus areas. Further comparison will be made in the following parts of the thesis.

Chapter 6. Economics and geopolitics in environmental aid

The previous chapter revealed that donors are only partially influenced by environmental variables in their environmental aid allocation patterns. Therefore, other, non-environmental factors also influence aid allocation. This chapter will focus on the economic and regional variables used in the regressions. It will attempt to answer the question: to what extent is aid for the environment driven by economic and regional factors?

In the first part of the chapter donors' policies will be set against the regression outputs revealing any economic variables present. The presence of such variables could be treated as an indicator of donors' economic interests playing a role in aid allocation. The second part of the chapter will analyze the role of regions in the aid allocation patterns. This part will reveal whether any regions are more likely to receive aid. The presence of regions in the regression outputs may also be used as an indicator of economic or political interests of donors being present in their aid allocation.

6.1. Is environmental aid driven by economic factors?

There is significant controversy about foreign assistance and economic interests. Researcher J. Brian Atwood claims that aid from the US is motivated by economic rationale, because aid creates markets for US goods and jobs for US workers and advances the overall "economic well-being" of the US (1998:149-150). Hiroyuki Yanagitsubo makes a similar statement about Japan as Japan's economy is heavily dependent on foreign trade (1998:152). Yet in 1984 Alfred Maizles and Machiko K. Nissanke conducted regression analysis and found no statistically significant correlation between general bilateral and multilateral aid and exports of strategic materials (885). Is this also true for environmental aid? Do export

volumes influence environmental aid? Do economic interests influence the extent of environmental aid allocated?

6.1.1. World Bank: a bank not driven by economics?

The World Bank is an economic institution as its name suggests. However, the Bank is not a “normal” bank, as it’s “mission is to fight poverty with passion and professionalism”⁸⁰. Moreover, the Bank assures that achieving poverty-focused growth and “long-term environmental sustainability are essential parts of this mission” (2000:8).

The Bank views environmental degradation as an obstacle to economic growth (2000:3). Nonetheless, economic growth will not be substantially compromised because of environmental degradation as “economic growth implies environmental change in a changing social context” (World Bank 2000:8). Furthermore, achieving growth in poor countries is considered an essential part of reducing poverty, thus, fulfilling the Bank’s mission. Therefore, the World Bank’s policies provide a justification for the presence of economic motivations as “integrating the environment into the CAS [Country Assistance Strategy] is most successful when there is a strong connection to economic outcomes” (2000:25).

One economic variable proves to be statistically significant in the logit regression output. The level of foreign direct investments (FDI) is positively correlated to the chances of obtaining funds from the Bank. This finding implies that countries with a more favorable business environment, with numerous financial opportunities for private companies are more likely to receive loans for the environment. The statistical significance of the FDI variable situates aid for the environment in a broader framework of the Bank’s activities. As the Bank sees a large role for private companies in developing economies, it tends to favor

⁸⁰ World Bank. *About Us*. Web. 11 November 2009. <<http://go.worldbank.org/3QT2P1GNH0>>.

business-friendly countries as recipients. Moreover, countries with higher levels of investments are more likely to repay borrowed funds (loans are on concessional terms). Yet an alternative hypothesis could be made: countries with larger FDI levels are more likely to apply for World Bank funds for environmental infrastructure.

No economic variable was present in the linear output influencing the extent of aid received. Therefore, the FDI variable is the only economic variable significant for the World Bank. The following chapters will explore the political and poverty variables present in the Bank's aid allocation pattern.

6.1.2. The GEF : hidden economic interests?

The GEF does not make many references to economic issues in its policy documents. The GEF is a grant giving institution with an environmental mission, thus, economic variables should not play a significant role in aid allocation.

The GEF does not have any policies which discourage GEF's funds from reaching oil exporting countries. However, the logit regression output showed a significant negative correlation between receiving GEF's aid and being an oil-exporting country. Nevertheless, according to calculations performed on the author's database, there is no significant correlation between being an oil exporting country and having an exceptionally degraded environment (air, water pollution, biodiversity loss, deforestation show no statistically significant correlation). Oil-exporting countries are just as likely to suffer environmental degradation as non oil-exporting countries. Thus, why are oil-exporting countries less likely to receive GEF funds?

In chapter five, the environmental focus areas of GEF were analyzed with biodiversity and climate change targeted as the main focus areas. Among its climate change activities,

GEF focuses on energy efficiency. From 1991 to 2008 GEF allocated \$ 850 million in energy efficiency projects, with a large part (57%) going to Asia (GEF 2008:8). During the same period GEF invested \$1.14 billion in renewable energy with the largest share (32%) distributed to Asia (GEF 2009b:7). Oil-exporting countries receive substantial revenues from oil, and energy-efficiency along with renewable energy are not key priority areas as the countries profit from increased oil exports⁸¹. Therefore, countries with energy efficiency and renewable energy projects are mostly not oil-exporters (see Table 12).

Table 12. GEF's energy efficiency and renewable energy funds and oil exporting regions.

Region	Number of oil exporting countries	GEF renewable energy funds	GEF energy efficiency funds	TOTAL funds
Asia	2	\$ 365 million	\$ 485 million	\$ 850 million
Eastern Europe and Central Asia	4	\$ 114 million	\$ 160 million	\$ 274 million
Latin America	4	\$ 239 million	\$ 87.5 million	\$ 326.5 million
Africa	7	\$ 319 million	\$64.6 million	\$ 383.6 million
TOTAL	17	\$ 1037 million	\$797.1 million	\$ 1834.1 million

Note: Number of oil exporting countries present in author's database. Source: GEF 2008:9; GEF 2009b:7 and CIA. The World Factbook. Web. 28 November 2009.

GEF states that renewable energy is “one of the most promising substitutes for fossil fuels”, which cause the largest portion of greenhouse gas emissions.⁸². GEF's energy efficiency work incorporates the transfer of environmentally-friendly technology. Additionally, GEF has made it a strategic objective to “support projects that not only promote the transfer of energy-efficient technologies but also enable work with regulatory institutions

⁸¹ According to OPEC from 2004-2008 OPEC countries received \$ 3 346 billion in oil revenues (OPEC. *Who Gets What from Imported Oil?* July 2009. Web. 14 December 2009. <http://www.opec.org/opec_web/static_files_project/media/downloads/archive/WGW2009.pdf>).

⁸² GEF. “Types of Projects in Climate Change” *Projects*. Web. 12 November 2009. <http://207.190.239.143/projects/focal_areas/climate/CCProject_types.html>.

on reforming policies and regulations in this vital sector” (GEF 2008:6). Therefore, when GEF grants are allocated, the energy profile of the country proves important and oil-exporters are more disfavored. Although the oil-exporting variable is classified as economic, in the context of GEF’s strong focus on climate change it is more adequate to view it as part of the environment category which concerns climate change.

In the linear regression output no economic variable proved statistically significant. Therefore, in accordance with GEF policies, economic variables do not play a role in increasing the extent of aid. However, non-oil exporting countries are more likely to become GEF recipients in the first place.

6.1.3. Are economies important for UNDP ?

Contrarily to GEF, UNDP sees the economy and the environment as closely linked issues, and makes numerous references to economic development in its policy materials. Moreover, UNDP has played an “influential role in helping governments develop and implement sound environmental policies of direct relevance to the sectors where economic growth is anticipated (such as agriculture, industry, transport and mining)” (UNDP 2008:73)⁸³. In addition, environmental degradation has economic impacts, because it is related to food security, fuel, shelter and medicines and constitutes overall “an integral part of ensuring human welfare and economic development” (UNDP 2009:29). However, no policy is present which would encourage economic factors to be linked to funds for the environment.

In the UNDP logit and linear regression outputs no economic variables proved statistically significant, showing that economic factors do not play a role in UNDP’s

⁸³ In 2009 UNEP published a Training Resource Manual *The Use of Economic Instruments for Environmental and Natural Resource Management*. In 2008 UN Environment Program launched the Green Economy Initiative.

environmental aid allocation.

6.1.4. Japan's aid for the environment is linked to its economy

There has been numerous research published about Japanese ODA and Japan's economic interests⁸⁴. The issue of development assistance is interconnected with economic affairs. Therefore, environmental assistance may also be influenced by economic matters. This linkage is visible in the environment-economy discourse as the Japanese Ministry of Foreign Affairs talks about the economic benefits generated by the environment (Ministry of Foreign Affairs of Japan 2007:2).

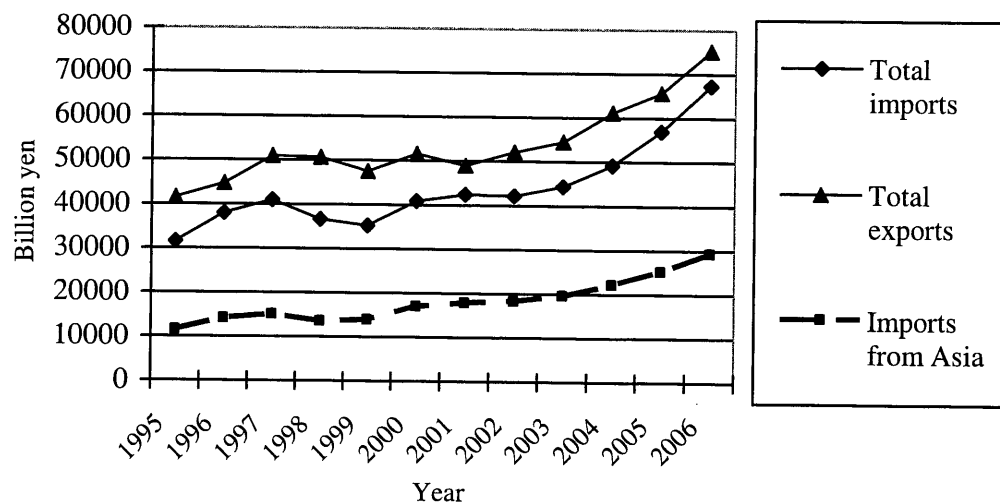
Furthermore, Japan intends to “promote environmental conservation, through the utilization of Japan's technologies and experience accumulated over the course of its parallel efforts in environmental conservation and economic growth” (JICA 2001:41). JICA has stated directly that: “ODA can contribute to Japan's economic interests as Japan is highly dependent on developing countries as suppliers of natural resources, energy and food” (2001:1). The *JICA Second Study on Development Assistance for the Environment* discusses “economic cooperation in the environmental field” (2001:45-48). Do economic motivations apply to the Japanese aid for the environment allocation pattern?

This research only partly confirms the findings of previous researchers. In the logit regression, out of the three economic variables (FDI, export and import levels), none proved to be statistically significant, implying that Japanese decision makers do not focus on economic matters in their decisions on whether or not to allocate environmental funds. Nonetheless, in the linear regression output one economic variable had a strong influence (t-statistic is 7.556): the import variable. The more resources are imported from a given

⁸⁴ Examples include: Doss 1996; Palanovics 2006; Taylor 1999; Dauvergne 2001; Schreurs 2004.

country, the more likely it is that the country will receive increased environmental funds. This finding does confirm Japan's resource dependence and places environmental ODA along other types of ODA as it is also influenced by economic factors. Figure 42 shows that total imports to Japan have grown from ¥ 31 548.7 billion in 1995 to ¥ 67 344.3 billion in 2006, a growth of 113%. The proportion of imports from Asia has also increased from 36.7% in 1995 to 43.6% in 2006. During the same period Japanese exports grew by only 81%.

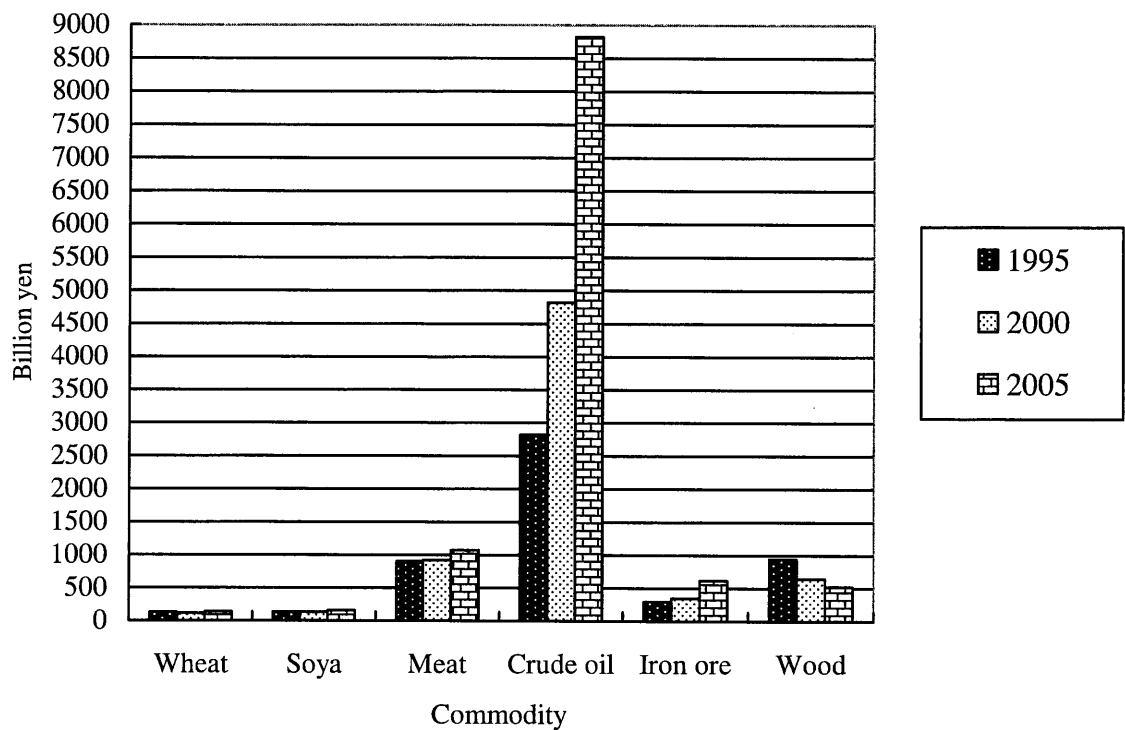
Figure 42. Values of Japanese imports and exports, 1995-2006.



Source: Ministry of Finance of Japan. *Trade Statistics of Japan*. Web. 23 February 2010. <http://www.customs.go.jp/toukei/info/index_e.htm>.

Moreover, when the import amounts are broken down into particular commodities, the large import increase of certain commodities is visible (Figure 43). Wheat imports have grown by 7.5%, meat imports have grown by 18.7%, soya imports have increased by 21.8%, crude oil imports have gone up by 212.9% and iron ore imports have grown by 109.8%. Overall, Japan imports 70% of its grain (Brown 2004:12). Out of the six selected commodities, the import value of five has grown with only the value of wood imports decreasing by 44.7%. Thus, imports are an important element of the Japanese economy.

Figure 43. Values of imports of selected commodities to Japan, 1995-2005.



Source: Ministry of Agriculture, Forestry and Fisheries of Japan. *Value of imports*. Web. 24 February 2010. <http://www.maff.go.jp/toukei/abstract/2_4/74.htm>.

Therefore, Japanese aid for the environment is not immune to Japanese economic interests as countries which are important import partners for Japan are more likely to receive increased amounts of environmental aid. This is a confirmation of previous research done on Japanese general aid allocation which found that economic motivations (including imports) were statistically significant at 1% error (Hook and Zhang 1998:1060-1061). Researcher Steven Hook explains that Japanese aid is designed to support Japanese foreign investments and trade policies, especially with regard to countries that possess raw materials important for Japan's economic development (Hook 1995:71). This finding reveals that environmental aid is part of the broader Japanese ODA framework from which economic motivations are not absent.

6.1.5. The US : a donor with no economic interests?

Similarly to Japan, the US government sees a linkage between the environment and economic growth. In the 1961 Foreign Assistance Act, Section 117.95 (a), the US Congress declared that:

if current trends in the degradation of natural resources in developing countries continue, they will severely undermine the best efforts to meet basic human needs, to achieve sustained economic growth....It is, therefore, in the economic and security interests of the United States to provide leadership ... in order to achieve environmentally sound development.

Overall, USAID materials state that “foreign assistance is a valuable foreign policy tool in terms of promoting U.S. security interests and its economic interests”⁸⁵.

Despite the above declarations, no economic variable proved statistically significant in either the logit or linear regression outputs. Thus, economical factors do not influence environmental aid allocation in the case of the US. This finding is in contrast to the study conducted by Tammy Lewis, which found that the US is more likely to assist countries with which the United States maintains economic and security ties (2003:153). The importance of geopolitical allies will be analyzed in the following part of the chapter.

6.1.6. Is Denmark’s environmental aid driven by its economy?

Contrarily to the US, Denmark does not perceive its assistance in the terms of its

⁸⁵ USAID. *About USAID*. Web. 2 February 2010. <http://www.usaid.gov/about_usaid/usaidhist.html>.

economic interest, but Danish foreign policy and security issues are present (DANIDA is a department in the Danish Ministry of Foreign Affairs). The Danish Ministry of Foreign Affairs describes its development policy: “Poverty reduction remains the fundamental challenge for Danish development cooperation. At the same time, Danish development policy is recognized as a central and integral part of Danish foreign and security policy”⁸⁶. However, Denmark does also seek to promote indirectly its economic interests. Among the criteria of the Foreign Affairs Committee of the Folketing (national parliament) for the selection of countries which are going to receive aid, the last criterion to be met (point seven) is:

if the above criteria are satisfactorily met [points from one to six], the possibility of promoting the participation of the Danish business sector – and thus employment in Denmark – in development cooperation should enter deliberations on the specific selection of countries, on condition that Danish supplies and services are competitive with respect to adapted technology, price and quality (DANIDA 2003a:74).

Moreover, one researcher estimated that between 6 000 and 8 000 jobs are directly dependent on the existence of Danish aid (Olsen 2002:5). Do economic variables play a role in Danish environmental assistance allocation?

Similarly to the US, Denmark has no economic variables in its logit and linear regression outputs. Therefore, Denmark’s aid allocation pattern is not determined to a significant extent by the economic variables tested. This, however, does not imply that aid for the environment is free from the donor’s economic interests. The presence of economic

⁸⁶ Ministry of Foreign Affairs of Denmark. *Danish Development Policy*. Web. 21 February 2010. <<http://www.um.dk/en/menu/DevelopmentPolicy/DanishDevelopmentPolicy/>>.

interests in Danish aid will be explored further in section 6.2.4 of this chapter.

6.1.7. Conclusions: is environmental aid driven by economic variables?

Economic variables did prove to be significant in environmental assistance allocation for some donors as they appeared in three out of twelve donors' regression outputs. Therefore, apart from environmental variables, economic variables are also influencing aid allocation. Nonetheless, despite the presence of economic factors, they are not the dominant category determining aid allocation. UNDP's, Denmark's, the US and the GEF's (partly) aid allocation pattern appears unaffected by economic issues analyzed in this thesis. The finding is a partial confirmation of previous research on trade policies which found that donors are not influenced by the economic policies of recipients (Parks and Tierney 2004:24). Moreover, there was not one economic variable which reoccurred in the regression outputs, showing a variety of economic factors which were present.

Similarly as in the previous chapter, there is no visible difference between multilateral and bilateral environmental assistance allocation based on the significance of economic variables. Table 13 reveals that both types of donors are equally influenced by economic variables. Thus, this finding enforces the view that there are no significant differences between bilateral and multilateral environmental aid allocation patterns.

Table 13. Economic variables present in regression outputs.

Donor	Logit regression	Linear regression
World Bank	FDI	<i>None</i>
GEF	OEX	<i>None</i>
UNDP	<i>None</i>	<i>None</i>
Japan	<i>None</i>	IM
USA	<i>None</i>	<i>None</i>
Denmark	<i>None</i>	<i>None</i>

6.2. Environmental aid and geographical distribution

Although there is no correct answer to the question where environmental aid should be allocated as it is needed in all the regions, and there is no region where environmental aid should *not* be allocated, donors do have their regional preferences. No country or region has escaped being victim to some sort of environmental degradation. However, the extent of these problems differs. As Robert O. Keohane described: “Environmental problems are most serious in those parts of the world with the least capacity to deal with them” (1996:3). Furthermore, out of the twelve most biodiverse countries in the world, eleven are in the developing world (Australia is the only “developed”). They include: Brazil, China, Columbia, Ecuador, India, Indonesia, Madagascar, Malaysia, Mexico, Peru and Zaire (Elliot 2004:30). Therefore, Africa, Asia and South America are all environmentally significant regions. Thus, what are the regional preferences of donors? Do they focus on the same regions? Are bilateral donors politically motivated with the US allocating aid to South America and Japan to Asia? This part of the chapter will attempt to answer these questions.

Using the OECD and donors’ databases, figures were derived for regional environmental aid distribution. Additionally, using logit and linear regression analysis, the significance of regions in aid allocation was determined for each donor. Donor regional priority policies (if existent) will be tested against actual regional aid distribution and regression results.

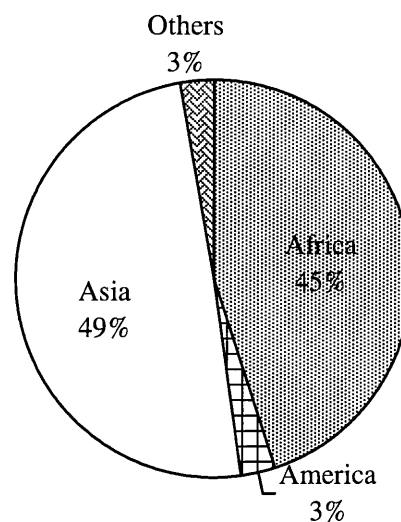
6.2.1. Are multilaterals geographically indifferent?

IDA purposefully targets seventy-nine poorest countries, thirty-nine of which are in Africa. African countries outnumber other countries as recipients. Although IDA has the

policy of targeting African countries, there is no region of preference in the World Bank's materials for environmental funds. The lack of preference was confirmed by the logit output as no region proves significant in determining whether or not to allocate funds. However, the linear regression analysis of World Bank aid shows a strong correlation to Asian countries. Being a region in Asia greatly increases the chances of receiving additional environmental aid from the Bank.

The World Bank, the largest multilateral environmental aid donor, has been present on all continents (see Figure 44). However, environmental aid has not been distributed equally with Asian countries receiving almost half (49%) of environmental aid.

Figure 44. Regional distribution of World Bank's aid for the environment (cumulative), 1995-2006.

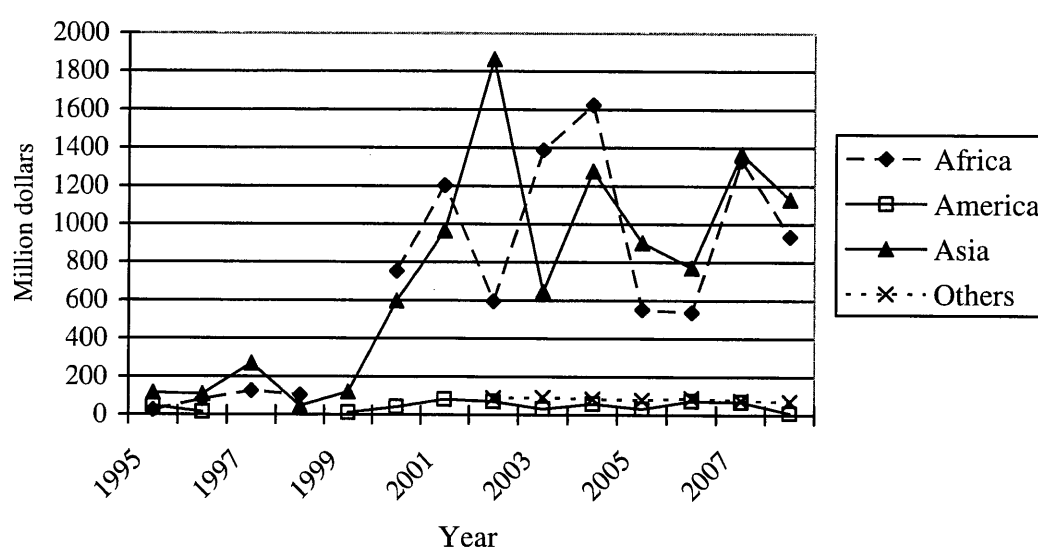


Note: America includes North, Central and South America. Other includes Europe and Oceania. IDA funds only.
Source: Calculated from OECD CRS.

However, the proportion of environmental funds allocated to Asian and African countries has been quite balanced. As Figure 45 shows, Asia and Africa have been the two dominant recipients of environmental funds. The two regions are also the majority recipients

of total IDA aid, because the allocation of IDA's resources is determined primarily by: each recipient's rating in the annual Country Policy and Institution Assessment (CPIA), its population size and its GNI per capita. Africa is given political priority, but Asia still obtains a larger volume of funds.

Figure 45. Annual regional distribution of World Bank's aid for the environment, 1995-2008.



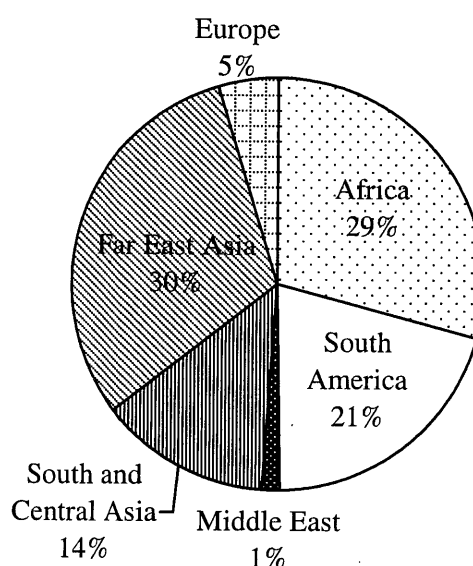
Note: Amounts in millions (\$2008). America includes North, Central and South America. Other includes Europe and Oceania. Data prior to 1999 is incomplete. Source: Calculated from OECD CRS.

The population variable, which is one of the indicators for general IDA loan distribution, did not prove statistically significant. Hence, population size does not affect the distribution of IDA funds for the environment. The GNI per capita variable will be explored in chapter eight.

As for GEF, the logit regression presents the same output as for the World Bank – no regional variables prove significant. The linear output does not show any statistical significance for the regions either. GEF does not have any target regions for its aid, as there is no policy giving preference to a particular continent.

