Sida

JUNE 2005 • PATRICK KRATT

Sida's effort to reduce poor people's vulnerability to hazards

Reducing the risk of disasters

"More effective prevention strategies would not only save tens of billions of dollars, but hundreds of thousands of lives as well. Funds currently spent on intervention and relief could be devoted to enhancing equitable and sustainable development instead, which would further reduce the risks of war and disaster. Building a culture of prevention is not easy, however. While the costs of prevention have to be paid in the present, its benefits lie in the distant future. Moreover, the benefits are not tangible; they are the wars and disasters that do not happen."

Kofi Annan, Facing the Humanitarian Challenge:
Towards a Culture of Prevention, UNGA, A/54/1

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Abbreviations

ADPC	Asian Disaster Preparedness Center
AFRA	Sida's Department for Africa
ASIEN	Sida's Department for Asia
BCPR	Bureau for Crisis Prevention and Recovery
CEPREDENAC	Coordination Center for Natural Disaster Prevention in Central America
CRED	Centre for Research on the Epidemiology of Disasters
DAC	Development Assistance Committee
DFID	Department for International Development
HPN	Humanitarian Practice Network at ODI
HUM	Sida's Division for Humanitarian Assistance
IFRC	International Federation of Red Cross and Red Crescent Societies
INEC	Sida's Department for Infrastructure and Economic Cooperation
ISDR	United Nations International Strategy for Disaster Reduction
NATUR	Sida's Department for Natural Resources and the Environment
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
OECD	Organisation for Economic Co-operation and Development
PLUS	Sida's economic system for planning contributions
PRSP	Poverty Reduction Strategy Paper
RELA	Sida's Department for Latin America
SAREC	Sida's Department for Research Cooperation
SEI	Stockholm Environment Institute
SEKA	Sida's Department for Cooperation with NGOs, Humanitarian Assistance & Conflict Management
SENSA	Swedish Environmental Secretariat for Asia
SGI	Swedish Geotechnical Institute
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VARG	Vulnerability and Adaptation Resource Group

Summary

Over many decades now the number, frequency and the effects of disasters has intensified around the world. Between 1994 and 1998 an average of 428 disasters per year were reported globally. Between 1999 and 2003 this figure was 707. As a consequence, at least a quarter of a billion individuals every year are affected by disasters, with starvation, death and poverty as the ensuing devastating consequences. Despite the fact that disasters constitute global phenomena, it is the poorest people living in the poorer parts of the world that are hit disproportionately hard by the effects of disasters. Hence there is a clear correlation between disasters and poverty.

At the same time as poverty itself increases people's vulnerability to floods, erosion and hurricanes, for example, the occurrence of disasters is a highly contributing cause of the drastic increase in poverty. Reducing the effects of human activities on the environment, while at the same time strengthening the ability of vulnerable people to protect themselves and quickly recover after disasters, constitute key factors for global poverty reduction. Today's increased awareness that vulnerability to hazards is of vital importance for achieving the Millennium Development Goals, has strengthened the understanding of the importance of risk reduction measures.

In the international efforts to reduce world poverty, donors and other development actors have abandoned the previously prevailing view that disasters constitute unpredictable and unavoidable events. Today the possibilities and the need for various ways of reducing the disaster risk is widely recognised. However, we still lack a fundamental understanding of the reasons behind, and the effects of, disasters. Due to mankind's effects on the environment through the misuse of resources and an increased climate change, today's 'natural disasters' are far from 'natural'. Furthermore, a disaster does not develop into a 'disaster' until an earthquake or a hurricane, for example, has such widespread consequences that it exceeds the ability of a society to cope with the ensuing human and financial strains.

Recently a number of studies have stressed the economic advantages of risk reduction measures (in addition, of course, to the apparent positive effects for the human population). According to UNESCO calculations, only four dollars out of every 100 dollars that are spent on humanitarian assistance today are allocated to risk reduction measures. This is despite the fact that each dollar spent on risk reduction results in savings of up to 25 dollars in avoided disaster losses.[1] These calculations, as well as a number of others, illustrate the substantial financial savings that can be made by supporting disaster risk reduction programmes and projects.

The conditions for increasing donor financing of disaster risk reduction measures are, however, made more difficult since the ownership of these issues has fallen in a gap between humanitarian assistance and long-term development cooperation. The financing of Sida's humanitarian assistance is characterised by a short-term perspective, which renders it more difficult to adopt a long-term risk perspective in situations other than the immediate recovery phase. At the same time the development sector's limited financing of risk-reducing measures could frequently be attributed to a lack of understanding of the underlying causes of disasters, as well as of the potential for development cooperation to reduce disaster risk.