The GEF project portfolio reveals that the GEF mainly concentrates its environmental activities in Far East Asia which receives around 30% of aid (see Figure 46), yet the regional aid spread is quite balanced. Africa receives almost the same share of aid. Out of the 30% allocated to Far East Asia, 58% is allocated to China.

Figure 46. Regional distribution of GEF funds, 1997-2006.



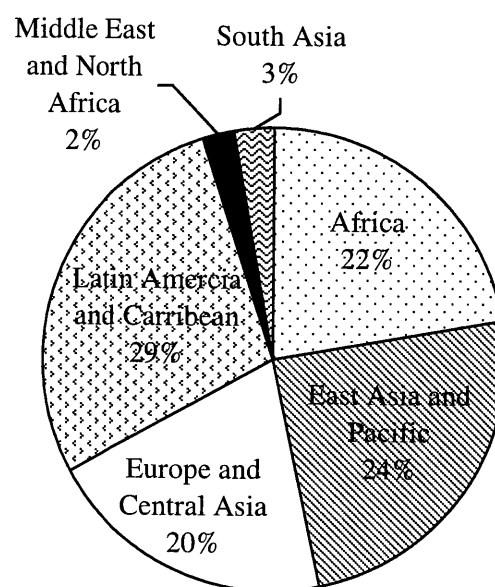
Note: Amount is in disbursements (\$2007). Source: Calculated from OECD QWIDS.

Taking into account that aid is distributed fairly evenly between the three environmentally significant regions, the geographical distribution of aid, in the case of the GEF, is not an explanatory factor. Therefore, Africa, Asia and South America have equal chances of receiving GEF grants.

As the World Bank is one of the two main GEF implementing agencies, it is worth asking how is combined World Bank/GEF aid distributed? Does it follow GEF's aid pattern or the World Bank's, since the Bank has a dominant role in the cooperation? If one compares Figures 44, 46 and 47, Figure 47 has a stronger resemblance to Figure 46. Although the

regional groupings differ at times, making the comparison a challenge, four out of the six regional World Bank/GEF groupings have figures which are closer to the GEF's regional percentage than the Bank's. This may question the dependence hypothesis of GEF on the World Bank, suggesting distributional independence of the GEF from the Bank.

Figure 47. Regional distribution of World Bank/GEF funds, 1996-2006.



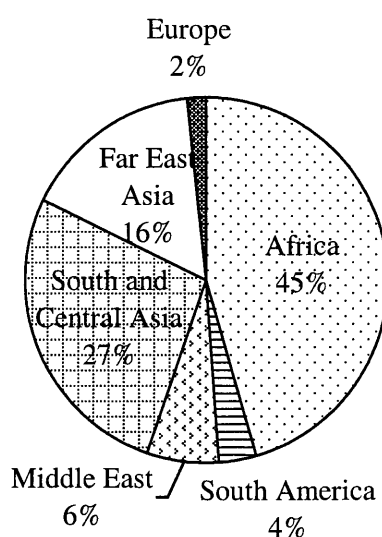
Source: Calculated from World Bank Project Database.

Similarly to the World Bank and the GEF, UNDP does not have any policies regarding regional preferences. Both the logit and linear regression results showed that no region has any explanatory value for UNDP's environmental aid distribution. Therefore, UNDP aid allocation is driven by other, non-geographical factors.

However, UNDP's environmental aid data shows that UNDP has set its primary focus on Africa, which receives 45% of environmental aid (see Figure 48). Even if South, East and Central Asia are combined, they will only constitute 43% of aid, setting the dominant place for African countries. Africa and Asia combined receive 88% of funds. UNDP environmental

aid is, therefore, heavily concentrated in these two regions, as South America receives only 4%. UNDP has twenty-four offices in South America, compared to thirty-four in Africa (due to the larger number of countries). One of the reasons for a stronger UNDP presence in Africa is the number of UNDP initiatives there (the UNDP-UNEP Poverty Initiative is an example). Nevertheless, the African variable is not a significant variable in the aid allocation as it did not prove statistically significant.

Figure 48. Regional distribution of UNDP's environmental aid, 1999-2006.



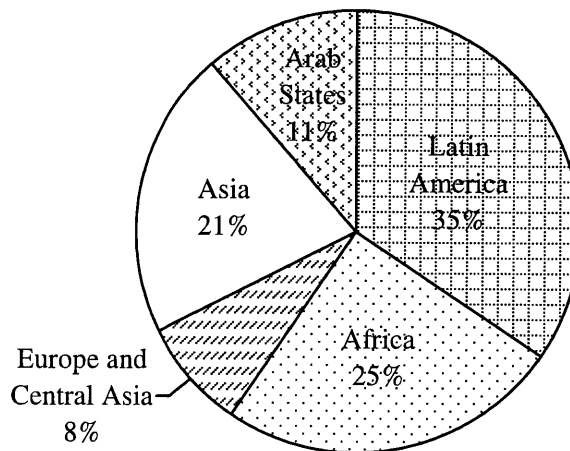
Source: Calculated from OECD CRS.

In chapter three, the GEF and UNDP linkage was partly analyzed. Is the mutual influence of GEF and UNDP visible when geographical distribution is concerned? Does the dependence of UNDP on GEF funds influence regional allocation? If the common GEF/UNDP Small Grants Program is divided into regions (see Figure 49), aid distribution becomes more regionally balanced than in the case of only UNDP programs. The largest change includes the increase of funds to South America and decrease to Africa (two trends which are visible in the GEF distribution). Therefore, the UNDP allocation Figure 49 is

altered towards the GEF distribution (Figure 46).

As GEF is a donor institution allocating grants, it has a dominant role over the implementing agency which applies for its funds. Despite this asymmetric relationship, the influence of UNDP on GEF aid distribution cannot be excluded. UNDP is one of the two main GEF implementing agencies, therefore, it plays a role in the geographical distribution of the GEF's activities. The GEF/UNDP linkage will be explored further in the following chapters.

Figure 49. Regional distribution of SGP, 1992-2002.



Source: UNDP 2003a:3.

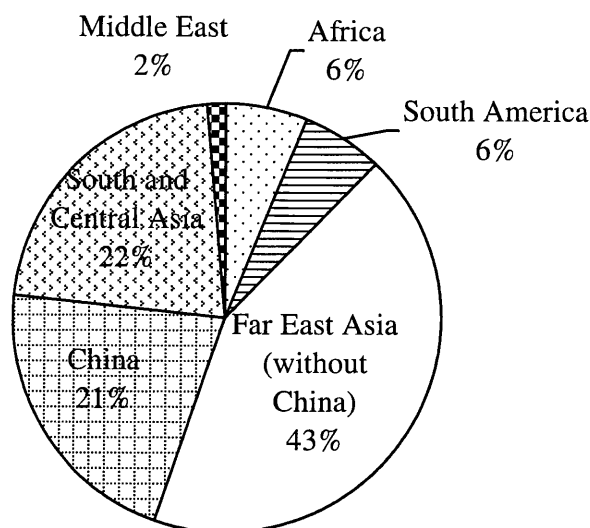
6.2.2. Japan and geopolitical variables

Japan in the 2003 ODA Charter focuses on priority regions for its aid. Asian countries are designated as the key recipients for the reason that neighboring countries “can have a major impact on Japan’s stability and prosperity” (Ministry of Foreign Affairs of Japan 2003:4). Moreover, in 2006 the Japanese Minister of Foreign Affairs stated: “It must not be forgotten that in the end ODA is implemented for Japan’s own sake. In other words, ODA is implemented to enhance the happiness and to raise the profile of Japan and its people in the

world”⁸⁷. Thus, the Asian region is a purposefully chosen target.

Japan’s strong commitment to Asian countries is also confirmed by the linear regression analysis. Being an Asian country turned out to be statistically significant when receiving additional Japanese aid (no region was present in the logit output). The Japanese regional policy is confirmed by the geographical aid distribution (see Figure 50). Far East Asia and South Asia received 86% of environmental aid. The rest of the amount is equally distributed between South America and Africa, with the Middle East receiving the remaining 2%. Thus, geographical variables play an important role in Japanese increased environmental aid distribution. This finding is also true for the World Bank’s regression output as the Asian country variable was similarly supported by the data.

Figure 50. Japanese environmental aid by region, 1995–2006.



Source: Calculated from OECD CRS.

⁸⁷ Ministry of Foreign Affairs of Japan. *Speech by Minister for Foreign Affairs Taro Aso “ODA: Sympathy is Not Merely for Others’ Sake”* 19 January 2006. Web. 11 April 2010. <<http://www.mofa.go.jp/announce/fm/aso/speech0601-2.html>>.

Although the Japanese ODA Charter gives political and economic reasons for the tightened Asian cooperation, in the case of environmental aid the close proximity of degraded environments can have an influence on the Japanese environment⁸⁸. As Katherine Morton explained in her research on Japanese aid, Japan is located downwind to China's coal-fired power plants and is affected by acid rains coming from that area (2005:6). This approach is also confirmed by MOFAJ policy documents which emphasize that environmental problems in developing countries are "critical problems because they threaten to seriously damage not only developing countries themselves, but also the entire international community, including Japan"⁸⁹. Moreover, one of the largest recipients of Japanese environmental aid has been China (21% of total aid for the environment), a neighboring country which has the largest CO₂ emissions in the world as most of its energy comes from coal. China also faces a severe desertification challenge with 360 000 hectares of land becoming a desert each year and experiences frequent dust storms that reach neighboring countries (Brown 2004:89). Hicks et al. calculated that Japan has become the largest donor for land degradation in the 1990s and China the largest recipient of such aid (2008:42-43).

6.2.3. Do regions matter for the US?

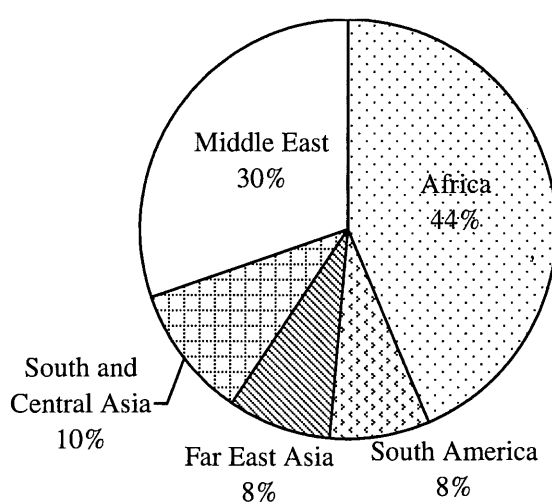
The US does not have specific environmental policies concerning geographical areas; policies which would exclusively target certain regions or emphasize regions of preference. The logit output confirms this lack of geographical preference. However, the US has a unique

⁸⁸ The theory linking Asian countries with Japanese imports and exports does not find confirmation in this research as the correlation for being a country in Asia and having increased export to Japan (0.301) and import from Japan (0.233) is quite weak. The correlation between Japanese FDI and being an Asian country is stronger (0.364).

⁸⁹ Ministry of Foreign Affairs of Japan. *Environmental Conservation Initiative for Sustainable Development (EcoISD)*. August 2002. Web. 12 February 2010. <<http://www.mofa.go.jp/policy/environment/wssd/2002/kinitiative3-2.html>>.

regional aid distribution pattern as it is the only donor allocating almost one third of its environmental aid to the Middle East (see Figure 51). Nevertheless, the aid pattern of the US suffers from some distortions as the Middle East region received an unusually large aid amount in 2003 (\$ 903.5 million) in the form of aid for environmental sustainability. Exactly this amount was distributed in 2003 to Iraq during the beginning of the war⁹⁰.

Figure 51. American environmental aid by region, 1995-2006.

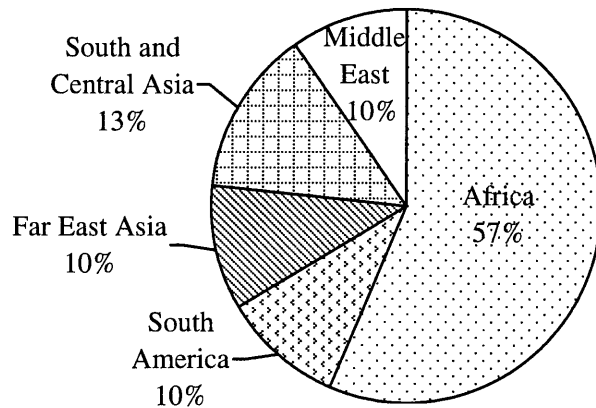


Source: Calculated from OECD CRS.

If this exceptional amount is excluded, the pie graph changes substantially. On average, aid to South America is equal to the aid reaching the Middle East region (see Figure 52). Africa receives 57% of environmental aid, followed by an equal distribution between South America, Far East Asia and the Middle East.

⁹⁰ Calculated from OECD CRS database.

Figure 52. American environmental aid by region (without Iraq), 1995-2006.



Source: Calculated from OECD CRS.

Similarly to UNDP, Africa is a key recipient region of US aid. The US assists forty-seven countries on the continent. The strong presence in Africa is justified by the region containing 45% of global biodiversity and having the highest rate of deforestation in the world⁹¹. Yet not only environmental issues drive aid towards the African continent. In USAID's materials, under "U.S. National Interest", there is the following statement:

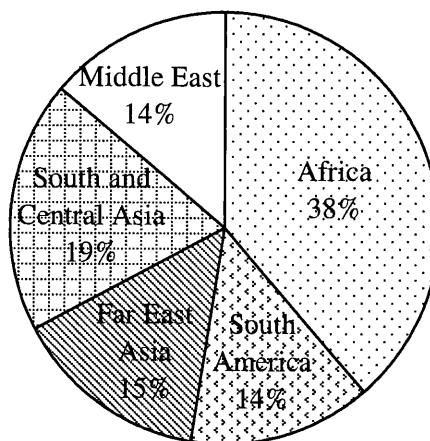
Preserving the richness and diversity of Africa's natural resource endowment and sound management of the continent's resource base are key to global efforts to promote environmentally sound economic growth. Also, transparent and accountable governance structures make it more difficult for potential terrorist networks to form and operate effectively⁹².

⁹¹ USAID. "Environment" *Sub-Saharan Africa*. Web. 16 December 2009. <http://www.usaid.gov/locations/sub-saharan_africa/sectors/env/>.

⁹² USAID. "U.S. National Interests" *CBJ 2004. Sub Saharan Africa*. Web. 16 December 2009. <http://www.usaid.gov/policy/budget/cbj2004/sub-saharan_africa/>.

The approach also appears in the case of Egypt, an US ally in the region⁹³. Egypt is such a large environmental aid recipient that, if environmental aid for Egypt is extracted, the aid figure for Africa falls to 38%. Egypt receives over 51% of environmental aid for the African continent (Figure 53).

Figure 53. American environmental aid by region (without Iraq and Egypt), 1995-2006.



Source: Calculated from OECD CRS.

The linear regression output confirmed the influence of Egypt: Egypt is a statistically significant variable in the linear regression. Does Egypt have a significantly degraded environment? Should Egypt be a prioritized country? On the contrary, Table 14 shows that Egypt performs on average *better* than the recipient country sample average. The only environmental categories in which Egypt is lagging behind is: the level of CO₂ emissions and the clean energy portfolio. Overall, Egypt has modest levels of biodiversity and a small number of threatened mammals, and is implementing large reforestation programs (mainly plantations). As a group of researchers summed up: “Egypt is not a country of great global environmental significance” (Hicks *et al.* 2008:82).

⁹³ Egypt is specifically tagged in the 2009 US Senate State and Foreign Operations Appropriations. Consolidated Appropriations Bill.

Table 14. Egypt's state of the environment compared to the country sample averages.

Environmental indicators	Egypt	Sample averages
Water access	98%	78%
Sanitation access	70%	59%
Annual deforestation rate	-3.5%	0.3%
CO ₂ emissions	144	103
Number of threatened mammals	6	20
Biodiversity index	3.2	11
Clean energy percentage	1.8%	6%

Note: CO₂ emissions are in million metric tons. Source: Calculated from author's database.

Being Egypt is an unusual variable for increased environmental aid allocation, however, similarly to Japan, the US sees its ODA in the context of national interest (USAID 2001:v). This perception was additionally reinforced after the September 2001 attacks, as the role of aid changed to foster to the country's security interests. USAID Administrator Andrew Natsios summarized:

In September 2002, President Bush unveiled his National Security Strategy. It outlined the new direction in foreign policy that was required to respond effectively to what occurred the previous September. Among the tools that would be engaged in the new war was 'development'. Indeed, it was elevated as a 'third pillar' of our foreign policy, along with defense and diplomacy (USAID 2004:1).

Egypt has an important role to play in anti-terrorism measures. USAID materials emphasize that one of the pillars of US-Egypt relations is cooperation in countering terrorism⁹⁴. In this setting, the distribution of increased environmental aid to countries which

⁹⁴ USAID. "Egypt" *Middle East*. Web. 12 February 2010. <http://www.usaid.gov/locations/middle_east/countries/egypt/>.

present a key national security issue for the US can be easily understood as the US views environmental aid as part of its broader aid framework. This is visible in Table 15, where Egypt is shown to be one of the two top aid recipients until 2003.

Table 15. The two top recipients of American aid, 1995-2005.

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Recipients	Israel Egypt	Israel Egypt	Egypt Jordan	Egypt Bosnia	Egypt Serbia	Colombia Egypt	Pakistan Egypt	Egypt Afghani- stan	Iraq Congo (D.R)	Iraq Afghani- stan	Iraq Afghani- stan

Source: Calculated from OECD CRS.

Nonetheless, allocating aid for the environment to a country that is not in particular need of it (compared to other countries) to serve US security issues is undermining the effectiveness of the funds allocated.

6.2.4. Denmark: aid recipient countries as part of a broader policy

Contrarily to the US, Denmark has formulated a regional aid distribution policy to ensure a more effective use of its aid resources. Its aid efforts are concentrated on a limited number of countries (DANIDA 2003:7). According to DANIDA materials, Africa is targeted to be a primary focus region for development assistance, as “Africa remains at the heart of Danish development policy, because this is where the challenges are greatest” (2007:2). Additionally, Denmark provides special bilateral environmental assistance to countries in Southern Africa and Southeast Asia. DANIDA has in 2009 fifteen Program Countries on which it concentrates its efforts: Bangladesh, Benin, Bhutan, Bolivia, Burkina Faso, Ghana, Kenya, Mali, Mozambique, Nepal, Nicaragua, Tanzania, Uganda, Vietnam, and Zambia. Egypt was taken off the list in 2009 (but will be included in the analysis). Ten of these

countries are in Africa, four in Asia and only two in South America. Africa remains the main priority area with Asia following close behind.

Do the regression results match the policy? A special Program Countries variable was created to capture the significance of the chosen countries in Danish environmental aid distribution. The variable showed no statistical significance in the logit output – being a chosen Program Country does not increase the likelihood of receiving aid. Thus, Denmark also allocates environmental funds to other countries.

However, the logit regression output showed that being an Asian country increases the chances of receiving environmental aid. In the author's database out of 100 sample countries, fifty-five did not receive any environmental aid from Denmark. The largest group of countries which did receive aid is Africa. Yet when the proportions are compared of recipient and non-recipient countries within each region, Asian countries are twice more likely to receive aid than not to receive (see Table 16). Therefore, despite the Danish policy focusing on Africa, Asian countries are proportionately more likely to receive aid (there are thirty-two countries in Asia compared to fifty-four in Africa).

Table 16. Number of Danish environmental aid recipients
by continent, 1995-2006.

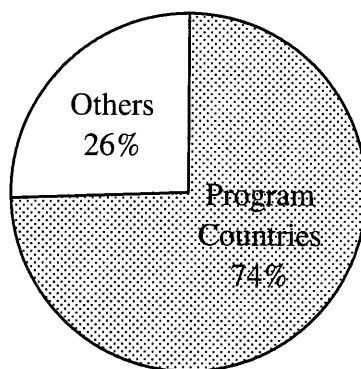
	Asia	Africa	South America
Number of countries that received aid	15	19	10
Number of countries that did not receive aid	7	20	13
Total	22	39	23

Source: Author's database.

Although the Program Countries variable is not significant in the logit output, it is significant in the linear output. Therefore, Program Countries are more likely to receive *more* aid.

Should the sixteen countries be receiving increased environmental aid? Similarly to the oil exporting countries, Program Countries do not suffer from any exceptional, above average level of environmental degradation (air, water, and biodiversity). The only characteristic that distinguishes them from the larger sample of countries is their correlation to countries with large populations living under \$2 a day (correlation coefficient 0.434). Thus, the Program Countries are also poorer countries. This enforces the argument that Danish environmental assistance is situated in the broader framework of Danish poverty alleviation policies, and is subordinate to other policies which determine country assistance allocation⁹⁵. Overall, 74% of all environmental aid is allocated to Program Countries (see Figure 54).

Figure 54. Funds for Program Countries as a percentage of environmental aid, 1995-2006.

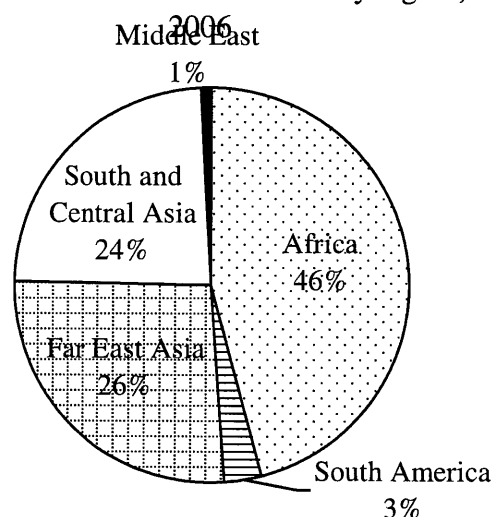


Source: Author's database.

⁹⁵ An important question arises: how are Denmark's Program Countries chosen? DANIDA uses seven criteria: 1. The economic and social stage of development of the country and its development needs and own plans for development; 2. The supply of development assistance from other bilateral and multilateral donors and the ability of the country to utilize the assistance and benefit from it; 3. The possibility of promoting sustainable development through dialogue with the country in question; 4. The possibility of cooperating with the country to promote the development of and respect for human rights in accordance with internationally adopted human rights' standards; 5. The possibility of cooperating with the country to ensure that aspects concerning women receive a central and fully integrated position in the development process; 6. Previous DANIDA experience from bilateral development cooperation and 7. If the above criteria are satisfactorily met, the possibility of promoting the participation of the Danish business sector – and thus employment in Denmark – in development cooperation should enter deliberations on the specific selection of countries, on condition that Danish supplies and services are competitive with respect to adapted technology, price and quality (DANIDA 2003a:74).

The policy of regional (Program Countries) preference is confirmed by actual distribution of funds, as 96% of aid is allocated to Asia and Africa, with South America receiving only 3% (see Figure 55). However, Africa did not turn out to be at the “heart of Danish development policy”, because 50% of funds were distributed to Asian countries.

Figure 55. Danish environmental aid by region, 1995-



Source: Calculated from OECD CRS.

If twenty of the largest recipient countries of Danish environmental assistance between 1995 and 2006 are classified by continents, African countries are the largest group, followed closely by Asian countries (see Table 17). Therefore, in the Danish linear output the regional variables (apart from the Program Countries variable) do not play a determining role as Asian and African countries are balanced out in practice. Thus, both the regression outputs and aid data show Asia to be equally as important as Africa in fund allocation.

Table 17. Top twenty Danish environmental aid recipients, 1995-2006.

	Asia	Africa	South America
Recipients	Bangladesh* Vietnam* Nepal* China Thailand Malaysia Cambodia India	Tanzania* Ghana* Mozambique* Burkina Faso* Uganda* Egypt* Benin* South Africa Kenya* Zambia*	Bolivia* Nicaragua*
Total	8	10	2

*Program Countries.

Source: Author's database.

Knowing that Denmark allocates increased environmental funds to Program Countries, one may once again raise the question whether there are any economic motivations behind the distribution of aid and choice of the sixteen countries as Program Countries.

As mentioned previously in this chapter, point seven of the recipient country selection criteria stated the possibility of doing business with Danish companies. DANIDA has created an additional program, the Private Sector Program (PSP), which “encourages Danish companies to establish long-term, mutually binding partnerships with companies in developing countries” (DANIDA 2003a:50). In 2002, nine out of ten countries where the PSP was being implemented, were Program Countries. However, less than half of the company partnerships continue after the end of the program. Thus, the PSP catalyzes the establishment of such business relationships, which easily terminate when the program is finished.

As described in chapter three, Denmark is often portrayed as a model donor. However, some researchers question this image. Carol Lancaster notes that the strong commercial purpose evident in Denmark's aid has been overlooked: “it was long the case that roughly half of Denmark's bilateral aid was dedicated to promoting exports and investment abroad” (2007:190). Yet the aid regression outputs do not confirm this statement for

environmental assistance as the export and import variables have no explanatory power for the analyzed aid data.

Nonetheless, the country selection process and the allocation of increased environmental funds to these countries, which are not affected by environmental degradation in any special way, does raise questions about Denmark's economic interests present in aid allocation. Moreover, Denmark is a global leader in wind technology which could partly explain its special environmental focus on climate change and CO₂ emissions (analyzed in chapter five). However, a senior technical adviser from DANIDA warns: "the choice of countries is motivated by a complex number of issues, and it is not possible to boil it down to statistics or similar"⁹⁶, which is partly confirmed by this research as the model for Denmark explains only 48% of the data.

Asia, apart from being present in Denmark's logit output, is the most frequent statistically significant regional variable for the analyzed donors' outputs. Thus, the question should be asked whether countries in Asia are more likely to suffer problems of environmental degradation? Table 18 provides a partial answer to the question.

Table 18. Comparison of environmental degradation indicators between Asia and Africa.

Environmental indicators	Africa	Asia
Water access	65%	76%
Sanitation access	41%	57%
Biodiversity index	5.6	16
CO ₂ emissions	22	310
Deforestation rate	0.5%	0.4%
Annual deforestation in 1000 km ²	1056.9	-124.57 1207.5 (without China)
Number of threatened mammals	16	36

Note: Asia includes India and China. CO₂ emissions in million metric tons. Source: Calculated from author's database.

⁹⁶ Merete Villum Pedersen. DANIDA Senior Technical Advisor. Email correspondence. 15 March 2010.

Being an Asian country increases the chances of having higher levels of biodiversity, threatened mammals and CO₂ emissions. However, Asian countries have better access to clean water and sanitation than African countries. The types of environmental degradation differ between the two regions. Thus, Asian countries are not always more likely to suffer more severe environmental degradation problems than African countries. There are also other, non-environmental reasons present behind the regional distribution, which were discussed previously.

6.2.5. Conclusion: how important are regions?

Overall, Asian and African countries have shown to be the main environmental aid recipient regions. In the case of Japan and the World Bank, being a country in Asia was statistically significant and explained a part of the increased environmental aid allocation. The same applies to Denmark in the logit regression. For the US, Egypt in particular was a determinant country due to political and security ties. As for the remaining donors, other non-geographical variables proved to be more significant in aid allocation. In conclusion, four donors out of six had geographical variables determining their environmental aid allocation in the linear regression output and only one (Denmark) in the logit output.

Only Denmark and Japan have clear regional environmental aid preferences stated in their policies, which they purposefully target (see Table 19). In Denmark's case, both the linear and logit outputs contain regional variables. Other donors, like the US, don't have such regional policies, yet aid data does show a strong regional preference (which for UNDP is Africa and for USAID Egypt in particular).

There is a difference present between multilateral and bilateral environmental aid allocation. None of the multilaterals had a regional priority policy, whereas two of the

bilateral donors did. All bilateral donors had one statistically significant regional variable present in their outputs, whereas among the multilateral donors, only the World Bank had a regional variable present. Thus, bilateral environmental assistance is more closely linked to particular regions than multilateral aid, suggesting that geopolitical issues play a larger role among bilateral donors. Overall, regions do play a significant role in aid allocation. Similarly to the economic variables, regional variables were present in four out of the six donors' regression outputs.

Table 19. Donors' regional priorities and regression outputs.

Donor	Policy priority	Logit variable	Linear variable	Dominant regions
World Bank	<i>None</i>	<i>None</i>	Asia	Asia
GEF	<i>None</i>	<i>None</i>	<i>None</i>	Asia, Africa
UNDP	<i>None</i>	<i>None</i>	<i>None</i>	Asia, Africa
Japan	Asia	<i>None</i>	Asia	Asia
USA	<i>None</i>	<i>None</i>	Egypt	Africa
Denmark	Africa and Asia	Asia	PC	Africa, Asia

Chapter 7. Is environmental aid political?

There is a large amount of academic literature stating that aid is an important foreign policy instrument which allows donors to pursue their national interests (Xu 2009:2). One researcher concluded: “Public and private environmental aid is not just an expression of altruism: environmental aid is embedded in politics and economics. Donors exert power through aid” (Lewis 2003:158). Previous regressions on general aid allocation show that “the variables representing political and security interests dominate the results” (Maizles and Nissanke 1984:885). Some researchers claim that aid allocation is mainly dictated by political and strategic considerations (Alesina and Dollar 2000:33). Despite that “political motives were always present in giving aid”, this research intends to verify the view that aid is embedded in politics (Grant and Nijam 1998:6). Chapter seven presents an analysis of political motivations behind environmental aid allocation. Each donor’s policies will be set against the regression outputs to reveal to what extent environmental aid allocation is influenced by political factors such as the level of democracy, corruption and government effectiveness.

7.1. The World Bank and politics

The World Bank has undergone heavy criticism for lending to corrupt countries as one researcher writes: “the Bank ‘had been in bed with Suharto’, ignoring his corruption for decades” (Murphy 2006:334)⁹⁷. William Easterly points out in his book the negative image of the Bank’s lending to corrupt governments:

adjustment lending did not discriminate very much between more corrupt and

⁹⁷ See also Berkman 2008.

less corrupt governments. Not much good is going to happen by disbursing aid loans to a corrupt government (...) It's hard to understand how Mobutu Sese Seko of Zaire, whose loot was measured in billions of dollars, received nine adjustment loans from the World Bank and IMF (2001:109-110).

The Bank itself is aware that corruption is a development problem (World Bank 1998:1). The World Bank's own evaluation report talks of inadequate controls against corruption in its operations, which implies that the Bank does not have adequate safeguards to protect its aid from being misused (2009:xviii). Therefore, the Bank has made plans to mainstream concerns about corruption into its lending practices (World Bank 1997:51).

IDA uses the Country Policy and Institutional Assessment (CPIA), along with the country's population size and GNI per capita, to establish priority recipients. The CPIA has sixteen points of evaluation, with the sixteenth being "transparency, accountability, and corruption in the public sector"⁹⁸. How does corruption influence the Bank's environmental aid allocation?

Despite all the mentioned drawbacks of lending to corrupt countries, countries with higher levels of corruption are more likely to receive environmental aid from the World Bank. The corruption variable was the only political variable which proved significant in the logit regression output. No political variable was significant in the Bank's linear regression output, thus, political factors analyzed in the model do not influence increased environmental aid allocation.

Why do corrupt countries receive environmental aid from the World Bank? Corrupt

⁹⁸ IDA. *CPIA Questionnaire*. Web. 10 November 2010. <<http://siteresources.worldbank.org/IDA/Resources/73153-1181752621336/CPIA09CriteriaB.pdf>>.

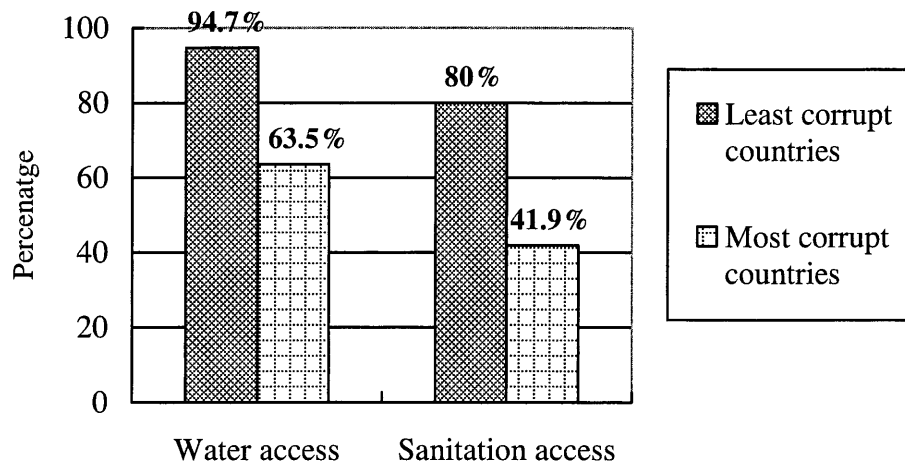
practices do not help resolve environmental problems, and in many countries corruption is considered to be one of the principal causes of environmental destruction. Al Gore points out the case of the rainforest of Sarawak, East Malaysia, where logging concessions were sold personally by the minister of environment (1992:180). Environmental assistance from the World Bank may be a reflection of the broader activities of the Bank as it has policies which specify working with corrupt countries on certain issues. The World Bank explains in its documents that good governance and anti-corruption are important elements of its poverty alleviation mission and for this reason there are numerous anti-corruption programs undertaken by the World Bank⁹⁹. Thus, to work on anti-corruption initiatives, one has to work with corrupt countries. Moreover, in the *2007 Implementation Plan for Strengthening Bank Group Engagement in Governance and Anticorruption*, the Bank assured that it is “committed to remaining engaged in the fight against poverty, and seeking creative ways of providing support, even in poorly-governed countries – ‘don’t make the poor pay twice’” (2007:33). According to the Bank’s Project Database, from 1995 to 2006, \$3 billion were spent on programs with anti-corruption components (for IDA alone). Therefore, environmental sustainability assistance can be situated in this broader policy framework. The presence of the corruption variable could also emerge from the finding that loan-issuing donors are more recipient government lead and that more corrupt countries are requesting more loans (a finding which still requires confirmation).

Should more corrupt countries be receiving environmental assistance because of a possibility of suffering from an increased level of environmental degradation? This research reveals that more corrupt countries do not show any additional signs of environmental degradation. However, the more a country is corrupt-free, the higher the access of a

⁹⁹ World Bank. *Governance & Anti-Corruption*. Web. 1 March 2010. <<http://go.worldbank.org/KUDGZ5E6P0>>.

population to clean water (correlation coefficient 0.512) and to adequate sanitation (correlation coefficient 0.437). Therefore, the more corrupt countries will have a smaller access of the population to water and sanitation. If one takes fifteen of the most corrupt countries and fifteen of the least, the difference between their populations' access to clean water and sanitation will be: 31.1 % and 38% of the population, respectively (see Figure 56).

Figure 56. The relationship between corruption and water and sanitation access (in percentages).



Source: Data from author's database. Based on Transparency International. *Corruption Perceptions Index 2005*. Web. 4 June 2010. <http://www.transparency.org/policy_research/surveys_indices/cpi/2005>, and World Bank 2007b: table 2.15:96-98.

Thus, the World Bank may ignore corrupt practices and direct funds into water and sanitation sectors (as these sectors constitute 18% of the Bank's global environmental portfolio), because there is a greater need for these types of projects in more corrupt countries. Moreover, 24% of the World Bank's global environmental aid is allocated for pollution management and health issues which are also related to water and sanitation. The Bank's global focus on water and sanitation and pollution management and health sectors, can be the reason why corruption practices are partly ignored in environmental aid allocation (which

does not imply that they do not have any effect on the implemented projects in these sectors).

Additionally, the corruption variable is highly positively correlated with government effectiveness (0.839), therefore, the higher the corruption perception index (the *less corrupt* a country is), the higher the level of government efficiency. Nonetheless, the government effectiveness variable did not prove significant on its own. The World Bank's interest in capacity building can be viewed within this context, as it tries to increase capacity of institutions, it will deal with countries that are also corrupt. As a World Bank employee explains: "The challenge is to develop institutional capacity, to ensure when your project is finished, it is sustainable"¹⁰⁰. Overall, 10% of the World Bank's global environmental portfolio is for governance and civil society.

However, by allocating environmental aid to more corrupt countries, the Bank is sending an opposing signal to its strategy. Moreover, allocating assistance to corrupt countries undermines its effectiveness, and remains a controversial issue (although more corrupt countries are in greater need of such assistance in water and sanitation sectors).

Despite that "worldwide trends pose new challenges and opportunities for environmental stewardship", and one of the trends being the spread of democratization, the level of democracy in a recipient country is not a significant factor in the Bank's aid allocation (World Bank 2000:28). The largest World Bank environmental aid recipients are not the ones with the highest levels of political freedom (the democracy average for both groups is 5). Both the logit and linear World Bank regression outputs confirm that the World Bank's environmental aid allocation is not influenced by additional political variables like the level of democracy or religion, which signifies that other (non-political) types of variables influence aid allocation.

¹⁰⁰ Mark Lundell. Sector Leader in World Bank Brazil. Personal Interview. 14 December 2009.

7.2. The GEF and politics

The GEF is an institution which should not be influenced by political factors as its mission is purely environmental. Political matters are almost inexistent in GEF documents: in 2006 an evaluation of the GEF project cycle was conducted which states that a project has to be cancelled if corrupt practices are detected (GEF 2007:8). Additionally, the GEF recognizes that corruption can affect environmental degradation¹⁰¹. However, in the nine GEF policy documents analyzed there is no mention of corruption, thus, it is not a major issue for GEF.

Nevertheless, similarly to the World Bank, corruption influences GEF's grant allocation. Additionally, the logit regression output showed (similarly to the World Bank) a negative correlation, which reveals that more corrupt countries are more likely to receive aid. As was analyzed previously, more corrupt countries tend to have severer water and sanitation problems. However, GEF focuses on global environmental issues and does not allocate assistance to water and sanitation, because water and sanitation are local issues (GEF has a focus on international waters). Therefore, the explanation for the allocation is not related to the limited access of certain populations to clean water facilities. Biodiversity levels are also not affected by corruption as no strong correlation between these two variables exists. Thus, why would more corrupt countries be more likely to receive GEF grants?

As analyzed in chapter five, capacity building is a strategic priority of the GEF and constitutes an "integral part of most GEF projects"¹⁰². Countries which are corrupt also are ineffective (correlation coefficient 0.839) and in need of capacity building projects. As Cadmo Gomes from the Ministry of Planning, Budget and Management in Brazil explains: "GEF

¹⁰¹ GEF. *The greenline*, November 2009. Web. 7 February 2010. <<http://thegef.org/greenline/Nov09/NR3.html>>.

¹⁰² GEF. *Capacity Building*. Web. 6 February 2010. <<http://207.190.239.143/interior.aspx?id=266>>.

grants are much sought after because of the technical expertise and knowledge”¹⁰³. GEF’s interest in capacity building may hold a partial answer to why GEF supports more corrupt countries. Yet the intentionality of aid allocation cannot be proved by regression analysis. Therefore, the allocation may be coincidental or unintentional. However, in chapter three the close GEF and World Bank linkage was discussed and the question needs to be asked: is the GEF’s aid allocation pattern a result of the Bank’s influence?

The presence of the same corruption variable in the GEF and World Bank logit outputs raises a question about the institutional independence of the GEF. From the sample of 100 aid recipient countries in the researcher’s database, World Bank’s and GEF’s assistance allocation was tracked, country by country, to identify potentially similar aid patterns between the two donors. Only in 53% of the cases did the donors act identically (by allocating or not aid to a particular country) which signifies a level of institutional independence, despite the fact that the World Bank is one of the GEF’s main project implementers and has administrative influence over GEF. Therefore, the presence of the same variable (corruption perception index) in the Bank’s and the GEF’s logit outputs, is not a result of GEF’s dependence on the World Bank. It is a coincidence.

Apart from the corruption variable, other political variables were tested. A strong positive correlation appeared between increased GEF funds and the level of democracy in a recipient country. Although GEF documents do not contain any policies related to democracy levels or other political variables, the actual aid allocation pattern reveals a preference for more democratized recipients. The presence of the democracy variable confirms a previous study, which also found GEF to favor liberal democracies (Lewis 2003:156).

Despite the lack of policies concerning political issues, two political variables proved

¹⁰³ Coordinator for International Assistance. SEAIN. Ministry of Planning, Budget and Management. Personal Interview. 15 December 2009.

significant in the GEF's aid allocation pattern, revealing the fact that the GEF is additionally driven by non-environmental variables. Nonetheless, the GEF's allocation policy changed in 2006. Due to political pressure from the US (GEF's largest donor), the GEF was obliged to introduce performance-based allocation and redesign its allocation pattern (Hicks et al. 2008:54-56 and GEF 2006:ii).

7.3. Is UNDP free from politics?

Contrarily to GEF, UNDP has made numerous policy statements about democracy as it is one of UNDP's focus areas. Moreover, UNDP supports a "free and informed media", which it considers important for democracy (UNDP 2007:26). Overall, UNDP places "a major emphasis on helping countries strengthen democratic governance and participation" (UNDP 2004:20). In relation to the environment, UNDP's Environmental Governance Initiative is a combination of the energy and environment focus area and the democratic governance focus area in order to protect the environment and insure adequate access of the poor to energy and natural resources (UNDP 2005:24). Thus, democracy is stated as an important issue in UNDP's policies.

The situation remains similar for the topic of corruption. In 2008 UNDP issued a special report titled *Tackling Corruption, Transforming Lives*, which lists "unchecked environmental exploitation" as one of the "the damaging effects of corruption" (2008b:1). There is a special chapter only devoted to corruption in the environmental sector (chapter five- Cleaning up natural resources). Moreover, UNDP sees a linkage between the existence of corruption and environmental degradation (particularly with regard to the seventh Millennium Development Goal), as "corrupt practices in exploitation of the environment...inhibit progress in achieving MDG 7" (2006a:52). The problem of corruption

is especially visible in regard to water resource management (UNDP 2008b:72). Corruption is a frequent topic in UNDP documents.

Nevertheless, neither one of UNDP's regression outputs revealed any statistically significant political variables. Thus, despite the policy statements above and the fact that 43% of UNDP's 2006 budget was allocated to democratic governance, UNDP's environmental aid allocation is not influenced by corruption or democracy levels (UNDP 2007:12). Therefore, UNDP's policies and priority focus areas set on democratization and tackling corruption do not apply to environmental assistance distributed. Environmental aid is not part of this broader policy framework. No political variable influenced UNDP's assistance for environmental sustainability.

7.4. Just how political is Japan's aid?

All three bilateral donors discuss democratization and corruption in their documents. JICA emphasizes the importance of democratization in its materials as the Japanese government has put the "promotion of democratization as one of the fundamental principles of development assistance" (2003a:Foreword). Moreover, the 1992 ODA Charter states: "Japan may provide aid more generously to countries that show progress in democratization or transition to a market economy to encourage such positive progress"¹⁰⁴. JICA has been providing assistance for democratization, but this does not imply that all its assistance is directed to democratizing countries. JICA also mentions democratization in relation to environmental issues, for the reason that: "environmental problems should be solved by the people in the developing countries....The central governments of the countries have...to improve governance, including democratization, decentralization and freedom of expression"

¹⁰⁴ Ministry of Foreign Affairs of Japan. "Japan's ODA Charter" *Japan's ODA Annual Report (Summary) 1997*. Web. 9 February 2010. <<http://www.mofa.go.jp/policy/oda/summary/1997/09.html>>.

(2001:9). Furthermore, democratization is considered as one of the “prerequisite conditions for the solution of environmental problems” (JICA 2001:12). Thus, environmental assistance should be directed to fully democratic or democratizing countries.

However, Japan does not allocate environmental aid to more democratic countries. The democracy variable was statistically insignificant in both regression outputs as it does not influence the aid allocation pattern. Fifteen of the largest Japanese environmental aid recipients had the democracy level average of 5, while fifteen of the smallest aid recipients had the average of 5.5. Thus, the level of democratization does not impact Japanese aid for environmental sustainability. Is the situation similar for corruption?

The issue of corruption is quite new to JICA’s policy documents as the term is seldom used. In April 2009, the Japanese Ministry of Foreign Affairs introduced Anti-Corruption Measures Related to Japanese ODA Loan Projects in relation to a corruption scandal in Vietnam. Amongst other measures, Japan is aiming to introduce more transparent and stricter procurement procedures for Japanese ODA loan projects and improve anti-corruption mechanisms¹⁰⁵. Nonetheless, apart from the announcement of anti-corruption measures, there is no mention of corruption issues in the policy papers. The term is also absent from the 2001 JICA *Second Study on Development Assistance to the Environment*. Thus, corruption issues do not play a key role in Japanese aid policy formulation.

The regression outputs confirm this finding as the corruption variable proved statistically insignificant in both regression outputs. Japanese environmental ODA is not influenced by the democracy, corruption, or government effectiveness levels of the recipient countries. The averages of these three variables are very similar for the largest and smallest Japanese environmental aid recipients (see Table 20). Thus, political variables do not play a

¹⁰⁵ Ministry of Foreign Affairs of Japan. *Introducing Anti-Corruption Measures Related to Japanese ODA Loan Projects*. 1 April 2009. Web. 9 February 2010. <<http://www.mofa.go.jp/policy/oda/reform/anti-corrupt/measure.html>>.

key role in environmental aid allocation for Japan. A previous study on Japanese general aid allocation reached the same conclusion as political and social variables proved statistically insignificant in aid allocation (Hook and Zhang 1998:1060-1061).

Table 20. The relationship between democracy, corruption and government efficiency levels and JICA's environmental aid.

	Average democracy level	Average corruption level	Average government effectiveness level
Countries receiving most aid from JICA	5	3	0
Countries receiving least aid from JICA	5.5	3.5	-0.4

Source: Data from author's database. Based on Transparency International. *Corruption Perceptions Index 2005*. Web. 4 June 2010. <http://www.transparency.org/policy_research/surveys_indices/cpi/2005>; Economist. *The Economist Intelligence Unit's index of democracy*. Web. 13 March 2008. <http://www.economist.com/media/pdf/democracy_index_2007_v3.pdf>; and World Resources Institute. *Earth Trends. Government Effectiveness Index*. Web. 12 March 2008. <<http://earthtrends.wri.org/text/environmental-governance/variable-1278.html>>.

7.5. The US: allocation does not confirm the political rhetoric

The terms “democratic” and “democracy” are frequently used in USAID's policy documents. USAID's second strategic goal is “building sustainable democracies” (USAID 2000a:51). Moreover, promoting democratization is a part of the American national interest as expanding the number of democratic countries is a key objective of the American foreign policy¹⁰⁶.

Similarly to Japan, democratic issues are also present in American environmental policies, as “the ‘actions necessary’ to conserve biodiversity or tropical forests usually involve a diverse mix of ‘cross-sectoral’ actions, including...support for more democratic governance” (USAID 2005:28). Additionally, USAID expresses the view that biodiversity can contribute to the democratization of a country (2008b:1). The promotion of democracy is

¹⁰⁶ USAID. *Democracy & Governance*. Web. 8 February 2010. <http://www.usaid.gov/our_work/democracy_and_governance/>.

done through sustainable community-led forest management (USAID 2008b:48). The Central African Regional Program for the Environment (CARPE) contributes to democratization, because by “improving environmental governance, CARPE helps improve democratic governance, transparency, accountability, social stability, and peace in the region” (USAID 2005a:15). USAID emphasizes that democratic nations make better partners for the US (2004a:5). Therefore, the subject of democracies and democratizing countries is a fundamental one for US policies.

However, the level of democracy does not influence American environmental aid allocation. It did not appear significant in neither the logit nor linear regression outputs. If the fifteen countries which received the least environmental aid are compared to fifteen countries which received the most aid, their average democracy indexes are: 5.2 and 5.9 respectively, presenting a very small difference in democracy levels. Thus, the policies do not find their verification in the environmental aid allocation patterns.

Similarly to the “democracy” terminology, the topic of corruption is frequently mentioned in USAID’s materials¹⁰⁷. A special report was issued in 2002 specifically on corruption and the environment. One of the findings of the report was that “corruption (...) contributes to the development of environmentally damaging policies and practices and to unfair allocation of environmental resources that contributes to environmentally harmful practices” (USAID and MSI 2002:2). Moreover, USAID lists corruption as one of the indirect threats or causes of biodiversity loss. More precisely: “conflict, corruption and illegal harvesting of natural resources” (2005:27). The corruption-environment linkage is clearly stated in the case of USAID’s policies towards Asian countries, as corruption is one of the major threats to conserving natural resources in Asia (2008b:37).

¹⁰⁷ In one 31-page document (USAID 2005a) the word “corruption” appears twenty-two times. The words “democracy” and “democratic” appear nine times.

Nevertheless, despite the rhetoric on corruption in policy documents, corruption levels also do not influence American environmental aid allocation as they did not prove statistically significant. Fifteen of the largest US aid recipients obtained an average corruption level of 3.03, while fifteen of the smallest recipients obtained an average of 3.81, showing a small difference in corruption levels. Additionally, the results for the US do not confirm earlier research which found the US to favor more democratic nations (Lewis 2003:153). Apart from the Egypt variable which was analyzed in the previous chapter, no other political variable proved statistically significant, which signifies that the level of corruption, political freedom, government efficiency has no influence on American environmental aid allocation. Moreover, national security interests (as the number of military personnel) also do not play a role in environmental aid allocation as they proved statistically insignificant.

7.6. Denmark links environment and democracy

Like the two previous bilateral donors, Denmark has an expressed interest in the process of democratization¹⁰⁸. However, Denmark also views aid for the environment as part of its own national interest as “environmental assistance is an integral part of Danish environment and development policy, and as such, should help promote Danish environment and development policy goals, as part of Danish foreign policy” (DANIDA 2004a:13). Moreover, Denmark’s development agency (DANIDA) is a part of the Danish Ministry of Foreign Affairs.

According to DANIDA’s documents, its development policy should contribute to promoting democracy as it is a condition for sustainable development and peace (2007:2). DANIDA strongly emphasizes that “it is a fundamental priority for the Government that

¹⁰⁸ The term democracy is a frequently used word in DANIDA documents. In one 17-page document (DANIDA 2003) the word was used seventeen times.

Danish development policy contributes to promoting freedom and democracy in developing countries” (2007:15). Thus, there is a large policy focus on democracy promotion among DANIDA activities.

Moreover, DANIDA discusses the mutual relationship between the environment and democracy, as “good environmental governance is fundamental to strengthening and consolidating democracy” (2009:9). Does this occur in practice? Is environmental assistance also directed to democratic or democratizing countries?

The logit regression output confirmed the significance of the democracy variable; more democratic countries are more likely to receive Danish aid for the environment. However, the democracy variable does not influence the extent of funds allocated (it is not present in the linear regression output). The regression results do confirm DANIDA’s strong policy emphasis on democratization and the implementation of these policies. The statistical significance of the democracy variable also reveals that aid for the environment is influenced by other DANIDA policies, and is treated as a part of a broader framework. A finding which is additionally reinforced by the Program Countries variable discussed in the previous chapter.

Although political variables should not influence environmental aid allocation because they will distort the environmental need-based allocation pattern, the influence of the democracy variable is a positive sign, for the reason that democratic governments are more accountable for the aid used than authoritarian or totalitarian governments. Amartya Sen’s research on famine is a good illustration of the importance of government accountability (1983). Moreover, the democracy variable is positively correlated with government effectiveness (0.656) and environmental sustainability (0.573). Thus, democratic countries usually manage their environments more sustainably. This relationship is presented in Table 21, where fifteen countries with the highest democracy levels were compared to fifteen with the lowest.

Table 21. The relationship between democracy levels, government effectiveness and environmental sustainability.

	Average government effectiveness level	Average environmental sustainability level
Most democratic countries	0.6	53.3
Least democratic countries	-1.1	41.8

Source: Calculated from author's database. Based on a World Resources Institute. *Government Effectiveness Index*. Earth Trends. Web. 12 March 2008. <<http://earthtrends.wri.org/text/environmental-governance/variable-1278.html>> and Yale University. "2005 Environmental Sustainability Index" *Environmental Performance Measurement Project*. Web. 12 March 2008. <<http://www.yale.edu/esi/>>.

Corruption is also an important issue in DANIDA's policies as "the fight against corruption...constitutes an absolutely fundamental prerequisite for development" (sic) (DANIDA 2007:9). The "the fight against corruption" is another aid focus area (DANIDA 2003:7). Fighting corruption is given high priority with DANIDA also developing an anti-corruption code (DANIDA 2005:24). Particularly in relation to the environment, DANIDA advises that "anti-corruption efforts to protect the environment and the poor" should be strengthened (2009:6). Yet corruption does not play a role in environmental assistance allocation, as the corruption variable proved to be statistically insignificant in both regression outputs.

However, if the average corruption level for forty-six countries which received environmental aid from Denmark is calculated (3.12) and then set against the average corruption level for the sixteen Program Countries analyzed in the previous chapter (2.73), the result shows that Denmark's Program Countries are on average more corrupt¹⁰⁹. As Denmark purposefully targets these countries for its aid allocation (all types of aid), it will also be supporting more corrupt countries, because the countries chosen have higher corruption levels.

¹⁰⁹ Bhutan is not included, because the corruption data for this country is unavailable. The Corruption Perception Index ranks from 0-10 with 0 being the most corrupt and 10 the least.

7.7. Conclusion: how political is environmental aid?

Overall, political factors do influence donors' aid allocation patterns: political variables are significant for half of the donors. The corruption and democracy variables are present in regression outputs of three donors. This is a confirmation of previous research based on general aid allocation, which found that less corrupt countries do not receive larger amounts of aid (Alesina and Weder 2002:1126).

Despite that more corrupt countries are more likely to receive environmental aid from the World Bank and the GEF, this does not imply that the donors allow corruption to affect their projects as projects are in such situations cancelled (or are obliged to be cancelled, which as illustrated in the case of the Bank, does not always occur). Nevertheless, one may argue that "rewarding" corrupt countries with aid is not an good motivation for change in the recipient countries. Moreover, researcher Ritva Reinikka explains that aid is ineffective in implementing policy reforms in bad policy environments: choosing the adequate recipients is a more effective strategy (2008:188). One may also question the actual outcomes of anti-corruption aid initiatives as two researchers argue: "Aid keeps corrupt leaders rich" (Hubbard and Duggan 2009:95). In addition, the argument that more corrupt countries are in larger need of assistance, thus, they require more financing, is false for environmental assistance. More corrupt countries do not show any exceptional levels of environmental degradation, compared to less corrupt countries (except with access to water and sanitation). Therefore, the explanation for increased environmental aid allocation to more corrupt governments cannot be solely environmentally need based.

However, corrupt countries also tend to be poorer countries (correlation with national poverty line -0.390 and \$2 a day poverty -0.496). Therefore, donors focusing on allocating aid to poorer countries will be simultaneously allocating to more corrupt ones. Thus, it can be

hypothesized that aid to more corrupt countries is allocated due to the poverty alleviation mission of some donors. Yet the question arises: do donors allocate environmental funds to poorer countries? Chapter eight attempts to answer this question.

Two multilateral institutions are influenced by the same variable (corruption) in the same manner (negative correlation). Nonetheless, their aid allocation patterns are different, thus, the regression output is not a sign of mutual influence. The democracy variable proved significant for two donors (GEF and Denmark). Although it would be preferable for aid for the environment to be allocated mainly based on environmental factors, the importance of the level of democracy in a recipient country is not a negative phenomenon. Democratic countries are more likely to manage the aid funds more effectively (as Amartya Sen illustrated in his work), thus, aid for the environment is more likely to be used adequately under this type of government than another.

There is an unequal balance between the multilateral donors and bilateral agencies in terms of political variable significance as multilateral donors are more affected by political variables (corruption, democracy). Moreover, only for one donor did a political variable prove significant in the linear regression output (democracy for GEF), revealing that political matters like corruption, democracy or government effectiveness levels, do not substantially influence the extent of aid received. Three donors were not influenced by these variables in any way (see Table 22).

Table 22. Political variables present in regression outputs.

Donor	Logit regression	Linear regression
World Bank	CI	<i>None</i>
GEF	CI	DI
UNDP	<i>None</i>	<i>None</i>
Japan	<i>None</i>	<i>None</i>
USA	<i>None</i>	<i>None</i>
Denmark	DI	<i>None</i>

Chapter 8. Do poorer countries get more environmental aid?

A lot has been said about the relationship between poverty and environmental degradation. Various terms have been used to describe it: “friends and foes”, “a downward spiral”, the “environment/poverty nexus”¹¹⁰. UNDP talks of a “vicious circle” as “it is the poor who frequently end up with poor quality land, water, fuel and other natural resources, which in turn limit their productivity. In trying to make a living, they may further degrade their immediate environment” (2007:4). JICA shares this view, as “developing countries are affected by a vicious circle of poverty and environmental destruction”¹¹¹. UNDP describes the double role that the poor can play in relation to the environment: “in exploiting natural resources, poor people negatively impact the environment, sometimes causing irreversible harm. However, the poor are also protectors of the environment and they are repositories of valuable indigenous knowledge of which environmental experts may be unaware” (2006a:32). The current dominating view presented in literature is that both issues are tightly interconnected and require simultaneous solutions. As the World Bank illustrates: “a lasting reduction in poverty....is not possible without ensuring that: the environment continues to provide fundamental ecological services for the benefit of current and future generations” (2000:8).

A number of poverty-environment initiatives have mushroomed during the last few years¹¹². During the decade of the MDGs and the increased focus of aid on poverty reduction,

¹¹⁰ See: UNDP 2005:24; Broad 1994 and Scherr 2005.

¹¹¹ JICA. *Natural Environment Conservation*. Web. 14 February 2010. <http://www.jica.go.jp/english/operations/thematic_issues/environment/overview.html>.

¹¹² Some examples include: the UNDP-UNEP Poverty-Environment Initiative (UNDP-UNEP. *UNDP-UNEP Poverty-Environment Initiative*. Web. 16 February 2010. <<http://www.unpei.org/>>) and the Poverty Environment Network (Poverty Environment Program. *Poverty Environment Net*. Web. 16 February 2010. <<http://www.povertyenvironment.net/>>). In 2005 the Canadian International Research Development Center launched the Rural Poverty and Environment Program. Additionally, there is the Urban Poverty and Environment Program. World Resource Institute has the Equity, Poverty and the Environment (EPE) Initiative (World Resource Institute. *Equity, Poverty and the Environment*. Web. 16 February 2010. <<http://www.wri.org/>>).

the question about the relationship between increasing environmental degradation and alleviating poverty becomes a crucial one. The World Bank emphasizes that decreasing the levels environmental degradation is important for poverty reduction, since the poor are the most dependent group on natural resources and most vulnerable to disasters (2002:34). Nevertheless, do poverty issues influence assistance for environmental sustainability?

It is out the scope of this research to analyze in-depth the poverty-environment relationship. However, this chapter will attempt to answer the following questions: are poorer countries more likely to receive environmental aid? Should poorer countries be favored when allocating aid for the environment? Donors' policies regarding the importance of poverty in aid allocation will be tested against the three developmental variables measuring poverty.

8.1. The World Bank connects environment with poverty

The Bank continuously points out in its documents regarding poverty and the environment that the poor depend on the environment in numerous ways: from income to health matters¹¹³. The amount of literature and strong emphasis used in the policy documents, leaves no doubt that “real, lasting poverty reduction is only possible if the environment is able to provide the services people depend on, and if natural resources are used in a manner that does not undermine long-term development” (World Bank 2000:3).

One of the World Bank's principles is “focusing on environmental interventions benefiting the poor” (World Bank 2000:6). As the Bank's primary mission is poverty alleviation, environmental problems are viewed within the poverty context and resolving them

project/equity-poverty-environment>). The Center for International Forestry Research has the Poverty Environment Network (Center for International Forestry Research. *Poverty Environment Network*. Web. 16 February 2010. <http://www.cifor.cgiar.org/pen/_ref/home/index.htm>). The ADB has a special trust fund: the Poverty and Environment Fund (ADB. *Poverty and Environment Program*. Web. 16 February 2010. <<http://www.adb.org/Projects/PEP/>>).

¹¹³ World Bank. *Poverty and Environment*. Web. 20 February 2010. <<http://go.worldbank.org/PZ1VKX8XD0>>.

has the goal of accomplishing the Bank's main mission. The Bank underlines the importance of its overall goal: "A sound strategy to ensure environmental sustainability must ... be an important element of the poverty-focused development strategy of the World Bank Group" (2000:8). It is worth remarking that environmental sustainability is not treated as an end in itself but as part of the poverty alleviation strategy. Therefore, does the Bank allocate assistance for environmental sustainability to poorer countries? Or do the policies remain unconfirmed?

Both the linear and logit regression outputs revealed that the \$2 a day poverty variable is statistically significant. Countries with larger populations living on \$2 a day are more likely to receive environmental aid from the World Bank and they are also more likely to receive increased amounts of aid, which confirms the hypothesis from chapter seven (that more corrupt countries may receive aid from World Bank because they are poorer). These poverty-focused regression outputs confirm the strong policy focus of the Bank on poorer countries. Poverty is an important issue for the Bank as it present in *both* the outputs.

However, should the World Bank's environmental loans be allocated to countries with larger populations living on \$2 a day? Although poverty alleviation is the mission of the Bank, the poorer countries may not need specifically aid for the environment as they may not suffer from exceptional levels of environmental degradation.

The author's database shows that the \$2 a day poverty variable is negatively correlated to access to clean water (-0.721) and sanitation (-0.831), the level of natural capital (-0.473) and positively correlated to the deforestation rate (0.398). Therefore, the larger the percentage of the population living under \$2 a day, the smaller the access to clean water and sanitation, the smaller the natural capital of the country and the higher the deforestation rate. This is additionally visible if one takes fifteen countries with the highest population percentage living under \$2 a day and compares to fifteen countries with the lowest percentage

living under \$2 a day (see Table 23).

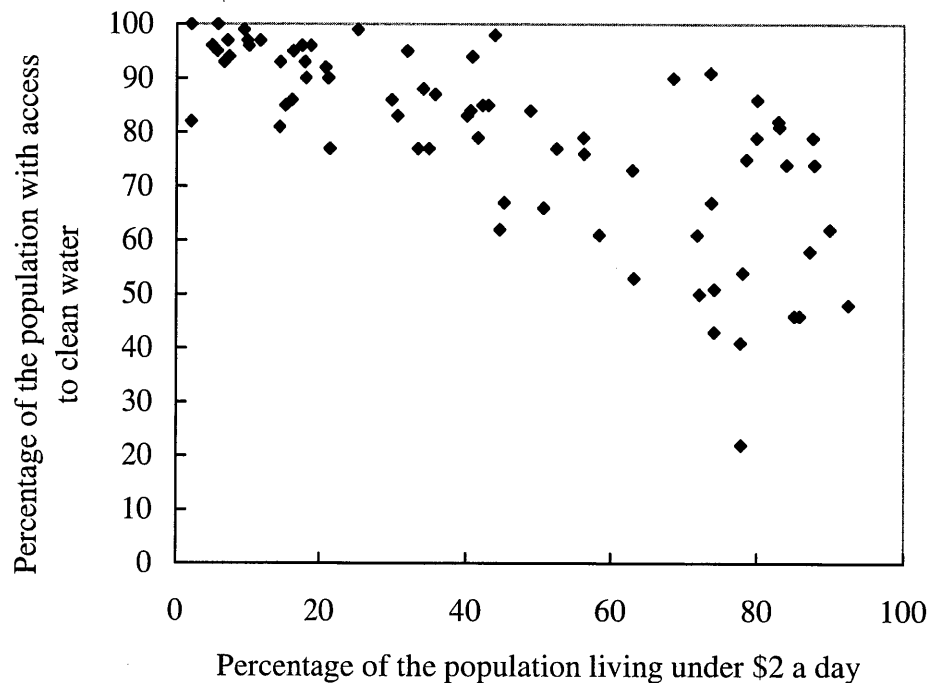
Table 23. The relationship between the size of the population living under \$2 a day and environmental indicators.

Environmental indicators	Countries with the largest percentage of the population living under \$2 a day	Countries with the smallest percentage of the population living under \$2 a day
Average water access	64%	94%
Average sanitation access	38%	87%
Average deforestation rate	1%	-1%
Average natural capital (2000)	\$ 1 584	\$ 7 111

Note: Substitution of the \$2 a day variable with the national poverty variable provides a similar distribution with the exception of the level of natural capital. Source: Calculated from author's database. Based on World Bank 2006a:159, and World Bank 2007b: table 2.15:96-98 and table 3.4:138-140.

Countries with higher percentages of the population living under \$2 a day should receive environmental assistance as they suffer from greater levels of environmental degradation. On average, between the countries with the largest and smallest \$2 a day population there is a difference of additionally: 30% of the population not having access to clean water, 49% of the population not having access to adequate sanitation, the natural capital decreasing by \$ 5 531 per capita, and the annual deforestation rate difference is 2%. Moreover, the relationship between the percentage of the population living below \$2 a day and clean water access is clearly visible in Figure 57. Thus, countries with larger percentages of the population living under \$2 a day are more likely to suffer from environmental degradation.

Figure 57. Correlation of under \$2 a day poverty and water access.



Source: Calculated from author's database. Based on World Bank 2007b: table 2.6:60-62 and table 2.15:96-98.

8.2. The GEF: a green institution for the poor?

Contrarily to the World Bank, GEF does not have a policy focus on poverty issues as fighting poverty is not a part of its mission¹¹⁴. GEF's activities do not focus on poverty reduction. Nonetheless, GEF's CEO Len Good believes that this happens in an indirect way (GEF 2005:4). The GEF sees its contribution to poverty reduction through its activities: "by addressing threats to the global environment, the GEF furthers political stability, poverty alleviation, disease prevention, and other efforts important to world peace" (2005:6). The GEF may contribute to poverty reduction, within the poverty-environment framework, however, its policies do not specifically target poorer countries.

¹¹⁴ However, after 2010 GEF plans to increase its aid allocation to countries with the lowest GDP per capita by 12% (GEF 2010:2 and 4).

The situation differs for the Small Grants Program (SGP) which is a joint activity conducted by the GEF and UNDP. It is emphasized that “most projects [of the SGP] are attempting to support income-generation activities in isolated, poor communities with little or no access to technical, financial or even humanitarian support” (UNDP 2003a:31). However, the 1998 SGP Evaluation Report stated that most national programs are having difficulties in combining the urgent priorities of poor, rural communities with the global environmental problems emphasized in the GEF’s policies (UNDP 1998a:2). Moreover, the compatibility of community priorities and the GEF’s goals has been shown to be a challenge (UNDP 1998a:4).

Thus, according to the above statements, poverty variables should not play a role in the GEF’s grant allocation patterns (despite that they present an important element in the SGP). The GEF does not have any policies which would give preferential treatment to poorer countries. The regression results confirm this as the GEF does not target poorer countries. In neither of the regression outputs, were there any poverty/wealth variables present. Therefore, grants from the GEF are indifferent to recipient countries’ wealth levels.

8.3. How important is poverty in UNDP’s assistance for the environment?

Fighting poverty is part of UNDP’s mandate. It is also a frequently used term in UNDP’s documents¹¹⁵. It is often emphasized that the poor are the primary victims of environmental degradation (UNDP 2008a:28). Therefore, the poorer countries require environmental assistance as they possess inadequate capacity to overcome environmental degradation (UNDP 2007:2).

¹¹⁵ In one 32-page UNDP 2004 Annual Report, the word “poor” appeared twenty-six times and the word “poverty” fifty-two times. Word statistics for other UNDP Annual Reports are similar: the 40-page 2006 Report mentions “poor” twenty-seven times and “poverty” thirty-seven times. Additionally, the terms are also frequent in UNDP documents on environmental issues: the 2008 *Evaluation of the Role and Contribution of UNDP in Environment and Energy* uses both terms 262 times on 157 pages (on average almost two words a page).

In 2007, UNDP along with UNEP created the Poverty and Environment Facility in Nairobi (UNDP 2007:10). Through UNDP's activities in the environment and energy sector, it focuses on integrating energy and environmental considerations into national decision-making structures concerning development (UNDP 2005:12). The environment and energy program is mainly for the poor as "the fundamental links between ... the environment and poverty, are self-evident" (UN 2003:11). However, does UNDP prefer poorer countries when allocating aid for the environment?

The regression outputs found that counties which were more likely to receive environmental assistance were countries with a larger percentage of the population living on less than \$ 2 a day. Thus, UNDP's environmental projects are more likely to be situated in poorer countries, in accordance with UNDP's mandate and poverty focused policies. Yet these countries are not any more likely to receive increased funds as no poverty variable proved significant in the linear regression.

As discussed in the case of the World Bank, countries with larger populations living on less than \$ 2 a day, should be targeted, because they suffer from higher levels of environmental degradation (water, sanitation, natural capital and deforestation) than countries with smaller numbers of the poor. However, countries with larger percentages of the population living on less than \$ 2 a day do not show any statistically significant correlation with biodiversity levels (the coefficients for the number of threatened mammals and the biodiversity index are: 0.031 and -0.118 respectively)¹¹⁶. This is visible in Table 24, which offers a comparison between fifteen countries with the highest percentages of the population living under \$2 a day and fifteen with the lowest. The biodiversity levels are similar and CO₂ emissions are higher in countries with smaller amounts of poor (China and India are taken out

¹¹⁶ The number of threatened mammals is an additional significant variable in UNDP's logit output, as the \$ 2 a day poverty variable does not have a statistically significant relationship with the biodiversity variable (there is no significant correlation).

of the dataset). Thus, it can be concluded that countries with larger percentages of the population living below \$ 2 a day are more affected by localized environmental degradation (in contrast to global environmental issues like larger CO₂ emissions).

Table 24. The relationship between CO₂ emissions, biodiversity levels and the percentage of the population living under \$ 2 a day.

Indicators	Countries with the largest percentage of the population living under \$2 a day	Countries with the smallest percentage of the population living under \$2 a day
Average biodiversity level	9	9
Average number of threatened mammals	22	17
Average CO ₂ emissions	0.9	10.1

Note: Without China and India. CO₂ emissions are in 10 million metric tons. Source: Calculated from author's database. Based on World Bank 2006: table 3.4:142-144 and table 3.8:158-160.

As UNDP Administrator Kemal Dervis states: “UNDP is a key partner in building capacity for human development focused around four areas: poverty reduction, democratic governance, crisis prevention and recovery, and environment and energy” (UNDP 2007:1). Yet not all of these areas are true for environmental assistance itself as aid for the environment is not allocated to more democratic countries or countries with cleaner energy use. However, poverty reduction is an important aspect of UNDP's environmental assistance as poorer countries (with larger percentages of populations living under \$2 a day) are more likely to receive UNDP's assistance.

8.4. JICA's aid : not only for the poor

Similarly to multilateral donors like the World Bank and UNDP, JICA sees a link between the environment and poverty: “when poverty is studied from an environmental perspective, it is clear that in most cases this poverty is closely linked to environmental degradation” (JICA 2001:12). Japan frequently mentions in its policy documents the

relationship between reducing poverty and improving degraded ecosystems (Ministry of Foreign Affairs of Japan 2007:2). The lives of the poor can be improved through combating environmental degradation. At the same time, poverty and population growth are portrayed as sources of environmental degradation (JICA 2001:25). Moreover, Japan has set three main focus areas related to environmental conservation: environmental pollution arising from economic growth; poverty alleviation “which is one of main causes of environmental depletion” and global environmental issues¹¹⁷. Thus, with a policy focus on poverty alleviation and the close relationship between poverty reduction and natural resources, it is expected that a poverty related variable will prove significant in the regression outputs.

Out of the two regression outputs, one poverty related variable proved to be statistically significant in the logit output: the percentage of the population under the national poverty line. However, the relationship was *negative*. The larger the percentage of the population under the national poverty line, the smaller the amount of environmental aid received from Japan¹¹⁸. No other poverty related variable was present in either of the outputs, implying that Japan does not take into account the recipients poverty level when allocating funds.

Despite that JICA has acknowledged the poverty-environment linkage in its aid materials, there is no statistical evidence that Japan prefers poorer countries in its environmental aid allocation¹¹⁹. On the contrary, countries with smaller populations of the poor are more likely to receive aid. Thus, JICA’s poverty-targeted policies are not implemented in practice.

¹¹⁷ Ministry of Foreign Affairs of Japan. *Environmental Conservation Initiative for Sustainable Development (EcoISD)*. Web. 15 February 2010. <<http://www.mofa.go.jp/policy/environment/wssd/2002/kinitiative3-2.html>>.

¹¹⁸ The weakness of this regression output has been discussed in chapter four.

¹¹⁹ JICA. *Natural Environment Conservation*. Web. 12 March 2010. <http://www.jica.go.jp/english/operations/thematic_issues/environment/overview.html>.

8.5. Do the poor really matter for the US?

Do the poor really matter to USAID? According to USAID policies the fight against poverty has become a crucial one as it is part of national security interests: “USAID plays a vital role in promoting U.S. national security, foreign policy, and the War on Terrorism. It does so by addressing poverty fueled by lack of economic opportunity, one of the root causes of violence today”¹²⁰. The US is an example of another donor strongly emphasizing the role that poverty plays in environmental degradation as “poverty, lack of access to resources necessary for subsistence” is mentioned as one of the threats to biodiversity (USAID 2005:27). An example is given of Zanzibar, where “the waters around Fumba village are rich with fish, coral reefs, and mollusks, but poverty, gender inequality and local market forces have led to overexploitation and biodiversity decline” (USAID 2008b:87). Moreover, environmental degradation can lead to increased poverty, because poor management of natural resources increases poverty (USAID 2008b:94). During 1995–2006 the US allocated 29% of its environmental project portfolio to environmental policies, and the poor countries are the ones which need policy strengthening the most, for the reason “that fragile states are largely a subset of poor countries with only fair or weak policy performance” and “relatively weak institutions are the hallmark of both poor countries and fragile states” (USAID 2004a:13 and 19). Additionally, as in the case of USAID’s environmental assistance to Jamaica, all the expected outcomes of USAID’s environmental assistance are meant to address poverty and environmental degradation¹²¹. Thus, American environmental assistance should be directed to poorer countries.

The logit regression output offers a confirmation of previous research, which found

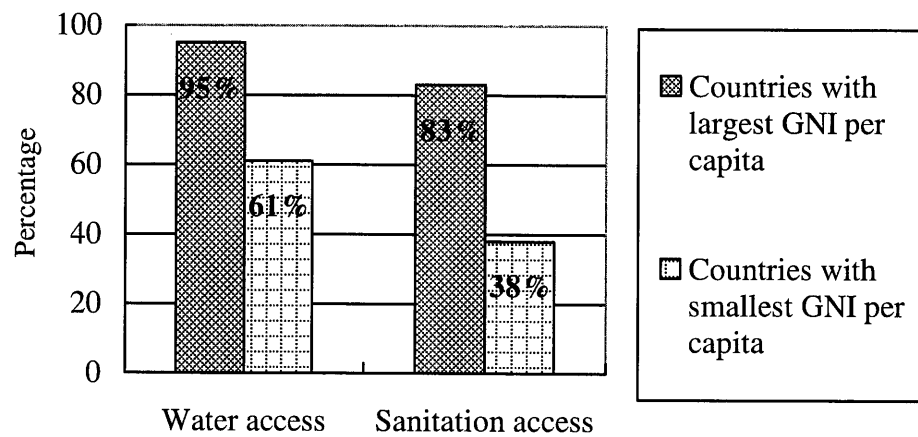
¹²⁰ USAID. “USAID Primer: What We Do and How We Do It” *About USAID*. Web. 6 March 2010. <http://www.usaid.gov/about_usaid/primer.html>.

¹²¹ USAID Jamaica. *Program*. Web. 16 February 2010. <<http://jamaica.usaid.gov/en/Program.2a.aspx>>.

that the US is more likely to support poorer nations (Lewis 2003:153). In the logit regression output the GNI per capita level showed a negative correlation with American environmental assistance. The larger the GNI per capita level, the smaller the chance of receiving environmental aid. The GNI per capita variable has also a strong negative correlation with the \$2 a day poverty variable (-0.618): the higher the GNI per capita, the lower the percentage of population under the \$2 a day poverty line. Therefore, the emphasis on poverty in USAID policies is confirmed. Nevertheless, no poverty related variable proved significant in the linear regression, revealing that poverty issues do not influence the extent of aid that will be allocated to a country.

Should countries with smaller GNI per capita be receiving environmental assistance? Similarly to the \$2 a day poverty variable, GNI per capita is positively correlated to the access to clean water (0.508) and sanitation (0.586). Thus, countries with smaller GNI levels also have smaller percentages of the population with access to water and sanitation (see Figure 58). There is a substantial difference in access to clean water (on average 34%) and sanitation (on average 45%) between the fifteen countries with the highest GNI per capita levels and fifteen with the lowest GNI levels.

Figure 58. The relationship between water and sanitation access and GNI per capita levels (in percentages).



Source: Calculated from author's database. Based on World Bank 2007b: table 1.1:14-16 and table 2.15:96-98.

For this reason, countries with lower GNI per capita levels are in greater need of water and sanitation assistance. Water related projects are USAID's third largest project sector (9%), after environmental policies and biodiversity.

8.6. Denmark's assistance: indirectly for the poor?

Similarly to the two bilateral donors, Denmark has a strong policy focus on poverty alleviation as "poverty reduction remains the fundamental challenge for Danish development cooperation"¹²². Reducing poverty is also a goal for environmental assistance, because poverty alleviation is the overall objective of DANIDA's policies. Therefore, all DANIDA environment programs are required to address poverty alleviation, for the reason that "poverty is one of the most important and most fundamental threats to stability and development in the world"¹²³.

¹²² Ministry of Foreign Affairs of Denmark. *Danish Development Policy*. Web. 7 March 2010. <<http://www.um.dk/en/menu/DevelopmentPolicy/DanishDevelopmentPolicy/>>.

¹²³ Ministry of Foreign Affairs of Denmark. "Note #5: Poverty and Environmental Management" *Good Practice*

However, not all environmental assistance is allocated to the poorest countries. As the DANIDA 2002 Annual Report explains, environmental aid is primarily allocated to Southern Africa and Southeast Asia. Despite that development assistance is mainly allocated to low-income countries, the majority of environmental assistance is given to medium-income countries, specifically countries with a GNP per capita exceeding US\$ 2000 (DANIDA 2003a:70). Therefore, environmental aid would be allocated to richer countries. Does the data confirm this statement? The average GNI per capita (2005) was calculated for forty-four countries which received environmental assistance from Denmark between 1995 and 2006. The average is \$ 1 568.4, so the GNI per capita does not exceed the \$ 2 000 (calculated in GNP per capita), but the figure is very close. The average for the Program Countries is only \$ 552.7. Therefore, the database does verify that Danish environmental assistance is given primarily to richer developing countries (see Table 25). Nonetheless, as explored in chapter six, being a Program Country increased the chances of receiving higher amounts of environmental aid.

Table 25. Average GNI per capita for Denmark's aid recipient countries.

	Program Countries	Countries which received environmental aid	All countries in the database
Average GNI per capita (2005)	\$ 552.7	\$ 1 568.4	\$ 2 610.3

Source: Author's database.

In 2002, Danish environmental assistance was reorganized as previously it was divided between the Danish Ministry of Environment and DANIDA. Environmental assistance was allocated to the Danish Ministry of Foreign Affairs and has been made more

Notes. Web. 7 March 2010. <<http://www.danidadevforum.um.dk/en/menu/Topics/EnvironmentAndSustainableEnergy/Environment/GoodPractices/GoodPracticeNotes/Note5.htm>> and DANIDA 2003:1.

focused and more anti-poverty-oriented (DANIDA 2003a:69). Moreover, Denmark has also acknowledged the environment–poverty linkage. Although “the link between climate change, environmental degradation, poverty reduction, migration and security is complex (...) the underlying causes of both poverty and environmental problems are political, legal and financial, they are linked and require coordinated action” (DANIDA 2007:13). If the goal of fighting environmental degradation or poverty is undercut, the lack of action will also undercut the other poverty or environmental element.

Additionally, by resolving environmental issues, DANIDA will also be fighting poverty as “degradation of the environment has an impact on the health, income, food production, water supply, and general opportunities of the poor” (DANIDA 2005:12). Moreover, DANIDA environmental programs are based on the assumption that sustainable development is a precondition for poverty reduction (DANIDA 2004:19). Therefore, as poverty and environmental degradation are interlinked, Danish environmental assistance should also be allocated to the poorest countries. DANIDA stresses that “the entire environmental assistance must contribute towards fulfillment of the overall target for Danish development assistance: poverty alleviation” (2004:22).

Denmark’s outputs present a complex picture of poverty. There are no poverty related variables present in neither of the outputs, but the Program Countries variable is statistically significant in the linear output. The Program Countries are on average poorer countries (correlation with \$ 2 a day poverty variable is 0.515 and GNI per capita -0.483). Therefore, poorer countries are more likely to receive increased aid from Denmark, yet in an indirect way (by correlation with the Program Countries). However, as shown in Table 25, the countries that receive aid for the environment from Denmark are on average wealthier than the Program Countries.

8.7. Should the poor receive environmental assistance?

For the reason that environmental degradation is interconnected with poverty, environmental assistance allocation to poorer countries (low GNI per capita levels, high percentage of the population under the national poverty line and under the \$2 a day poverty line) would be considered as the most effective solution. Researcher Tammy Lewis has pointed out that if a donor is mainly distributing aid based on recipients' needs, it would favor low-income nations (2003:146). Despite that all donors agree in their policies on the environment-poverty linkages, not all environmental problems are present only in poor countries. Countries with different levels of wealth face different environmental challenges. Table 26 shows the statistical relationship between different environmental problems and poverty levels.

Table 26. Correlation between environmental degradation and poverty levels.

	National poverty	\$2 a day poverty	GNI per capita level
Water and sanitation access	<i>negative</i>	<i>negative</i>	<i>positive</i>
Biodiversity and climate change	<i>negative</i>	<i>no relation</i>	<i>no relation</i>
Environmental vulnerability	<i>negative</i>	<i>negative</i>	<i>positive</i>

Source: Author.

Donors interested in biodiversity loss and climate change (especially air pollution) should allocate aid to countries with lower national poverty levels as these countries have higher levels of the two types of environmental problems. On the other hand, donors interested in water and sanitation issues should focus on countries with high national and \$2 a day poverty levels and low GNI per capita. Therefore, donors should not only allocate aid for the environment to poor countries (although this allocation pattern is also justified).

8.8. Conclusions

Poverty levels did prove to be significant for four donors. Moreover, all three types of wealth measurement used proved to be statistically significant for at least one donor. Thus, donors do make a connection between environmental degradation and poverty levels. The recipients of environmental assistance tend to be poorer countries.

However, this chapter has also shown that some donors like the World Bank and UNDP, which have a strong focus on poverty alleviation, do see aid for the environment in the broader framework of other policies. Environmental issues are not as important *per se* as they are important because they are part of the donors' main mission. Donors focus more on poverty reduction than the improvement of ecosystems (especially the World Bank). Poverty levels did prove to be an important factor for the World Bank, UNDP, USAID and partly Danish aid allocation.

There are no significant differences in the approaches to poverty between the multilateral and bilateral donors, because within each donor group the approaches are diversified. Japan does not prioritize poorer countries in its aid allocation, yet the US is a very pro-poor donor. Similarly as the World Bank. GEF's grant allocation in relation to poverty is more closely connected to Japan's than the Bank's. Denmark focuses on poorer countries (larger \$2 a day poverty and lower GNI per capita), but it also allocates environmental aid to wealthier countries. UNDP allocates aid to poorer countries as it has an interest in water and sanitation issues (apart from environmental management and biodiversity). Despite the common pro-poor rhetoric donors have different allocation patterns. This is not a negative phenomenon, as the environmental problems affecting richer and poorer countries differ, and they all should be addressed. However, it remains a fact that for some donors (Japan and partly Denmark) the allocation patterns do not match the policies.

Overall, Table 27 sums up the poverty variables which proved statistically significant for the donors.

Table 27. Development variables proved significant in regression outputs.

Donor	Logit regression	Linear regression
World Bank	P\$2D	P\$2D
GEF	<i>None</i>	<i>None</i>
UNDP	P\$2D	<i>None</i>
Japan	PNPL	<i>None</i>
USA	GNI	<i>None</i>
Denmark	<i>None</i>	<i>None</i>

Chapter 9. Environmental aid in practice: case studies from Brazil and the Philippines

The previous chapters have illustrated that aid for the environment is influenced by various environmental, poverty related, geographical, political and economic factors. Environmental aid is not treated as a special, separate category, but is considered a part of a broader aid framework. Since donors have their own interests and (intentional or unintentional) aid allocation patterns, are donors' policies and priorities confirmed in practice? Does biodiversity truly matter for USAID, the number of threatened mammals for Japan and the level of CO₂ emissions for the World Bank?

As one researcher emphasized: "Quantitative exercises that produce correlations between the value of aid flows to particular countries and the per capita incomes or other indicators of need in those countries...can be quite misleading considered by themselves in the absence of context" (Lancaster 2007:16-17). Hence, this chapter will attempt to describe the process of environmental aid formulation and implementation by donors in two fieldwork countries: Brazil and the Philippines. Findings are based on fieldwork research conducted in the Philippines (March 2009) and Brazil (December 2009-January 2010)¹²⁴. Moreover, the chapter will aim to verify if donors' priorities, analyzed in the previous chapters, are maintained and implemented at the national level. Thus, this chapter analyzes the national contexts with regard to environmental aid and verifies the coherency of donors' global policies. Subsequently, based on the above findings, the charter attempts to evaluate the extent of the influence of recipient governments on the global allocation patterns of donors.

The chapter begins with an analysis of the two chosen case study countries and the special features these countries possess. Additionally, based on the fieldwork case studies, donors' policies and project portfolios will be compared to illuminate any potential

¹²⁴ The author was able to conduct fieldwork thanks to grants from the GSID Global Practicum.

differences encountered between the global and national levels. The goal is to test the coherency of global policies and focus areas.

The following section explores the mutual influence of donors and the recipient governments to reveal whether donors shape the national aid agendas according to their policies and priorities. This section will attempt to answer to what extent are donors' interests enforced in practice. Some of the aid allocation patterns analyzed previously become visible as donors attempt to implement their projects at the national level.

Additionally, one of the findings of the previous chapters was that donors see environmental aid as a small, integrated part of their other aid activities. Therefore, the subsequent part of this chapter is comprised of a detail analysis of the whole donor – recipient government cooperation framework. The research shows that even in such environmentally significant countries like Brazil and the Philippines, the environment is not on the top of the aid agenda, but a minor part of it.

Finally, based on the research outcomes of the previous points, the concluding part of this chapter analyzes the broader implications of the donor-recipient government relationship and its influence on the global environmental aid allocation patterns.

9.1. Are Brazil and the Philippines special cases?

Both Brazil and the Philippines are important countries for the global environment. They are both on the list of the world's sixteen most "biodiverse hotspots". They are also under severe environmental threat as their natural resources are being rapidly depleted. Due to the environmental importance of the two countries and the extent of environmental degradation present, the major aid donors have undertaken large environmental programs in these two regions. Therefore, the two case studies offer a rich source of information for an

analysis of donor-government relations and cooperation in the environmental sector.

Nonetheless, it should be asked how representative are Brazil and the Philippines as case studies? Do the findings in these two countries apply to other aid recipients? Are Brazil and the Philippines in any way different? To answer these questions it is necessary to compare the two countries to the averages for the recipient country sample to see if the two countries have any special characteristics. If only environmental indicators are extracted, Table 28 is obtained.

Table 28. Environmental indicators for Brazil and the Philippines.

Environmental indicators	Brazil	Philippines	Sample averages
Water access	90%	85%	78%
Sanitation access	75%	72%	59%
Deforestation rate	0.5%	2%	0.3%
Deforestation in 1000 km ²	28.2	2.3	0.9
Biodiversity index	100	34	11
Number of threatened mammals	74	50	20
CO ₂ emissions	31.3	7.4	9.2
Environmental sustainability index	62	42	48
Environmental vulnerability index	281	402	289
Natural capital per capita	\$6 700	\$1 500	\$4 200

Note: Figures for CO₂ emissions are in ten million metric tons and the sample averages are without India and China. Source: Author's database.

The Brazilian and Filipino populations have on average higher water and sanitation access than the average sample country. Additionally, there are three indicators for which the figures for Brazil and the Philippines are much higher than the sample averages: the area annually deforested, the level of biodiversity and the number of threatened mammals. Therefore, both Brazil and the Philippines have significantly larger areas deforested each year, they are on average richer in biodiversity and the devastation of these biodiverse ecosystems places a higher number of mammals under threat. These environmental aspects make Brazil and the Philippines exceptional. With such high levels of environmental significance (and

simultaneous environmental degradation), one would expect environmental issues to be prioritized among the donors and governments in Brazil and the Philippines. This chapter will attempt to verify these assumptions.

However, one also needs to look at other determinants which may distinguish these two countries from the sample. Donors revealed a number of non-environmental factors to be significant in their outputs, thus, they should be further explored. If all the non-environmental indicators are taken from the donor regression outputs and compared, Table 29 is created.

Table 29. Non-environmental indicators for Brazil and the Philippines.

Non-environmental indicators	Brazil	Philippines	Sample averages
Imports to Japan (billion \$)	\$4.4	\$7.8	\$4.7
FDI (billion \$)	\$18.2	\$0.5	\$ 1.3
Population below \$2 a day poverty line	21.2%	43%	44.2%
Population below national poverty line	21.5%	36.8%	38.7%
GNI per capita (2005)	\$3 550	\$1 320	\$2 600
Corruption index	3.7	2.5	3.1
Democracy index	7.4	6.5	5

Note: FDI is without China. Source: Author's database.

There is no single common trend visible for both Brazil and the Philippines that would distinguish them from the rest of the sample countries. Although both fieldwork countries have slightly higher democracy indicators than the country sample averages. Moreover, Brazil has higher FDI levels and lower poverty levels than the Philippines and the overall sample averages. Brazil is on average wealthier. Nonetheless, there is no clear advantage or disadvantage that the two countries possess (in contrast to the environmental findings discussed above). Therefore, mainly environmental aspects distinguish Brazil and the Philippines from the rest of the sample countries. It is, thus, expected that environmental issues will have a more prominent place on the national governments' and donors' agendas than in other aid recipient countries.

9.2. Donors' national environmental policies reflect their global ones

The preceding chapters (chapter five, six, seven and eight) have analyzed donors' global environmental aid policies and their actual aid allocations. However, donor aid funds take on a different form and focus in each country. This section will look into how environmental aid is formulated and distributed in two environmentally significant countries. Potential differences between global aid allocation and national donor priorities will be explored and the coherency of policies tested. Donor's global policies will be partly verified at the national level. Denmark and GEF are excluded from parts of the analysis due to the small size of Denmark's program and the nonexistence of national programs for GEF.

If national donor priorities are set against their global ones, there is a significant overlap (see Table 30). From the sets of global policies, several policies are extracted by donors for each of the two countries. Hence, policies remain coherent at the national level as they present a reflection of the global ones.

Table 30. Donors' stated environmental priorities globally, in Brazil and the Philippines.

	Brazil	Philippines	Globally
World Bank	<ul style="list-style-type: none"> ➤ water and sanitation ➤ sustainable forestry 	<ul style="list-style-type: none"> ➤ water and sanitation ➤ environmentally sustainable mining ➤ watershed management ➤ watershed and coastal management ➤ protected area management 	<ul style="list-style-type: none"> ➤ pollution management ➤ urban environment ➤ sustainable resource management ➤ capacity building ➤ global environmental issues
UNDP	<ul style="list-style-type: none"> ➤ mainstreaming 	<ul style="list-style-type: none"> ➤ strategies for sustainable 	<ul style="list-style-type: none"> ➤ water governance

	environmental strategies ➤ sustainable forestry ➤ desertification ➤ energy	development ➤ energy ➤ biodiversity	➤ sustainable energy ➤ land management ➤ biodiversity ➤ environmental mainstreaming ➤ chemicals management
JICA	➤ climate change ➤ urban issues	➤ urban issues ➤ disaster prevention	➤ nature conservation ➤ environmental management ➤ water and disaster prevention
USAID	➤ climate change ➤ biodiversity	➤ energy ➤ environmental management ➤ urban issues	➤ country commitment to national and international programs ➤ biodiversity ➤ climate change ➤ sustainable urbanization ➤ sustainable use of energy ➤ natural resource management

Source: World Bank 2003:8; UN 2002:33; JICA. *JICA no Brasil. Atuando como Perceiro Global*:3 and JICA Brazil. *Diretrizes*. Web. 23 February 2010. <<http://www.jica.go.jp/brazil/portuguese/office/projects/>> ; USAID. "Brazil" *Latin America and the Caribbean*. Web. 18 January 2010. <http://www.usaid.gov/locations/latin_america_caribbean/country/brazil/>; USAID 2005b:36; World Bank 2005a:Annex1:5; World Bank 2005:21; Government of Japan 2008: Annex:4 and 30; UNDP Philippines. *Energy and Environment for Sustainable Development*. Web. 13 January 2010. <<http://www.undp.org.ph/?link=11>>.

The environmental project portfolios present a similar pattern as the majority of projects found globally are reproduced at the national level for all of the four donors.

Additionally, if the regression outputs for each donor are added, a more comprehensive picture emerges (see Table 31). Donors appear to have a relatively coherent project allocation pattern: from the global project portfolio through the influencing environmental variables found, to the national level project portfolio. The regression output variables are related to donors' focus areas.

Table 31. Donors' majority environmental projects globally, in Brazil and the Philippines as percentages of the total project portfolios.

	Brazil	Philippines	Globally	Environmental variables in regression outputs
World Bank	<ul style="list-style-type: none"> ➤ Water and sanitation, flood prevention (50%) 	<ul style="list-style-type: none"> ➤ Water and sanitation, flood prevention (21%) ➤ Energy and mining (43%) 	<ul style="list-style-type: none"> ➤ Agriculture (18%) ➤ Energy (15%) ➤ Water and sanitation (18%) 	<ul style="list-style-type: none"> ➤ CO₂ emissions
GEF	<ul style="list-style-type: none"> ➤ Biodiversity (56%) ➤ Climate change (24%) 	<ul style="list-style-type: none"> ➤ Biodiversity (38%) ➤ Climate change (42%) 	<ul style="list-style-type: none"> ➤ Biodiversity (32%) ➤ Climate change (31%) 	<ul style="list-style-type: none"> ➤ Nr of threatened mammals ➤ Environmental sustainability ➤ Number of environmental treaties ratified
JICA	<ul style="list-style-type: none"> ➤ Water and sanitation (30%) ➤ Flood prevention 	<ul style="list-style-type: none"> ➤ Transportation (38%) ➤ Water and sanitation (11%) 	<ul style="list-style-type: none"> ➤ Water (21%) ➤ Energy (25%) 	<ul style="list-style-type: none"> ➤ Nr of threatened mammals ➤ Environmental vulnerability

	(42%)	➤ Flood prevention (8%)		
USAID	➤ Policy and management (46%) ➤ Biodiversity (27%)	➤ Policy and management (81%)	➤ Environmental policy (29%) ➤ Biodiversity (19%)	➤ Biodiversity ➤ Deforestation rate

Note: Percentages in brackets are the percentages of the total project portfolios. Source: Calculated from OECD CRS and the World Bank Project Database.

There is, however, an exception. JICA has a much more infrastructure dominated portfolio at the national and global level than its regression variables would lead to believe. As outlined in chapter five, Japan allocates greater aid amounts to countries with more vulnerable and endangered environments in the form of infrastructure projects, which leads to questionable outcomes. As researcher Carol Lancaster summed up: “Japan’s heavy focus on the hardware – infrastructure...– rather than the software of development differentiated it from most other aid agencies” (2007:128). Nevertheless, infrastructure project are also purposefully targeted by Japan as they represent projects in which “Japan can contribute from its own experience” (JICA 2002:5).

Overall, donors maintain coherent environmental aid policies as national policies and project portfolios reflect global ones. The regression variables support these findings, with some exceptions, as discussed above. However, are donors’ priorities and focus areas visible on the national aid agenda? Do donors shape and dominate over the preferences of recipient governments, enforcing their own interests and priorities? The following part of the chapter will explore this issue.

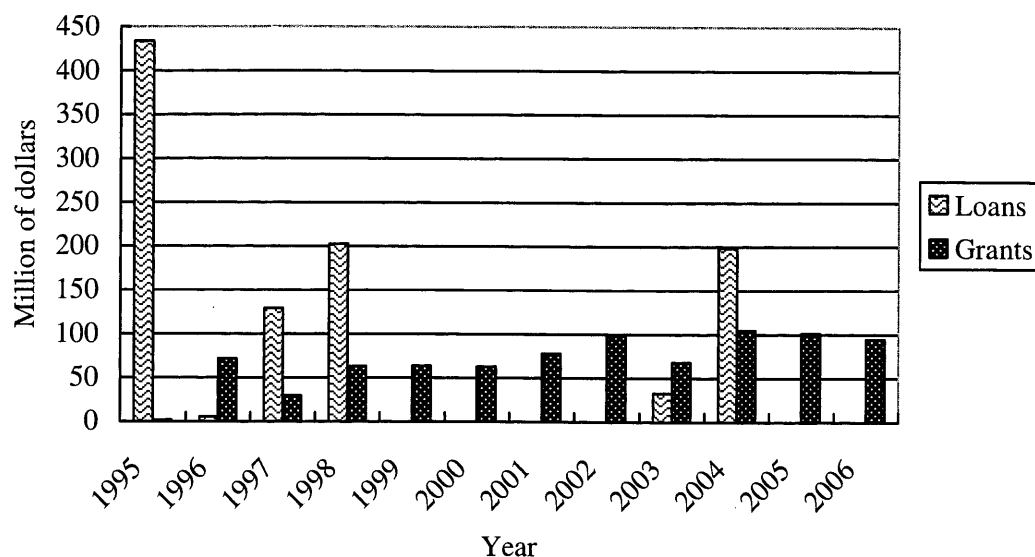
9.3. Do donors enforce their policies on recipient governments?

The case studies provide a vital source of information about the functioning and preferences of donors, because what occurs at the national levels influences the global allocation patterns and vice versa. The type of donor and recipient government cooperation affects the type of aid that is allocated and provides a partial explanation for donors' global aid allocation patterns and their aid portfolios. This section explores whether aid is recipient-need or donor-interest driven.

Both donors and recipient governments have their own policies and focus areas. With donors' aid preferences clearly stated and aid allocation patterns uncovered, it is necessary to ask: what is the actual political leverage of donors in recipient countries? To what extent do donors' interests influence the cooperation with the recipient governments? Does USAID's and GEF's interest in biodiversity or JICA's interest in water and sanitation lead to an increased interest in these issues among the recipient governments? This section will attempt to answer to what extent donors dominate over the national aid agendas in Brazil and the Philippines.

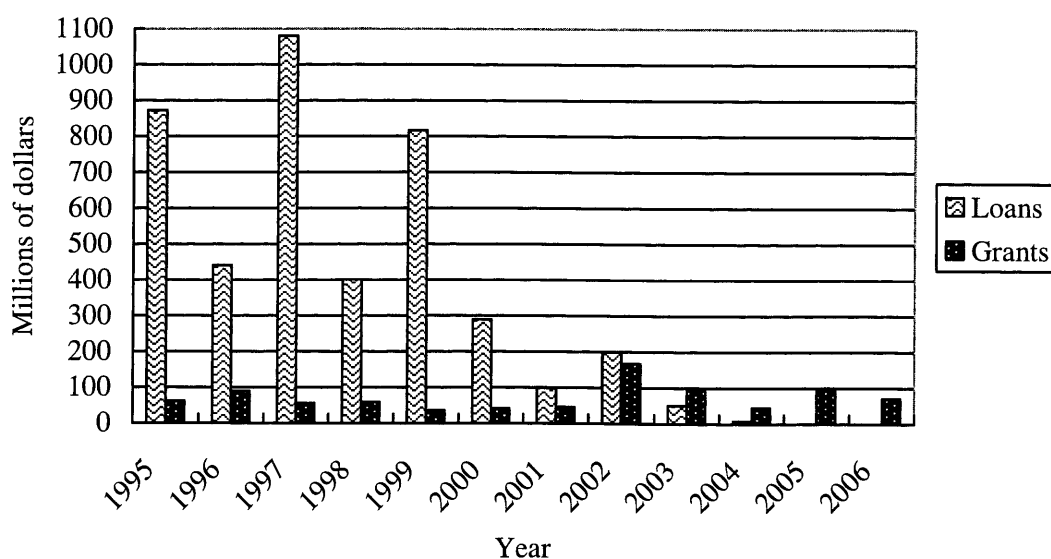
Despite the environmental significance of both fieldwork countries, according to the OECD CRS database, assistance for the environment has been fluctuating in Brazil and decreasing in the Philippines (see Figure 59 and 60). However, the proportion of grants to loans has been increasing. Therefore, with more grants available for the recipient countries, do donors shape the aid agenda more than the recipient governments?

Figure 59. Environmental aid to Brazil, 1995-2006.



Note: In millions of dollars (\$2008). Grants and loans include projects with the policy goals: only for environment, gender and environment, environment and participatory development, and gender and environment and participatory development. Figures are for all multilateral and bilateral donors available in OECD CRS, excluding GEF. Source: Calculated from OECD CRS.

Figure 60. Environmental aid to the Philippines, 1995-2006.



Note: In millions of dollars (\$2008). Grants and loans include projects with the policy goals: only for environment, gender and environment, environment and participatory development, and gender and environment and participatory development. Figures are for all multilateral and bilateral donors available in OECD CRS, excluding GEF. Source: Calculated from OECD CRS.

Although all the analyzed donors have their own stated focus areas, they assure that they do not dominate in setting the aid priorities. As the World Bank Sector Leader for Environmental and Socially Sustainable Development explains: “We don’t write up investment plans for them. They [Brazilian government] come with their investment plans, more or less defined”¹²⁵. This is additionally confirmed in a World Bank report which argues that, because Brazil is capable of financing many of its own development programs, the Bank “has increasingly become demand-driven in its programs, with Brazil largely determining the activities for which it borrows” (World Bank 2000a:81-82).

However, the Bank does play a more influential role in the process of agenda setting. In 2004 the World Bank’s own evaluation department stated that Brazilian government officials complained about the Bank initiating action after receiving informal requests from particular ministries, instead of working within the previously agreed framework (2004a:14). Furthermore, the case of the Philippines confirms the Bank’s active role as the World Bank staff has “pushed the government in the right environmental direction”, although the staff’s efforts have not yet brought “substantive results” (World Bank 1999:20).

Donors do play a larger role in shaping the agenda also because some of them design their own project proposals and are very active in seeking new projects. A JICA staff member comments on the mutual influence between the Brazilian government and JICA: “The most common way of designing a project is our office talking to the federal or local government in Brazil and trying to come up with an idea of a new project and after some discussion we try to materialize this idea into a project proposal and send it to the Japanese government”¹²⁶. The MOFAJ states that the formulation of an ODA project is mainly based on a request from the recipient government. However, MOFAJ simultaneously prepares “country notes” (renamed

¹²⁵ Mark Lundell. Personal Interview. 14 December 2009.

¹²⁶ Miyamoto Yoshihiro. Representative of JICA Brazil. Personal Interview. 8 December 2009.

“rolling plans” in 2009), outlining Japan’s aid policies towards Brazil and then sends them to the Japanese Embassy in Brazil (Ministry of Foreign Affairs of Japan 2010:10). A JICA employee confirms that the JICA projects are request based, but at the same time JICA looks for projects on its own¹²⁷. JICA’s global aid portfolio is made up of water, sanitation and energy projects (46% of projects). JICA’s Brazil portfolio is primarily water, sanitation and flood prevention. In contrast, JICA in the Philippines concentrates on transportation projects with environmental components. JICA mainly focuses on environmental infrastructure projects on the global level and this trend is also visible in both fieldwork countries, confirming a continuous policy.

The Ministry of Environment in Brazil is also continuously looking for new funding opportunities as a Director explains:

We define our overall priorities in terms of planning, what we need, but we also have a more opportunistic approach, we take advantage of opportunities, like there are funds from the GEF....If we think we have some new needs and the government budget is not sufficient, then we seek assistance elsewhere. But the reverse also happens: sometimes we receive offers from donors¹²⁸.

The Department of Environment and Natural Resources (DENR) in the Philippines is keen for new funds and projects to fulfill its institutional objectives. In 2003 21% of new budget appropriations to the Office of the Secretary of DENR were foreign assisted projects¹²⁹.

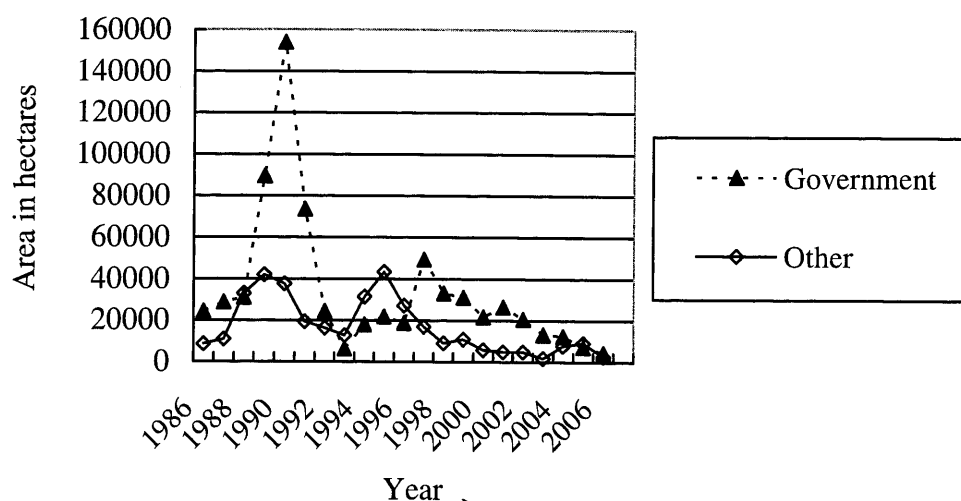
¹²⁷ Miyamoto Yoshihiro. Representative of JICA Brazil. Personal Interview. 8 December 2009.

¹²⁸ Braulio Dias. Director. Secretariat for Biodiversity and Forests. Ministry of Environment. Personal Interview. 10 December 2009.

¹²⁹ Calculated from Department of Budget and Management of the Philippines. X. *Department of Environment and Natural Resources*. Web. 23 March 2010. <http://www.dbm.gov.ph/nep2003/bpms_files/DENR.TXT>.

A DENR staff member commented: “Before it would reach 30%”¹³⁰. However, in 2009, foreign assisted projects made up only 6% of the new appropriations to the Office of the Secretary of DENR¹³¹. Without adequate funds DENR does not have the capacity to fulfill its mission. Hence, donors have substantial political leverage to promote their policies. This dependence is visible in Figure 61, when a shortage of foreign aid caused a dramatic drop in government reforestation programs.

Figure 61. Reforested area in the Philippines, 1986-2006.



Note: From 1988 the ADB-OECF First Forestry Sector Program Loan was implemented, accelerating reforestation efforts as it was one of the Program objectives. The loan ended in 1992¹³². Source: DENR Forest Management Bureau. Table 1.08. *Area Reforested by Sector: FY 1973-75 to CY 2006*. Web. 13 January 2010. < <http://forestry.denr.gov.ph/stat2006.htm>>.

The federal ministries in Brazil, such as the Ministry of Environment, are in a paradoxical situation as they are in need of external assistance, but at the same time they have enough political leverage to push for their program preferences and requirements towards

¹³⁰ Cristina Regunay. OIC-Chief. Multilateral Investment Program Division. Personal Interview. 19 March 2009.

¹³¹ Calculated from the Department of Budget and Management of the Philippines. X. *Department of Environment and Natural Resources*. Web. 19 March 2010. <<http://www.dbm.gov.ph/NEP09/DENR/A.pdf>>.

¹³² ADB. *Program Performance Audit Report on the Forestry Sector Program (Loans 889[SF]/890-PHI)*. Web. 20 November 2009. <<http://www.adb.org/Documents/PERs/IN3602.pdf>>.

donors. All donors in Brazil are required to work with a Brazilian government counterpart (at a state or national level) on their projects, even if the project is implemented by a Brazilian NGO¹³³. This gives the Brazilian side substantial influence as a project without a government counterpart cannot be implemented, which implies a required level of flexibility and adjustments also from the donors' side. A Director in the Ministry of Environment elaborates: "We have had cases when we were approached by donors with ready projects. Sometimes it's ok, it corresponds with a need that we have, and we manage to come to an agreement. Yet sometimes it is a project which we are not interested in or of we don't agree with the way it was designed"¹³⁴.

The strong position of the Brazilian ministries towards donors is also visible in the case of GEF funds. GEF funds require a government counterpart and its approval for the project. A UNDP Environment and Energy Coordinator explains that in the case of a GEF grant application, the interested institution is obliged to consult with the Ministry of Environment, and as other institutions are also interested in the funds, the Ministry has decision-making power over who finally applies¹³⁵. For both UNDP and the World Bank funds from GEF constitute a significant part of their "green" funds.

Moreover, the Brazilian Cooperation Agency (*Agência Brasileira de Cooperação-ABC*) advocates for the Brazilian side, influencing at times the project design. The ABC is responsible for technical cooperation in Brazil, therefore, all technical cooperation projects in the environmental sector are coordinated by the ABC. If needed, the ABC provides political support to the Ministry of Environment during talks with potential donors. Minister Marco Farani (ABC Director) elaborates: "The people involved in the Ministry of Environment, who

¹³³ Eric Stoner. USAID Brazil. Deputy Director and Environment Coordinator. Personal Interview. 7 December 2009.

¹³⁴ Braulio Dias. Director. Secretariat for Biodiversity and Forests. Ministry of Environment. Personal Interview. 10 December 2009.

¹³⁵ Carlos Castro. Personal Interview. 21 January 2010.

are responsible for the policies, they are the ones that will analyze the project in detail. They can say that in Brazil we don't do it that way, but this way, so the project is changed"¹³⁶.

The Ministry of Environment has a substantial influence on donors as they all need the Ministry to partner with and with limited funds (in the case of GEF grants), it is up to the Ministry to decide and balance partnerships. JICA commented in its Brazil Strategy: "Brazil has a tendency to assert federal government ownership in identifying and formulating new projects. Brazil is also generally reluctant to have donor countries offer support directly to implementing agencies in Brazil or ask for their cooperation and to jointly formulate projects" (2002:44). Therefore, donors have limited political leverage to push for their priorities, if they are in opposition to what the government anticipates.

However, the project design and approval process is not a one sided one. It requires mutual compromise, and as mentioned previously, the Ministry of Environment is in need of additional funds. ABC Director admits that the Brazilian side has to "align its policies" with donors' requirements¹³⁷. Thus, there is close cooperation between donors and the government.

Nonetheless, how frequent are the interactions between donors and the recipient government? A World Bank employee informs that there is an annual portfolio review and every four years an intensive nine-month consultation takes place on the Country Partnership Strategies¹³⁸. The Director of ABC confirms that one or two meetings with donors take place annually¹³⁹. JICA staff member adds that there are occasionally additional, smaller meetings¹⁴⁰. However, UNDP staff meets with ABC every week due to the large number of common projects¹⁴¹. There is no policy that would specify the number of meetings (except for

¹³⁶ Personal Interview. 20 January 2010.

¹³⁷ Personal Interview. 20 January 2010.

¹³⁸ Mark Lundell. Sector Leader of World Bank Brazil. Personal Interview. 14 December 2009.

¹³⁹ Minister Marco Farani. Personal Interview. 20 January 2010.

¹⁴⁰ Miyamoto Yoshihiro. Representative of JICA Brazil. Personal Interview. 8 December 2009.

¹⁴¹ Carlos Castro. UNDP Brazil Coordinator for the Environment and Energy Unit. Personal Interview. 21 January 2010.

the Bank's portfolio review).

Are donor and government focus areas harmonized? Do they share the same environmental priorities? If donor and government environmental priorities are set together, there is an overlap between some focus areas (see Table 32). The largest overlap of common environmental priorities found in policy documents is presented by JICA, the World Bank and governments, and the smallest overlap by governments, USAID and UNDP.

Table 32. Donors' and governments' environmental priorities in Brazil and the Philippines, according to official policy documents.

	Brazil	Philippines
World Bank	<ul style="list-style-type: none"> ➤ water and sanitation ➤ sustainable forestry 	<ul style="list-style-type: none"> ➤ water and sanitation ➤ environmentally sustainable mining ➤ watershed management ➤ integrated costal resource management ➤ protected area management
UNDP	<ul style="list-style-type: none"> ➤ mainstreaming environmental strategies ➤ sustainable forestry ➤ desertification ➤ energy 	<ul style="list-style-type: none"> ➤ strategies for sustainable development ➤ energy ➤ biodiversity
JICA	<ul style="list-style-type: none"> ➤ climate change ➤ urban issues 	<ul style="list-style-type: none"> ➤ urban issues ➤ disaster prevention
USAID	<ul style="list-style-type: none"> ➤ climate change ➤ biodiversity 	<ul style="list-style-type: none"> ➤ energy ➤ environmental management ➤ urban issues

Government	➤ urban issues	➤ sustainable use of natural resources
	➤ conservation	➤ sustainable mining
	➤ sustainable forestry	➤ conservation
		➤ urban issues
		➤ disaster prevention

Source: World Bank 2003:8; UN 2002:33; JICA. *JICA no Brasil. Atuando como Perceiro Global*:3 and JICA Brazil. *Diretrizes*. Web. 23 February 2010. <<http://www.jica.go.jp/brazil/portuguese/office/projects/>> ; USAID. "Brazil" *Latin America and the Caribbean*. Web. 18 January 2010. <http://www.usaid.gov/locations/latin_america_caribbean/country/brazil/>; USAID 2005b:36; World Bank 2005a:Annex1:5; World Bank 2005:21; Government of Japan 2008: Annex:4 and 30; UNDP Philippines. *Energy and Environment for Sustainable Development*. Web. 13 January 2010. <<http://www.undp.org.ph/?link=11>>; NEDA 2009:61; Ministry of Planning, Budget and Management of Brazil 2003:101-102.

USAID, among of the bilateral donors, has the smallest part of its aid channeled through the public sector, and in the case of Brazil and the Philippines, it chooses to work primarily through NGOs (local and US) and private contractors¹⁴². Therefore, USAID is not obliged to align with government priorities, although consent from the government is needed for USAID to operate in Brazil and the Philippines. Additionally, USAID does not issue loans, only grants, thus, it is more flexible in the design of its activities as these amounts will not be repaid. USAID is an example of a donor which tries to execute its own policies with a large degree of independence: it has set global and national policies and works primarily (or exclusively as in Brazil) with international or local NGOs and private firms, bypassing in practice the government¹⁴³.

UNDP, similarly to USAID, does not issue loans, but focuses on technical cooperation. UNDP Brazil staff explains the diversified environmental portfolio: "It is a blend of what Brazil wants from UNDP to help them and what is our mandate....Some of the

¹⁴² As the USAID's Evaluation of the Environmental Program states: "USAID/Brazil's environmental program has been working to build the institutional capacity of local nongovernmental organizations (NGOs) focused on conservation efforts through training and networking opportunities" (2009:1).

¹⁴³ During fieldwork research in the Philippines, DENR staff expressed frustration with USAID's operational methods. USAID staff was also aware of DENR's frustrations.

UNDP portfolio is decided by UNDP, other parts are decided by government”¹⁴⁴. However, UNDP is very dependent on government funds (in 2008 they amounted to 70% of UNDP Brazil’s budget). UNDP materials explain that with the reduction of international funding, the Brazilian government finances its own national development programs in partnership with UNDP¹⁴⁵. UNDP Philippines is in a similar situation with regard to priority setting, since “national priorities dictate the projects that UNDP/GEF supports”¹⁴⁶. Nevertheless, UNDP activities still expand beyond the government’s focus areas, which reveals a degree of independence.

Donors like Japan and the World Bank primarily issue loans, are bound by the recipient governments’ chosen priority areas to a larger extent than grant giving donors, for the reason that the national governments are in fact spending their own funds (as they will be repaid in the future). In 2008 Japan has channeled through the public sector in the Philippines and Brazil, 78.9% and 92.8% of its environmental aid, respectively¹⁴⁷. The figures for US are 13.2% (Philippines) and 12.6% (Brazil) as the majority of aid is channeled through NGOs and private contracting firms (see Figure 62)¹⁴⁸. Therefore, the recipient governments in Brazil and the Philippines have a greater say over the loan usage than grant usage, which can omit government structures.

¹⁴⁴ Carlos Castro. UNDP Brazil Coordinator for the Environment and Energy Unit. Personal Interview. 21 January 2010.

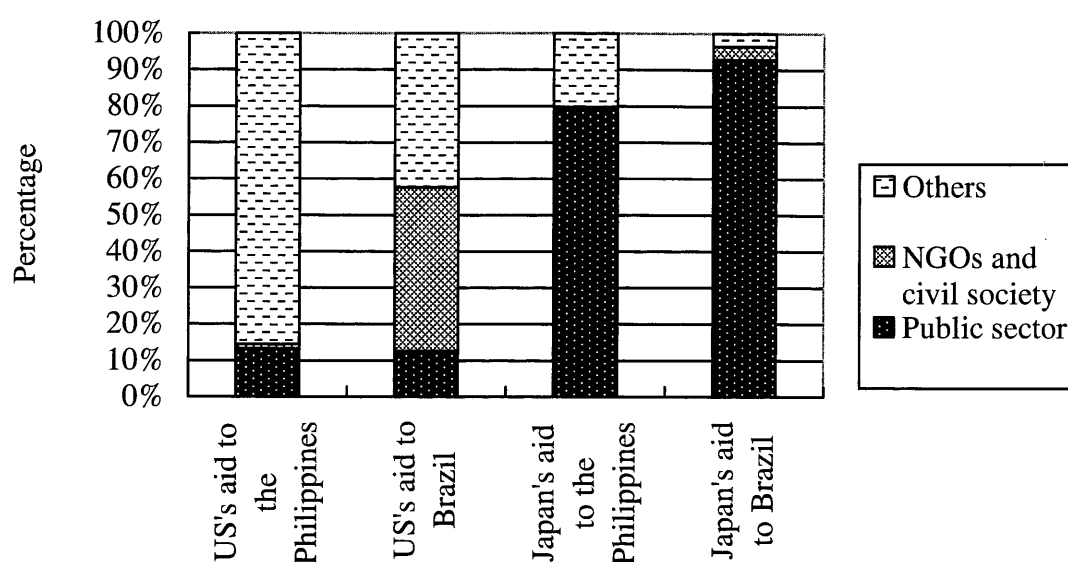
¹⁴⁵ UNDP Brazil. *O PNUD e seus Objetivos*. Web. 21 February 2010. <<http://www.pnud.org.br/pnud/>>.

¹⁴⁶ UNDP Philippines. *Energy and Environment for Sustainable Development*. Web. 21 February 2010. <<http://www.undp.org.ph/?link=11>>.

¹⁴⁷ Calculated from OECD CRS.

¹⁴⁸ USAID does not channel any funds directly to the public sector in Brazil. The 12.6% of funds channeled through the public sector are from other US agencies, such as the US Department of Forestry.

Figure 62. American and Japanese environmental aid to the Philippines and Brazil by channel (in percentages), 2008.

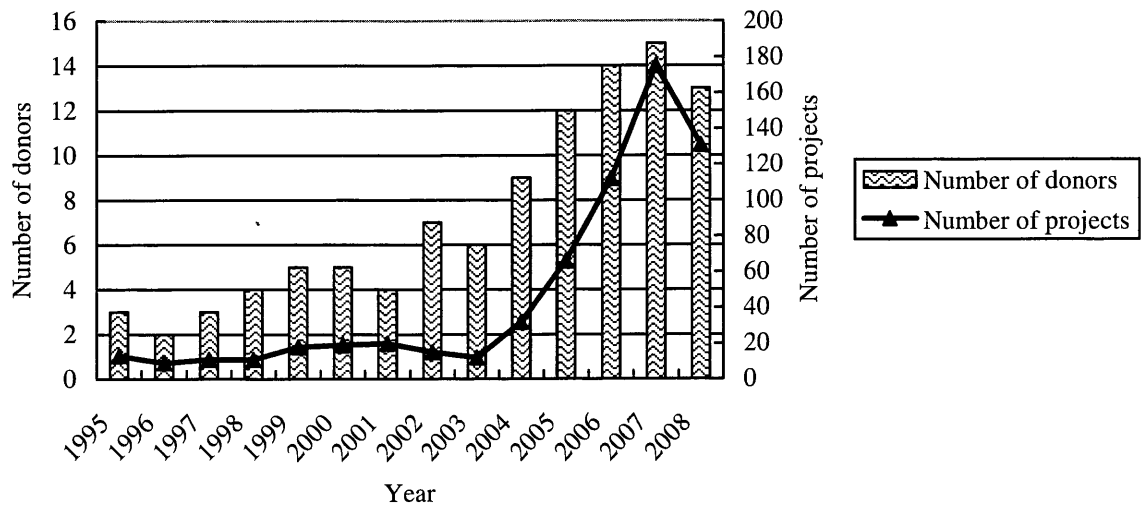


Source: Calculated from OECD CRS.

Moreover, despite the fact that the influence of national governments and loan-issuing donors is mutual as governments can only borrow on the terms the donor agency is offering (the conditionality of some loans), the number of new loan-issuing donors has been rising, providing the recipient governments with a wider choice for loans. One of the most influential new lenders is China. It is estimated that the growth of Chinese concessional lending in the Philippines has risen from \$60 million in 2003 to \$1.1 billion in 2007, placing China as the fourth largest donor to the country (Landingin 2010:90). The number of new donors (Non-DAC countries) has experienced a rapid growth from 2004 (see Figure 63). The emergence of new aid lenders has evoked fears about the losses in the “aid market” among some donors¹⁴⁹.

¹⁴⁹ Senior Operations Officer. World Bank Philippines. Personal Interview. 17 March 2009.

Figure 63. Growth of Non-DAC country donors, 1995-2008.



Note: Excludes China. Non-DAC country donors include: Brazil, Colombia, Estonia, Hungary, Iceland, India, Israel, Latvia, Lithuania, Kuwait, Monaco, Poland, Saudi Arabia, Slovak Republic, South Africa, Taiwan, Thailand and United Arab Emirates. Includes aid sectors: agriculture, forestry, fishing, water and sanitation and general environment protection. Source: Calculated from AidData. Web. 16 January 2011. <<http://aiddata.org/home/index>>.

Thus, there are larger policy overlaps present between recipient governments and loan-issuing donors, because loan-issuing donors have higher percentages of funds channeled through the public sector. In addition, the recipient governments have a greater influence on the usage of loans due to the required repayment of funds, and the rise in the number of new aid lenders has provided the governments with a greater choice of funds. Nonetheless, the larger policy overlaps do not imply that loan-issuing donors are passive actors (as the previous examples of World Bank and Japan reveal), nor do they imply that loans are a preferred source of funding for national governments¹⁵⁰.

Regardless of the type of aid allocated, donors play an important role in environmental budget supplementation (in the case of the Brazilian Ministry for Environment

¹⁵⁰ DENR, Ministry of Environment in Brazil and the Secretariat for International Assistance in Brazil expressed a deep interest in acquiring larger amounts of grants for the environment, yet, due to the limited availability of grants, were unable to do so. Personal Interviews. March and December 2009.

and the Filipino DENR) and, thus, have strong bargaining power. In the case of Brazil it is challenging to argue that donors dominate over the aid agenda as it appears to be a process of mutual influence and continuous negotiation. It is also important to note that Brazil is a larger and wealthier country than the Philippines, thus, its position towards the donors is stronger.

Nevertheless, there is a consistency present to what donors formulate and implement in the two countries and what they do on the global level. Furthermore, national institutions still have to align with donor requirements if they want to continue receiving aid. Hence, donors do enforce their aid interests at the national level to a certain degree, despite the rapid development of both fieldwork countries, as aid is still much sought after.

In the Brazilian case, the aid agenda appears to be more recipient-need than donor-interest driven. Donors have a strong interest in Brazil's environment, which paradoxically gives the government more power to negotiate environmental assistance. Additionally, Brazil is capable of financing a number of its own projects¹⁵¹. Yet, the US is an example of a donor which is driven by its own interests, even in Brazil. Moreover, loan-issuing donors tend to be more responsive to the recipient governments than grant-giving donors.

The Philippines, on the other hand, with weaker bargaining power appear to be more donor-interest driven, because they are in greater need of funds than Brazil and have a smaller self-financing capacity. However, the number of donors in the Philippines has been increasing, potentially shifting the future balance towards being more recipient than donor-driven with the expanding choice of aid partners.

¹⁵¹ According to the *Economist*, Brazil has recently expanded its own aid program, which reached \$1.2 billion in 2010 ("Speak softly and carry a blank cheque" *Economist* 15 July 2010. Web. 16 January 2011. < <http://www.economist.com/node/16592455>>).

9.4. Coordination among donors

With the wide range of donors' interests and different policies present, it is challenging to shape and balance them. To avoid project duplication, donors need to coordinate their focus areas and activities. Donors are obliged by the Paris Declaration of 2005 to harmonize their aid efforts¹⁵². Nevertheless, the donors' harmonization policies have various results (depending on the country) as the group of donors analyzed (USAID, JICA, UNDP, World Bank) has different levels of coordination in the fieldwork countries. The two countries present different models of donor cooperation, which will be explored in the following section.

In Brazil, there is little coordination between donors on aid activities. Donors talk with particular ministries on specific projects that either side wants to design and implement. There are seldom separate meetings with other donors on the issue. Other donors are also not present during the bilateral talks with the ministries. There are occasionally meetings on particular issues like climate change and PPG7 (a pilot program to conserve the Brazilian rainforest which ended in 2009). The ABC Director confirms that donors coordinate by themselves¹⁵³. A JICA employee explains the reason behind the lack of formal cooperation: "We know informally what the other donors are doing"¹⁵⁴. An USAID employee adds: "The reason why it's informal is that we found out early on that the Brazilian government doesn't like donors meeting formally to discuss things"¹⁵⁵. Thus, there is no formalized donor

¹⁵² The Paris Declaration on Aid Effectiveness created a set of monitorable actions and indicators for donors. They include: ownership, alignment, harmonization, results and mutual accountability (Third High Level Forum on Aid Effectiveness. *Paris Declaration*. Web. 24 February 2010. <<http://www.accrahlhf.net/WBSITE/EXTERNAL/ACCRAEXT/0,,contentMDK:21687851~pagePK:64861884~piPK:64860737~theSitePK:4700791,00.html>>).

¹⁵³ Minister Marco Farani. Personal Interview. 20 December 2009.

¹⁵⁴ Miyamoto Yoshihiro. Representative of JICA Brazil. Personal Interview. 8 December 2009.

¹⁵⁵ Eric Stoner. USAID Brazil Deputy Director and Environment Coordinator. Personal Interview. 7 December 2009.

cooperation system; no forum, no committee to oversee all the activities. Japan emphasized in one report: “In Brazil, a ‘donor community’ does not exist” (Ministry of Foreign Affairs of Japan 2010:11). Nevertheless, duplication was noted. A JICA evaluation study reported “some duplication of support activities among donors”, however, it did not cause a “serious problem in efficiency and effectiveness” (Ministry of Foreign Affairs of Japan 2010:7).

The Philippines present a different model of donor cooperation. The National Economic Development Authority (NEDA) is Philippine’s economic development and planning agency, with the President as the agency’s chairman. The NEDA Board meets at least once a month as it is the agency responsible for the coordination of the formulation of development plans, policies and programs, official development assistance and the monitoring and evaluation of plan implementation¹⁵⁶. Within NEDA there is the Harmonization Committee, which coordinates all the donors’ efforts.

Moreover, in the Philippines, there is the Philippines Development Forum where all development-related institutions meet: donors, government and NGOs. The Forum is held annually. Aside from the Forum, donors assure that there is project coordination and information sharing as frequent meetings between donors are held¹⁵⁷. Additionally, USAID Philippines comments: “Bilateral donors...routinely consult with USAID on the formulation and evaluation of their country strategies and programs, as well as on individual activities” (2005b:2). Moreover, the World Bank has summarized its aid coordination activities in the Philippines as conducting regular joint reviews with the government, ADB and JBIC, and organizing the Quarterly Development Partners Breakfast Group (2005a:Annex1:10).

Despite the formalized coordination system and the existence of the Harmonization Committee and the Philippine Development Forum, there have been incidents of project

¹⁵⁶ NEDA. “Legal Mandate” *About NEDA*. Web. 16 March 2010. <http://www.neda.gov.ph/about/legal_mandate.htm#AnnexA>.

¹⁵⁷ USAID, JICA and World Bank staff. Personal Interviews. March 2009.

duplication noted. The Japanese Bank for International Cooperation (JBIC) mentions in one of its reports: “the delay in implementation in some subproject areas occurred because these same areas were already covered by other projects” (JBIC 2004:9). Therefore, a formalized cooperation framework cannot be treated as a guarantee against project duplication.

Only in 2006 there were over 118 environmental projects taking place in Brazil and 83 in the Philippines. Moreover, the actual figure is much larger as GEF funds were not counted. According to the GEF project database in 2006 there were three projects approved for biodiversity for the total amount of over \$ 130 million for Brazil. Three years later, the Brazilian Ministry of Planning, Budget and Management counted 38 GEF projects in preparation or implementation in 2009 with the total value of over \$290 million¹⁵⁸. On the whole, in December 2009, the Brazilian Ministry of Planning, Budget and Management reported in total 120 projects (implemented or in preparation) for the environment and water resources (without energy and sanitation) for the federal government with the total value of \$ 2.3 billion¹⁵⁹. With large funds and project numbers the issue of project duplication and donor fragmentation becomes a crucial one.

Table 33. The number and value of environmental projects in Brazil and the Philippines, 2006.

	Water, sanitation and waste disposal	Forestry	Biodiversity and biosphere	Total
Brazil	\$8 (38)	\$10.5 (23)	\$18.8 (57)	\$37.3 (118)
Philippines	\$16.1 (47)	\$1.4 (16)	\$2 (20)	\$19.5 (83)

Note: The number of projects is in brackets. Includes grants, loans and technical cooperation. Amounts are in million dollars (\$2007). Donor counterpart funds are not included. However, the figures are underestimated as some donors do not have full project coverage in the OECD CRS database, and also GEF funds are not included. Source: Calculated from OECD CRS.

¹⁵⁸ Ministry of Planning, Budget and Management of Brazil. *Projectos por fonte*. Web. 23 March 2010. <http://www.planejamento.gov.br/secretarias/upload/Arquivos/seain/downloads/cofiex_fonte.pdf>.

¹⁵⁹ Calculated from Ministry of Planning, Budget and Management of Brazil. *Projectos União e empresas*. Web. 23 March 2010. <http://www.planejamento.gov.br/secretarias/upload/Arquivos/seain/downloads/cofiex_uniao_empresas.pdf>.

What is the average size of an environmental project and why is this important? In 2009 in Brazil the average loan for the environment (with water) was \$ 65.7 million, and a grant \$ 29.9 million¹⁶⁰. However, in the Philippines, according to DENR data, in 2006 the average loan for the environment was \$16.8 million and grant \$3.5 million, which presents a clear contrast with the Brazilian figures¹⁶¹. The presence of a large number of small-scale projects is associated with two problems: increased time absorption by donor projects for state bureaucrats and increased “poaching” of skilled labor to service projects. The phenomenon of donors hiring the most skilled public servants to manage projects has been discussed in a World Bank Policy Research Working Paper, which reveals the impact of donor fragmentation on the quality of government bureaucracy (Knack and Rahman 2004:21-22). Are the Philippines and Brazil affected by increased donor fragmentation?

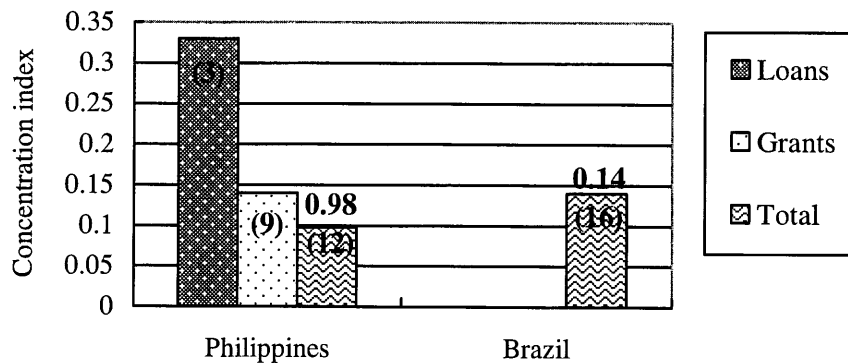
The fragmentation of donors is calculated using the Herfindahl index (“concentration index”), which can be applied to measure the number of donors and their share in the aid market¹⁶². The higher the fragmentation of donors, the lower the index number. Larger index numbers imply a higher concentration of donors. Thus, in Brazil the donor community for the environmental sector is more fragmented than in the Philippines (see Figure 64).

¹⁶⁰ Calculated from materials obtained from Ministry of Planning, Budget and Management, COFIEX in December 2009.

¹⁶¹ Calculated from DENR 2007:5.

¹⁶² According to the OECD definition: “A measure of industry concentration. The value of the index is the sum of the squares of the market shares of all firms in an industry. Higher values indicate greater concentration”. OECD. *Herfindahl Index*. Web. 18 March 2010. <<http://stats.oecd.org/glossary/detail.asp?ID=6205>>.

Figure 64. Donor concentration in the Filipino and Brazilian environmental sectors.



Note: Numbers in parenthesis indicate the number of donors. The total for the Philippines is an average for the loan and grant index. Calculations include sanitation and ecotourism but are without energy. Calculations for the Philippines are for the year 2006 and for Brazil 2009. Source: Donor shares for the Philippines are calculated from DENR 2007:7; index for Brazil is calculated from the Ministry of Planning, Budget and Management, COFIEX. *Proyectos por fonte*. December 2009.

Nevertheless, both the Philippines and Brazil have considerably high levels of donor fragmentation. Two researchers calculated the concentration index average for the year 2000 to be 0.3 for “recipients of substantial amounts of aid” (Knack and Rahman 2008:336). The figures for both fieldwork countries are below this average, revealing higher fragmentation of environmental aid donors. In the light of this research, the stronger the donor cooperation network is, the better for the recipient country due to a decrease in bureaucratic burden with separate donor reporting and the danger of project duplication or even implementation of projects with conflicting missions in the same area (for ex. mineral extraction and conservation).

However, the large fragmentation of donors also implies that particular donors cannot dominate over the aid agenda as the national government can choose to cooperate with another donor. Although high fragmentation is not a beneficial phenomenon, because it causes an excessive bureaucratic burden, it also gives more choice and freedom to national governments and balances donor interests.

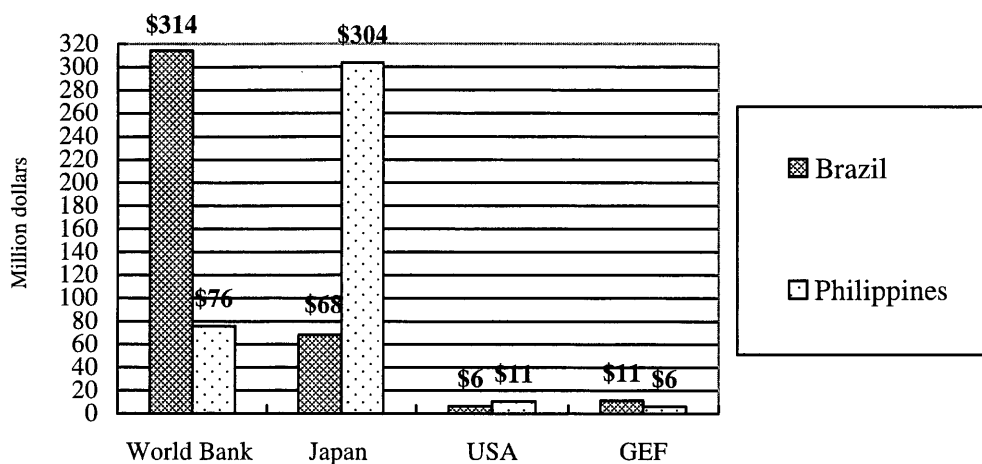
9.5. How much does the environment matter?

Chapters five, six, seven and eight revealed that despite the environmental rhetoric of donors, aid for the environment is not so “green” as claimed by donors. Various non-environmental factors influence environmental aid. Aid for the environment is only a part of a broader aid framework with other sectors dominating. Does the situation remain the same for the two countries of global environmental significance? Do environmental funds constitute only a small fraction of the overall aid portfolio? This section of the chapter will attempt to verify the findings of the econometric analysis as it explores in detail the donor-recipient government cooperation framework in the two countries.

The environmental importance of Brazil and the Philippines would imply a special interest of donors in the preservation of their natural resources. If the environments of the most biodiverse countries are not preserved, than probably the least biodiverse won't be either. This section explores whether environmental aid is treated as a separate, important category of aid or just a marginal area of donor interest. Thus, it provides a confirmation or negation of the donors' global approaches.

Japan and the World Bank have been one of the largest donors to Brazil and the Philippines in terms of volume of aid for the environment. Their annual averages range from \$ 68 million to \$ 314 million (see Figure 65).

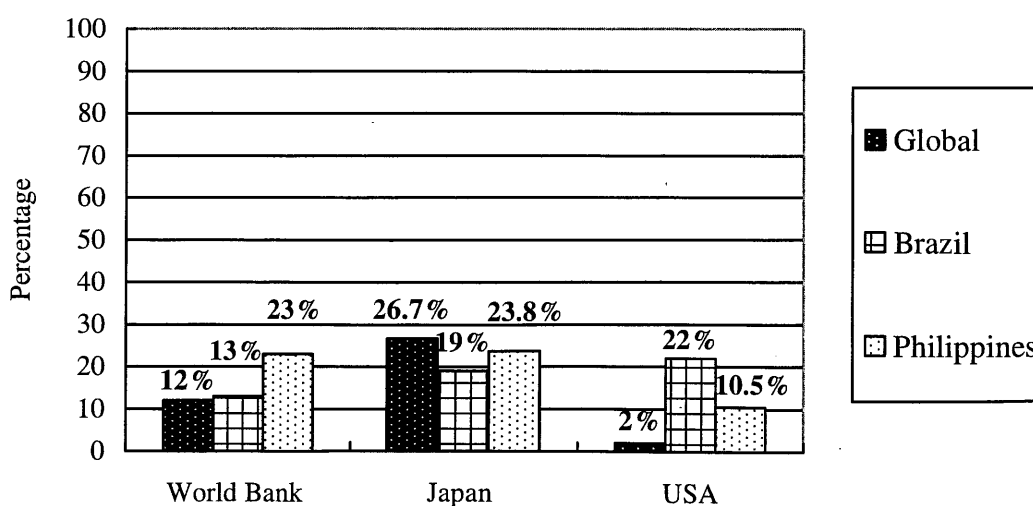
Figure 65. Average annual environmental aid to the Philippines and Brazil, 1991-2007.



Note: Data for Japan and the US available from 1995. Source: Calculated from OECD CRS, GEF project database and World Bank Project Database.

Yet despite the large annual amounts for the environment, no donor allocates more than a quarter of aid to solve environmental problems (see Figure 66). Hence, the large majority of funds to Brazil and the Philippines are for non-environmental purposes.

Figure 66. Percentages of environmental aid in Brazil, Philippines and on the global level, 2000-2008.



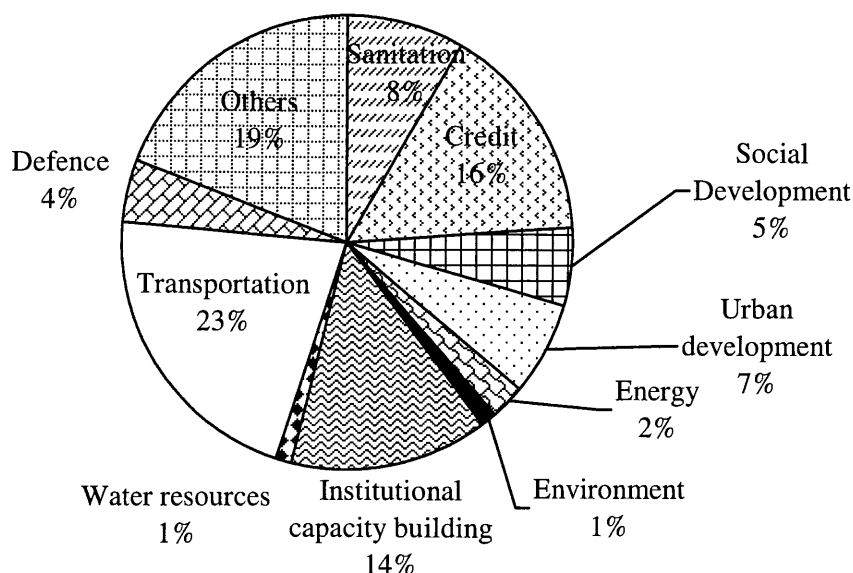
Note: World Bank percentages are for IBRD loans. Source: Calculated from OECD CRS, World Bank Project Database and World Bank 2007a:58.

Donors like the US and the World Bank are on average “greener” in Brazil and the Philippines than globally as their aid percentage is higher in the two fieldwork countries. Therefore, they issue more environmental funds in these two countries than in others. For Japan the number is less than the global average. According to Robert Hicks et al., the Philippines was in the 1990s the six largest environmental aid recipient, with Japan, the World Bank and the US constituting three of the four top environmental aid donors to the country (2008:62).

However, to fully understand the position of environmental issues on the aid agendas, one needs to look at the overall aid amounts allocated to both countries, because aid is pooled together from other donors. The national aid frameworks offer a glimpse of the recipient governments’, as well as the donors’, aid sector prioritization. Additionally, it reveals the impacts of donors and their environmental aid.

In Brazil it is the Ministry of Planning, Budget and Management which approves and monitors the financial aspects of loans and grants issued to the country. In the Ministry there is the Secretariat of International Assistance (*Secretaria de Assuntos Internacionais* - SEAIN) which is the executive secretariat for the Commission for External Financing (*Comissão de Financiamentos Externos* - COFIEX). Neither SEAIN nor COFIEX have the role of aid coordination. Their goal is to check the financial feasibility of loans and the accordance with the national development plans. These two institutions possess the information on financial aid flows in Brazil. The data from SEAIN for 2009 reveals the small percentage of loans for the environment taken (1%; with water resources included the figure increases to 2% – see Figure 67).

Figure 67. Foreign assistance loans approved by sector in Brazil, 2009.

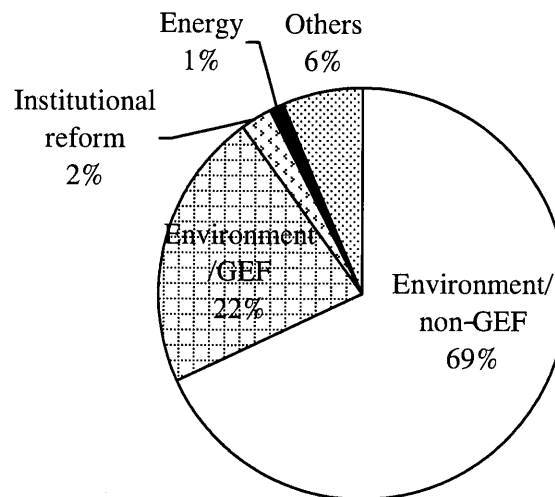


Note: the 4% for defense is exceptionally high as Brazil purchased nuclear submarines during this period (Cadmo Gomes. Coordinator for International Assistance. SEAIN. Ministry of Planning, Budget and Management. Personal Interview. 15 December 2009). Source: Materials obtained from SEAIN. 15 December 2009.

Nevertheless, grants show a different picture as 91% of grants are for the environment (see Figure 68). The amount exceeded \$ 1.6 billion in 2009 with GEF funds constituting 24% of the total environmental funds. The volume of grants received for the environment is higher than the volume of loans (\$ 929 million including loans for water resources). Without GEF funds the percentage of grants for the environment drops to 69% (over \$1.2 billion). GEF grants are very small in size (average \$ 7 million), thus, despite constituting only 24% of the total environmental funds (US\$ 382 million), GEF has 68% of the number of environmental projects (53 out of 78)¹⁶³.

¹⁶³ The GEF project database reports much smaller figures (GEF funds, excluding cofinancing, approved in 2009 equal around \$ 27 million), thus the funds reported by SEAIN include all types of GEF grants (including SPG) and include cofinancing from other institutions (but not government counterpart funds).

Figure 68. Foreign assistance grants approved by sector in Brazil, 2009.



Source: Materials obtained from SEAIN. 15 December 2009.

Hence, environmental loans and grants present a striking contrast and imbalance in Brazil. Grants are a much more preferred source of aid for the environment than loans and the national government shows a great interest in acquiring them (especially from GEF as SEAIN Coordinator Cadimo Gomes confirmed)¹⁶⁴. Through the provision of large grant funds, donors obtain substantial influence on the environmental agenda, especially on how the grants will be utilized (as illustrated previously with the example of USAID).

Brazil spends only 0.6% of its national budget allocation for the environment. Nonetheless, it is significantly supplemented by foreign assistance (especially environmental grants) as in 2009 Brazil allocated R\$ 3.5 billion from the Treasury for the environment, while it received, including funds for water, US\$ 929 million (R\$ 1.7 billion) in loans and US\$ 1.6 billion (R\$ 2.9 billion) in grants. Therefore, Brazil receives more in foreign aid for the environment (R\$ 4.6 billion) than it spends from its own government resources (R\$ 3.5

¹⁶⁴ Braulio Dias. Director. Secretariat for Biodiversity and Forests. Ministry of Environment. Personal Interview. 10 December 2009.

billion). Furthermore, the ratio of environmental grants to loans is 1.7 to 1¹⁶⁵. This reveals the exceptional interest donors (especially the GEF) have in the environment in Brazil and the interest of the government in acquiring external grants.

Nevertheless, 98% of loans and 9% of grants reaching Brazil are not for the environment. Hence, overall Brazil receives R\$ 4.6 billion in aid for the environment and R\$ 92.7 billion for other, non-environmental purposes. Therefore, it is challenging to argue that the environment is the main sector of cooperation as it receives 4.7% of total aid funds flowing into the country.

Is the situation the same for the Philippines? According to the Department of Budget and Management in 2009, DENR was allocated 9.3 billion pesos in new appropriations from the national budget (including foreign assistance projects). Out of this figure, 542 million pesos were allocated as foreign assistance (including Filipino counterpart funds). The Filipino counterpart funds amounted to 184 million pesos (34% of total), which leaves 358 million pesos as external financing. Moreover, no grants were issued for the years: 2007, 2008 and 2009 as the 358 million pesos for 2009 are all in the form of loans. From 2004, when the environmental foreign assistance budget was 408 million pesos (with only 11% in required counterpart funds) and grants constituted 45.5% of the total environmental assistance, the number of grants has been decreasing.

However, the OECD CRS presents a different picture with the Philippines receiving grants in both 2007 (\$ 4.2 million) and 2008 (\$ 20 million). These are grant figures for the total “only environment” aid channeled to the public sector only. The OECD CRS figures contradict the statement of the Department of Budget and Management.

As mentioned in section 9.3, according to the data of the Department of Budget and

¹⁶⁵ However, the overall proportion of grants (all sectors) to loans (all sectors) is 1 to 30.6. Therefore, the high proportion of environmental grants to environmental loans is an exception rather than a rule.

Management, in 2009 foreign assistance made up 6% of DENR's budget. Nonetheless, the figures seem severely underreported. DENR itself reports increased figures of aid, which are not present in the budget. Table 34 presents and analysis of the year 2006.

Table 34. Foreign assistance for the environment as stated by different information sources for the Philippines, 2006.

Information source	Loans	Grants	Total
National Budget of the Philippines	\$8.9 (\$11.6 with Filipino counterpart funds) (4)	\$ 0.23 (1)	\$9.13 (5)
DENR	\$ 67.4 (4)	\$120.4 (34)	\$187.8 (38)
OECD CRS	none	\$ 7.1 (through public channel) (25)	\$7.1 (25)

Note: Numbers in parenthesis account for the number of projects. Amounts in millions of dollars. OECD CRS data excludes GEF. Source: Department of Budget and Management of the Philippines. *Foreign Assisted Projects*. Web. 12 March 2010. <http://www.dbm.gov.ph/besf_2008/Table%20B/B14.pdf>; DENR, 2007:5 and calculated from OECD CRS.

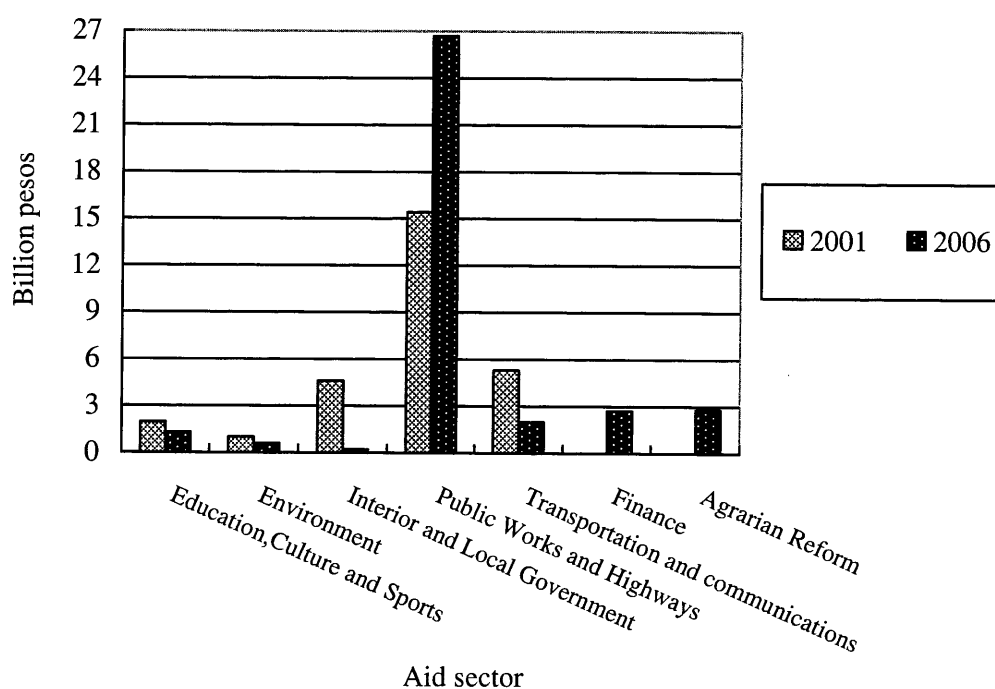
Moreover, NEDA reports similar figures for DENR as DENR itself (NEDA 2008:11). The author contacted both the Department of Budget and Management and the Foreign Assistance unit in DENR (March 2010), but has received no reply to the inquiry of the difference in reporting. Therefore, it can only be hypothesized that a substantial part of foreign aid does not go through the national budget (which would also be a confirmation of the OECD CRS figures). This can be the case of funds from the GEF (which are always approved by governments, but can be distributed and managed by other institutions), which as USAID Philippines reports: "direct GEF funds are due to taper off and be more regionally focused" (2008a:49).

If DENR was allocated in 2006 6.3 billion pesos (according to the Department of Budget and Management) in new budget appropriations and received \$ 187.8 million (9.6 billion pesos in 2006) according to DENR in aid, environmental aid would constitute 152.4% of new budget funding. The importance of external financing for DENR is additionally confirmed by a UNDP evaluation report, which emphasizes that DENR is "dependent on

external loan and grant funding to meet its commitments” (2009a:38). Nevertheless, no clear conclusion can be drawn on the extent of external financing for DENR as the three sources analyzed provide different figures.

In the Philippines there has been a shift of the government/donor cooperation focus. In 2001 the three main sectors for financial cooperation were: public works and highways, transportation and communication, and interior and local government. Nevertheless, five years later the assistance for public works and highways sector experienced a growth of 73%, followed by the appearance of two new dominant sectors: agrarian reform and finance. Aid for the environment *decreased* from 2001 by 40% (Figure 69).

Figure 69. Aid allocation to the Philippines by sector, 2001 and 2006.



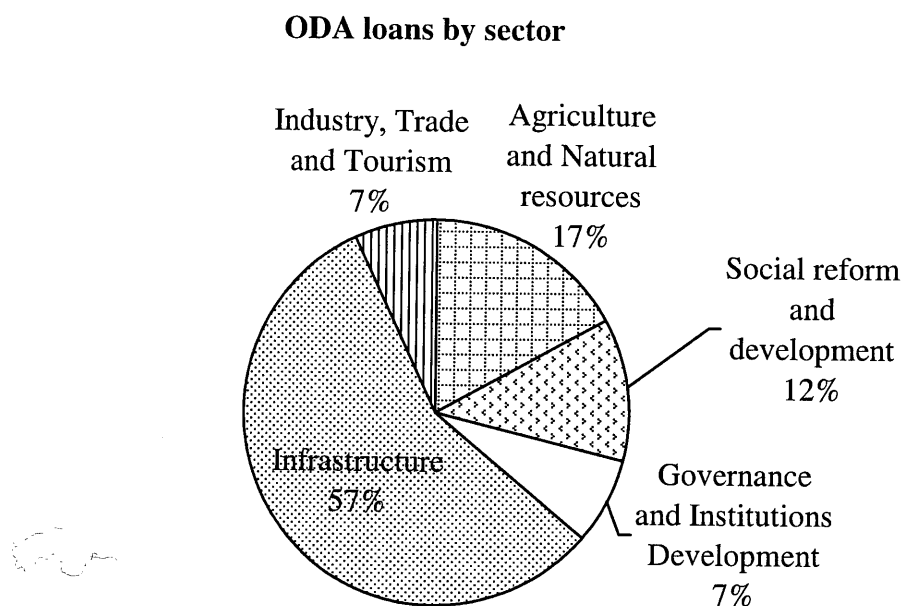
Source: Department of Budget and Management of the Philippines. *Budget Expenditure/Sourcing*: 2003 and 2008. Web. 12 March 2010. < <http://www.dbm.gov.ph/index.php?id=32&pid=9>>.

USAID Philippines evaluated that in 2007 the DENR was among the top three Philippine government agencies-recipients of foreign grants, but had a low share (1.6%) in the

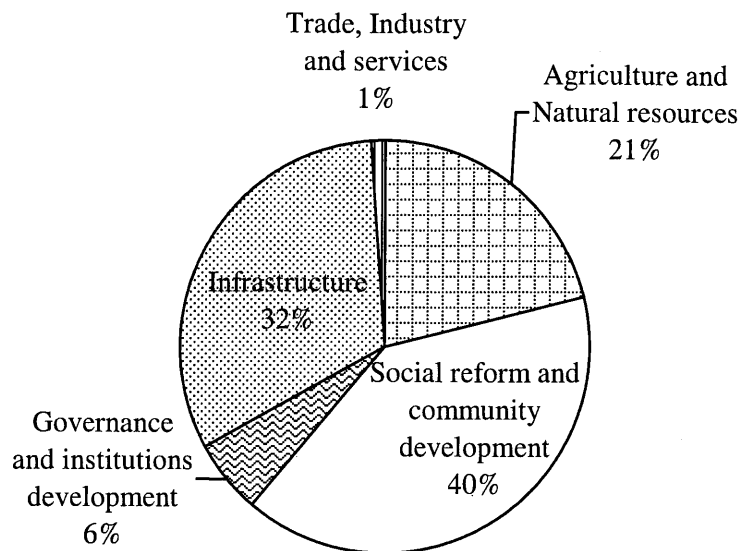
entire ODA loan portfolio (USAID 2008a:49). The data from the Department of Budget and Management does not confirm the statement for grants as for 2007 no grants were noted for DENR. Yet the Department does confirm that DENR received 1.6% share of loans. Therefore, it can be argued that the Filipino government is not willing to borrow large funds for the environment (similarly to Brazil, which has 2% in loans including water).

Overall, NEDA presents a summary of the 2007 aid portfolio, where out of the 17% of loans for agriculture and natural resources, the actual amount for natural resources (DENR) is 1.6% (see Figure 70). The percentage of grants is higher (21%) but the actual figure for only natural resources is unconfirmed. However, in 2008 NEDA reported that DENR received \$ 147 million in grants, which is 11% of the grant total (2008:11).

Figure 70. ODA loans and grants in the Philippines by sector, 2007.



ODA grants by sector



Source: NEDA 2008:4 and 10.

The government of Brazil borrowed only 2% of the total loan amount for environmental purposes, and the Filipino government 1.6% for natural resources. Despite the “greener” image of some of the donors in the two countries, the overall volume of environmental loans remains low.

Grants present a different situation to loans as 91% of grants coming into Brazil are for the environment (a striking contrast to only 2% of loans), 21% of Philippine grants are for agriculture and natural resources (11% of total grants go through DENR). Thus, 89% of grants in the Philippines are for non-environmental purposes. Yet donors, such as the US, allocated for the environment 10.5-22% of their grants in Brazil and the Philippines, a higher percentage than in other recipient countries. The “green” average percentage of donors in the two fieldwork countries can be related to the donors’ particular interest in those countries as they are both one of the sixteen biodiversity hotspots and have high global environmental

significance.

The percentage of grants for the environment is much more balanced and shows a stronger interest from the side of the governments (especially Brazilian) to receive environmental aid in the form of grants. Cadmo Gomes explains: “We have quite a large portion of GEF funds allocated to Brazil, but still it is not enough. We would like to see more GEF funds”¹⁶⁶. The DENR has also confirmed an interest in increased grants for the environment¹⁶⁷.

Overall, Brazil receives more aid for the environment than it spends from its own Treasury. Donors offer almost \$ 1.6 billion in grants for the environment, which reveals the particular interest donors have in Brazil. Nevertheless, despite the increased, above average donor interest, 98% of loans are used for other purposes and environmental aid constitutes only a fraction of the overall aid portfolio (less than 5%), confirming the global approach of donors of treating environmental aid as a smaller part of their aid framework, subordinate to other donor policies.

The Philippines present a different picture with the DENR receiving only 2% of the national budget, without such significant levels of aid for the environment as Brazil to supplement its own budget (especially after 2004 according to the Department of Budget and Management). Environmental loans constitute only 1.6% of the funds borrowed by the government with around 11% of overall grants received allocated to supplement the budget of DENR. Funds to decrease environmental degradation are not a prime focus area.

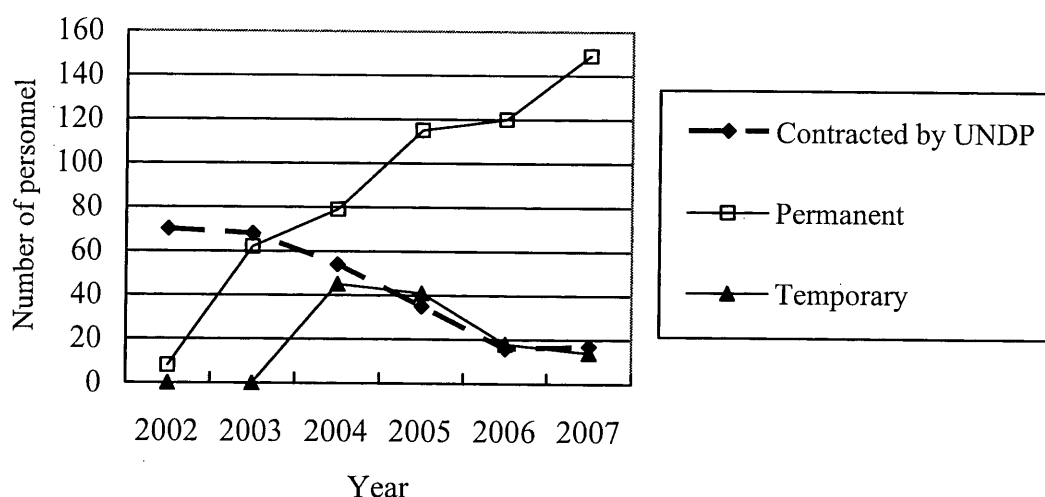
Despite that the environment is not a top priority sector for financial cooperation, it is a crucial one (especially if aid exceeds the national budget for the environment). One such

¹⁶⁶ Coordinator for International Assistance. SEAIN. Ministry of Planning, Budget and Management. Personal Interview. 15 December 2009.

¹⁶⁷ Cristina Regunay. OIC-Chief. Multilateral Investment Program Division DENR. Personal Interview. 19 March 2009.

illustration of the importance of donors' role in budget supplementation, is the case of UNDP directly financing the Brazilian Institute of Environment and Renewable Natural Resources' (*Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis* – IBAMA) licensing personnel (see Figure 71), which otherwise would have not been able to fulfill its mission. In 2002, out of seventy-eight IBAMA staff responsible for licensing, seventy employees (89.7%) were contracted out by UNDP. Without donor financing, the main environmental law enforcement institution in Brazil would not have been able to issue licensees. The number has decreased to seventeen in 2007 as IBAMA hired more permanent staff.

Figure 71. Number of IBAMA licensing personnel by type, 2002-2007.



Source: IBAMA 2008:8.

9.6. Conclusion: recipient governments and global aid allocation patterns

Econometric based analysis presents global trends and indicates the possible explanatory factors for them. Nonetheless, to verify some of the policies, focus areas and

trends, a detailed insight into aid at the national level is needed. Donors' national policies, priorities and project portfolios can confirm or contradict global ones.

The first part of this chapter found that several key environmental indicators (deforested area, biodiversity levels and the number of threatened mammals) distinguish Brazil and the Philippines from the remaining aid recipient countries. Hence, these two countries are of global environmental significance. Donors would be expected to have larger environmental programs in these regions.

The analyzed donors have very coherent national policies and project portfolios, which match their global ones. Additionally, the environmental regression output variables correspond to the donors' majority projects and focus areas, confirming the consistency of donors' actions. The exception is presented by JICA's regression output variables, which do not match the infrastructure focused project portfolios.

Donors have their interests and priorities which they execute, but the national aid agenda is a product of mutual influence, although to various degrees in Brazil and the Philippines. In Brazil the aid agenda appears to be more recipient-need driven than the Philippines, with the Brazilian government using the interests of donors in its environment to its advantage. On the one hand, recipient governments are in need of aid, and are required to adjust to donors' conditions. On the other hand, the growing number of donors provides a wide choice for governments, enabling them to simultaneously enforce their own regulations and preferences.

There are larger policy overlaps present between recipient governments and loan donors, because loan-issuing donors have higher percentages of funds channeled through the public sector; the recipient governments have a greater influence on the usage of loans due to the required repayment of funds; and the number of new aid lenders has been on the rise, providing greater choice to governments. Grant issuing donors like USAID remain focused on

their priorities (biodiversity) and attempt to execute them independently. However, for recipient governments, grants remain a preferred source of funding to loans.

Additionally, there are two models of donor cooperation presented, which reveals the overall functioning of aid institutions in the fieldwork countries. Brazil has a very informal system of cooperation which is primarily based on donor-government meetings, whereas the Philippines have a more formalized network with group meetings, multi-party talks and a Harmonization Committee. The fragmentation of donors poses challenges for the national governments as they have to deal with donors separately, but at the same time the fragmentation provides them with the choice of which donor to work with.

Despite that aid for the environment is a needed commodity which may exceed the national budget expenditure for the sector, as it does in Brazil, it presents only a small fraction of the total aid distributed to the two environmentally significant countries. Therefore, donors do not apply any preferential treatment to aid for the environment and its allocation. Both countries receive large (larger than the global average) amounts of aid, but the amounts fall far behind other sectors financed. Hence, it is challenging to argue that donors are truly committed to decreasing environmental problems (even in the most biodiverse countries). Moreover, as explored in chapter three, the largest environmental aid recipients are usually also the largest overall aid recipients, which reveals the close linkage and integration of environmental aid with other policies and sectors financed by donors.

This chapter has looked into the global and national coherency of donors' policies. Subsequently it has explored how are the national aid portfolios formulated and what is the extent of donor involvement. Additionally, chapter nine illustrated that donors vary: in their focus areas, policies, aid implementation methods and influences on national governments. With the research results stated above, what are the broader implications of these findings? Are the global environmental aid allocation patterns a reflection of donors' preferences or are

they a product of the mutual influence of recipient governments and donors?

Although recipient countries are independent entities with the freedom to choose the desired aid funding source and, as shown in sub-point 9.3, the number of potential aid donors has been increasing, the influential role of large donors should not be underestimated. There is a coherency present between the national and global policies of donors and their project portfolios, thus, donors do have large enough political leverage to maintain their priorities on the national level.

However, there is a distinction between grant and loan-issuing donors. There was a larger policy overlap found between loan-issuing donors and recipient governments than with grant-issuing donors and recipient governments. On the national level country governments have a larger say in the usage of loans rather than grants. Moreover, some donors like USAID may bypass government structures all together and work with NGOs and private contractors (as shown in Figure 62). Hence, one may argue that the global aid allocation patterns of grant-issuing donors like USAID and GEF (especially after 2006) are more the reflection of donor decisions than the influence of national governments¹⁶⁸. There is a wide-spread desire for grants among recipient governments and large volumes are distributed, but there are not enough grants to finance all the activities. As with any scarce resource, the resource holder has substantial influence.

Loan-issuing donors are bound by the mutual relationship and influence of the national governments to a greater extent than grant-issuing donors. Their global allocation pattern is a reflection of their previously set focus areas and policies as well as the result of national-level negotiations. The majority of aid from loan-issuing donors is channeled through the public sector. One cannot dismiss the research finding of the continuity and coherency of

¹⁶⁸ Due to the number of applications for grants from 2006 GEF introduced its own grant allocation pattern – Resource Allocation Framework (RAF), which was later revised and launched in 2010 as the System for Transparent Allocation of Resources (STAR). For more details see GEF 2010:2.

donors' global and national policies, but also has to simultaneously acknowledge the dependency of such donors on the actual recipient governments for fund disbursement. It can be additionally argued that with the continuous rise of new loan-issuing donors, the global allocation patterns of donors such as the World Bank and Japan will be more and more a product of mutual donor-recipient influence than a reflection of previously set donor policies.

Chapter 10. Conclusions

The aim of this research was to compare how the approach to environmental aid differs between donors and to analyze which factors influence their global allocation of environmental aid. As the study showed, environmental aid has various motivations (not only environmental). This thesis also provided two empirical examples of donors' policies and aid allocation patterns, in two different national contexts: Brazil and the Philippines. The conducted research revealed the extent of policy coherency for donors' (both at the national and global level) and the donors' actual influence on the recipients' aid agendas. The country case studies helped to answer the question whether global aid allocation patterns of donors are a product of donor policies or the result of mutual influence between donors and recipient governments. The following parts of this chapter will outline the main conclusions.

10.1. What is wrong with environmental aid?

The primary finding of this research is the lower priority given to environmental aid (despite donors' policies) within the overall donor aid framework. Aid allocation for the environment is only partly driven by environmental factors. Political, regional, poverty and economic variables also play a role. Although the presence of some political variables is justified and even desired (such as the high democracy and low corruption level of the recipient country or the location of the recipient country), the presence of other variables is not. If aid for combating environmental degradation is influenced by the import levels of a country, the level of FDI or being a country named Egypt, its allocation pattern is distorted. Moreover, it is not fully consistent with donors' policies.

None of the six donors analyzed was free from the influence of non-environmental

variables. In each donors' regression output there was at least one political, economic, poverty or regional variable present. Denmark, despite being presented as the "greenest" donor, was affected by non-environmental variables, and purposely treated environmental issues as part of its general aid and interests.

Nonetheless, all the donors had also at least one environmental variable in the linear regression output (influencing the extent of aid allocated). Therefore, aid for the environment is also determined, to an extent, by environmental matters. All donors are at least partly "green". There is a wide diversification of environmental variables which proved to be significant for donors. The two most common environmental variables which appeared in the regression outputs were: the number of threatened mammals and level of CO₂ emissions.

Moreover, there are regional preferences for environmental aid. Asian and African countries have shown to be the main environmental aid recipient regions. In the case of Japan and the World Bank, being a country in Asia was statistically significant and explained a part of the increased environmental aid allocation. The US showed a special preference for Egypt regarding environmental assistance. Thus, environmental aid is geopolitically motivated.

Environmental aid is equally influenced by political and economic factors. The level of democracy or corruption in a recipient country proved equally as important as the level of FDI or imports. Thus, aid for the environment is embedded in politics as well as economical interests. Although the allocation pattern of some donors may be unintentional, the rationale behind economic or political variables is present. With Japan influenced by its neighbors' environments and dependent on their resources for its own economy, it is logical for the donor to prefer exporting Asian countries as primary recipients of aid.

It is a positive phenomenon that some donors allocated aid (Denmark) or increased aid amounts (the GEF) to more democratic countries because this increases the likelihood of adequate accountability of aid (for any sector). It is less likely that aid will be misused within

the country. However, more corrupt countries are also more likely to receive aid from the GEF and the World Bank. For the GEF this allocation is probably unintentional, yet the allocation pattern undermines the effectiveness of GEF's allocation. Despite that more democratic countries will receive *increased* GEF funds, the current allocation is not fully consistent with GEF's policies, because more corrupt countries have a higher probability of receiving GEF's aid in the first place (as shown in the logit regression output). The ten top GEF recipients have simultaneously higher corruption (3.07) and democracy levels (6.08) than the whole GEF sample average (3.14 and 5.16, respectively)¹⁶⁹.

As for the World Bank, the statistical significance of the corruption variable is a potential indication that environmental funds are part of a broader aid policy based on improving governance and corruption levels in the recipient countries. From 1995 to 2006 IDA has spent \$ 3 billion on programs with anti-corruption components. The presence of the corruption variable could also emerge from the finding that loan-issuing donors are more receptive to recipient government requests and that more corrupt countries are requesting more loans than less corrupt ones (a finding which still requires confirmation).

Both the World Bank's and the GEF's allocation would be more consistent with their policies if they reconsidered their aid allocation patterns regarding the levels of corruption. Allocating funds to corrupt countries is counterproductive, regardless of the aid sector. As discussed in chapter seven, conditionally attached to aid regarding good governance has been labeled as a failure. Aid for environmental sustainability has value for its own purpose – reducing or eliminating environmental degradation, and does not need to solely viewed within another policy framework. If environmental aid's objective is not valued, the aid will not address its goal.

¹⁶⁹ The ten top recipients are: China, Mexico, Brazil, Philippines, India, Indonesia, Peru, Uganda, Sri Lanka, Ghana.

Despite Denmark being presented as a model “green” donor, this research questioned the image. Denmark does have the highest per capita expenditure on aid for the environment among the bilateral donors and its aid trend has been quite stable, suggesting a sustained commitment to environmental issues, nonetheless, the policy documents and regression outputs revealed that environmental aid from Denmark is geographically determined in advance and linked to other assistance. Denmark, similarly to other donors, treats environmental aid as part of its broader aid framework (74% of environmental funds were allocated to previously chosen Program Countries).

Situating aid for the environment as a part of donors’ general aid policies has its benefits and drawbacks. On one hand, integrating the environment sector with other policies and sectors ensures a certain level of stability and distributional predictability of aid. Moreover, some developmental problems are complex and require comprehensive solutions that cut across various sectors simultaneously.

On the other hand, environmental degradation is localized, and aid should be allocated to those most degraded regions, regardless of the economic or certain political factors. If aid for the environment is attached as a sort of “bonus package” to the largest recipients of overall aid, it is being misallocated and misused as it does not even attempt to solve the most serious environmental problems located elsewhere.

The presented allocation patterns of donors leave some developing countries seeking environmental funds powerless – they cannot adjust their geographical location or FDI levels to fit into the current allocation pattern. They are able, however, to increase their democracy level or increase their corruption level (which would increase the likelihood of obtaining GEF or World Bank funds, although this action is not a preferential one). However, the most promising activity to undertake would be lobbying for a just aid allocation pattern, based on recipient-need, not donor-driven policies or interests. This research was undertaken more to

raise awareness among donors of their aid allocation patterns than to encourage recipient countries to change their political or economic status. Adjusting oneself to an ill-suited aid allocation pattern is not an optimal solution.

Aid for the environment isn't and should not be driven by solely environmental factors, because other factors do matter (such as the level of democracy or corruption). Environmental funds allocated to environmentally degraded, undemocratic countries with high levels of corruption may never reach their intended purpose. Therefore, it is justified that apart from environmental determinants, there should also be political ones present. However, no convincing explanation exists for justifying the presence of economic variables in environmental aid allocation. FDI, import, export should not determine the level of environmental funds allocated. Nevertheless, there is still a need for further research as the regression analysis undertaken managed to explain from 28-89% of the donors' aid data.

Environmental aid has not gained any additional importance during the period analyzed as the aid volume and overall environmental aid percentages do not undergo any significant increases (except for GEF). Some donors (USAID, GEF or the World Bank) tend to allocate increased funds to the most globally environmentally significant countries (such as Brazil and the Philippines), yet the funds lag behind other sectors. Up to date there has not been a serious attempt undertaken to stop or reduce environmental degradation because the percentage of aid for the environment has either been decreasing (USAID, Japan until 1999) or has remained quite stable (Japan from 1999, Denmark, World Bank from 2001) for many donors. The commitments from the 1992 Rio Earth Summit have fallen short of the targets. As shown in chapter one, for some parts of Agenda 21 only 2% of the promised funds have actually been disbursed. Simultaneously, environmental degradation is increasing in the developing world. Environmental aid does not require new pledges and promises but the actual distribution of previously agreed amounts. Moreover, the varied and broad

understanding by donors of what is aid for the environment, presented in chapter three, only distances the goal of decisive and coordinated action being undertaken.

10.2. The environment and poverty are interconnected

Four out of six donors were influenced by poverty levels in the recipient country with regards to their environmental aid allocation patterns. The level of wealth or the percentage of the population living under \$2 a day, were one of the most common variables present in the regression outputs. Poorer countries were more likely to receive funds for environmental sustainability. Poorer societies were often purposely targeted, because for donors like the World Bank poverty alleviation is the main mission of the institution. Moreover, the World Bank, Japan and UNDP emphasize the strong linkages between poverty and environmental degradation.

It is difficult to evaluate the poverty-based approach as poorer countries do not suffer from all the types of environmental degradation covered by donors with their aid. Thus, not all of aid for the environment should be directed to them (one such example are funds for the reduction of CO₂ emissions which should be targeted to wealthier, industrializing countries). The environmental vulnerability index is also higher in countries with higher GNI per capita.

Poorer countries are particularly in need of aid for water and sanitation, and aid for decreasing the deforestation rate (aid for the sustainable management of the forestry sector). Therefore, this type of aid is justifiably targeting poorer societies. The majority of global environmental funds have been spent on the provision of clean water and sanitation, addressing one of the recipients' greatest areas of need.

Nonetheless, the very presence of the environment-poverty linkage in donors' policy materials shows that aid for the environment is set in a much larger aid framework and is to a

large extent subordinate to it. Donors focus on poverty reduction, and in order to achieve this goal they attempt to reduce the level of environmental destruction. For some donors like the World Bank, there is a very clear prioritization of these two issues. The only exception is the GEF as its only mission is environmental and all its activities are targeted to solving environmental problems. The GEF is not influenced by the levels of poverty in a country.

10.3. No distinction between multilateral and bilateral donors

There is no distinction present between the multilateral and bilateral donors in their approaches as there are no elements which would bind them into two separate groups. No common variable is visible for the multilateral or the bilateral group (see Table 35). There is no indication that multilateral institutions are more recipient-oriented than bilateral donors, which contradicts the perception that multilateral institutions are less politicized and more recipient-need driven.

Table 35. Regression variables present in the donors' outputs.

Bilateral donors		Multilateral donors	
Japan	Import levels Threatened mammals Environmental vulnerability Asia	World Bank	\$2 a day poverty CO ₂ emissions Corruption level FDI level Asia
USA	Biodiversity Egypt GNI per capita Deforestation rate	GEF	Threatened mammals Democracy level Environmental sustainability Corruption level Oil exports Environmental treaties
Denmark	Program Countries CO ₂ emissions Democracy level Natural capital Environmental vulnerability Asia	UNDP	Sanitation \$2 a day poverty Threatened mammals

Some bilateral donors reveal greater distributional similarities with multilateral donors than with other bilateral donors. USA reveals more variables in common with UNDP than it does with Japan. World Bank's policies and focus areas have more in common with Japan than the GEF or UNDP. Hence, there is no consistent approach that could be tagged "multilateral" or "bilateral" as there are numerous cross-sectional divisions.

However, bilateral donors are more influenced by regional variables than multilateral donors. All three bilateral donors have a regional variable present, while among the multilateral institutions only the World Bank allocates increased environmental funds to Asia. Thus, multilateral donors are less regionally biased.

Additionally, there is not one common (environmental or non-environmental) variable present for all the donors. This shows the wide variety of interests and focus areas of donors. This variety in itself is a positive phenomenon as ecosystems have multiple parts that need preservation: from the protection of watersheds, to forest management to clean air. All these elements are interconnected and influence each other. Thus, the diversification of aid for the environment is beneficial, because it ensures the holistic coverage of environmental problems as donors specialize in different environmental sectors. However, the volume of aid for different sectors remains unbalanced (with water receiving the largest volume) and some sectors like land degradation still seem to be lacking adequate funds.

10.4. Donors' policy coherency and aid volumes.

Donors' environmental policies are coherent. There appears to be no rift between donors' global policies and what is implemented at the national level. Additionally, the environmental regression output variables correspond to the donors' majority projects and focus areas, implying a level of policy continuity of donors (except for Japan).

There is consistency in donors' actions as national policies and project portfolios reflect global environmental ones. Although the degree to which they manage to implement their environmental policies varies. There is a distinction between grant and loan-issuing donors. There was a larger policy overlap found between loan-issuing donors and recipient governments than with grant-issuing donors and recipient governments. On the national level country governments have a larger say in the usage of loans rather than grants.

Loan-issuing donors like Japan and the World Bank cooperate more closely with the recipient governments, because the funds from these donors will be repaid in the future. Loan-issuing donors also have higher percentages of funds channeled through the public sector. In addition, the rise in the number of new aid lenders has provided the recipient governments with a greater choice of funds. Thus, loan-issuing donors are bound by the mutual relationship and influence of the national governments to a greater extent than grant-issuing donors.

Nonetheless, the larger policy overlaps between recipient governments and loan-issuing donors do not imply that loan-issuing donors are passive actors (as the examples of World Bank and Japan reveal in chapter nine), nor do they imply that loans are a preferred source of funding for national governments (on the contrary). Additionally, there is a coherency present between the national and global policies of donors and their project portfolios, thus, donors do have large enough political leverage to maintain their priorities on the national level. Their global allocation pattern is a reflection of their previously set focus areas and policies as well as the result of national-level negotiations.

Grant-issuing donors, like USAID, with clear and previously fixed priorities (biodiversity and policy management), try to act independently at the national level by choosing to work primarily with NGOs and private contractors. Moreover, USAID has the smallest percentage of aid channeled through the public sector. Similarly to the US, Denmark

also issues grants for the environment and 74% of its environmental aid is directed to the predetermined Program Countries. Hence, one may argue that the global aid allocation patterns of grant-issuing donors are more the reflection of donor decisions and policies rather than the influence of national governments. Grant aid appears more donor-interest than recipient need driven.

UNDP, on the other hand, is more bound by the recipient governments as they provide a part of its financing, yet it still maintains a broad spectrum of activities. UNDP is additionally dependent on funding from GEF for its environmental program in many countries. Regardless of the form of aid allocated (loans or grants), donors play an important role in environmental budget supplementation in the recipient countries.

Donors are overall consequential in their environmental policies undertaken. Yet these efforts still remain marginal. Environmental aid is subordinate to other aid sectors not only in donors' policies, allocation patterns, but also the overall environmental aid volumes. The holistic comparison of the donor/government aid framework in Brazil and the Philippines highlighted these issues. The percentage of aid for the environment has been very low in both countries.

Furthermore, as the case study of two biodiverse countries with threatened environments revealed, loans for the environment constitute 1-2% of all loans (grants obtain a much higher percentage). Therefore, the environmental sector is not a priority sector for financial commitment as 98-99% of loans are utilized for other purposes. These are figures for two of the most globally environmentally significant countries ("biodiverse hotspots" housing the remaining patches of tropical rainforests). If the most environmentally significant countries are obtaining such small percentages of funds, countries with less significant environments are more likely to receive even smaller amounts.

Nonetheless, the case studies did confirm that Brazil and the Philippines receive

increased amounts of aid for the environment compared to other countries of smaller environmental significance. Environmentally significant countries do obtain an increased volume of funds for the environment (especially grants). However, environmental aid amounts still present a striking contrast to other sectors which receive disproportionately greater amounts. In Brazil, the country with the largest remaining rainforest, the highest biodiversity levels on Earth, with one of the highest numbers of threatened mammals and the largest area deforested annually, aid for the environment constitutes only 4.7% of all aid funds flowing into the country (including the 91% of grants for the environment). Hence, it would be beneficial if donors not only rethought their allocation patterns of aid but also the volume of funds. The current aid amounts may not be enough to make a real difference.

10.5. Contributions and scope for further study

Academic interest in environmental aid has grown simultaneously with the aid volume from the 1990s. However, the overall knowledge on the topic is still limited, due to the definition and measurement challenges. This thesis presents the first study combining global aid allocation patterns with case studies regarding aid for the environment. Apart from testing donors' aid policies against actual allocation patterns (with the inclusion of new variables such as national security or detailed environmental indicators), the conducted study verified global tendencies and policies using two recipient country case studies. Broad trends were contrasted against specific national contexts to explore the coherency of donors' policies. The only other research up to date, testing the environmental aid allocation of major donors, is the book *Greening Aid?* published by Hicks et al. in 2008, during the research conducted for this thesis. Therefore, these are only the beginnings of a potentially influential new area of academic interest which, with the global interest in climate change and growing concerns

about the sustainable use of natural resources, could gain political importance in the future.

This study looked into the broadly defined environmental sector and the allocation of environmental aid. The tendencies and patterns uncovered through the conducted research may not only be applicable to environmental aid and the environmental sector in recipient countries. Aid for education and health may face similar dilemmas and challenges. However, it is out of the scope of this thesis to explore and cover these issues. Moreover, environmental aid itself still needs further understanding and continuous monitoring. Questions regarding donor motivations and aid effectiveness still require answers. If the concept of environmental aid becomes easily and uniformly understood, it will be more reliably measured. The current OECD definition is too broad and allows for various, at times conflicting, interpretations. Hence, the calculations and comparability of donor aid figures raises questions. Moreover, a clear, common definition of aid for the environment would allow for a decisive statement of the environmental problem and potentially increase the commitment of the donor community to solving it.

The undertaken study is only one brick on which subsequent ones need to be laid in order for a solid, comprehensive understanding to emerge.

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