Even if the need to reduce poor people's vulnerability to hazards in many respects has been addressed in Sida's policy and guidance documents, this survey of existing disaster risk reduction measures illustrates that Sida does not take these concerns into adequate consideration. In the light of this the present report examines Sida's potential for integrating a disaster risk reduction perspective into its development cooperation work. The closing discussion recommends 13 ways in which Sida should proceed in order to effectively integrate a disaster risk reduction perspective into development cooperation, thereby strengthening the agency's work towards achieving poverty reduction and sustainable development.

1 *Disaster Risk Management in a Changing Climate*, Vulnerability and Adaptation Resource Group (VARG), 2005, s.24f.

Introduction: Sida's initiatives for disaster risk reduction 2004

In the Swedish Government Letter of Appropriation of 2004, Sida was commissioned to report on how humanitarian assistance and development cooperation contribute to "disaster risk reduction measures". In response to this assignment the Department for Co-operation with NGOs, Humanitarian Assistance and Conflict Management (SEKA) within Sida gave a consultant the task of surveying Sida's ongoing work within the field of disaster risk reduction. SEKA has further considered it their task to suggest, together with other regional and sector departments, a relevant agenda and to communicate important issues and inspiration, as well as providing contacts with relevant actors and networks within the area of disaster risk reduction. During the autumn this ambition resulted in a series of seminars on the theme "The Opportunities for Development Cooperation to reduce poor peoples' vulnerability to hazards", in which representatives from Sida, several government departments as well as Swedish NGOs took part in discussions on regional and thematic issues within this field.[2]

The overall purpose of the survey, as well as of the series of seminars, is to facilitate Sida's integration of a disaster risk reduction perspective into the cooperation with Sida's partner countries in which the risk of disasters is of obvious importance to the poor. The two processes have also constituted part of Sweden's preparations for the UN 'World Conference on Disaster Reduction' that was held in Kobe, Japan, Jan 18–25, 2005.[3]

This report is the outcome of Sida's initiatives mentioned above. In order to obtain a fundamental and common understanding of central concepts and relations regarding disasters, this report begins with a chapter detailing the background. Chapter 2 discusses the

2 Memorandum: "Om Sidas arbete med förebyggande av naturkatastrofer", written by SEKA head of Department Eva Asplund, Aug 23, 2004.

3 Ibid

importance of, and the opportunities for, working in a way that reduces the risk of disasters. Chapter 3 deals with identified obstacles and opportunities for integrating a risk perspective into Sida's work. Finally, Chapter 4 outlines a suggested action plan and provides recommendations regarding Sida's future work on disaster risk reduction. The information presented is based on current literature as well as on knowledge and experiences presented during the abovementioned seminar series.[4]

4 To facilitate going back and forth between the different sections of this report the individual sections have been drawn up separately. This does, however, result in certain marginal aspects of the discussion being repeated in the different sections.

1. Disasters and development cooperation

Concurrent with increased climate change the number, frequency and the effects of disasters has intensified around the world. As a consequence, at least a quarter of a billion people every year are affected by disasters, with starvation, death and poverty as the ensuing devastating consequences. In the international struggle to reduce poverty and suffering around the world, the devastating consequences of disasters constitute one of the major threats to these efforts.

In recent years the increased awareness of the possibility of reducing disaster risk has contributed to balancing the previously prevailing view that disasters are unpredictable and unavoidable events. This misconception (still current today) has been replaced by an increased focus on the fact that risk reduction measures may help to save thousands of human lives each year. Illustrating the causes of disasters and strengthening the understanding of how possible risk reduction strategies may serve to promote poverty reduction efforts, constitutes a first step towards such a process.

Causes of hazards

Hazards such as floods, earthquakes and droughts occur daily, very few of which have a global impact. Some have regional effects, while most have only a local impact on people's lives and well-being. The extent of the destruction caused by these hazards depends, among other things, on the intensity, duration, the geographical area as well as on the time when they occur.[5] Only a very small proportion of these hazards have such devastating consequences for the health and material assets of human beings that they are classified as disasters.[6] Hence it is important to distinguish between hazards and those relatively few occasions when these trigger disasters.

5 Dilley, Maxx, et.al, *Global Natural Disaster Hotspots*, draft, 2004, p.2.

6 Abramovitz, Janet, *Unnatural Disasters*, Worldwatch Institute, p.8.

A common misconception is that hazards are solely caused by 'natural'[7] processes within ecosystems when in actuality, the activities of human beings affect both the creation as well as the intensity of hazards to a large extent. The exceptional financial growth of the previous century resulted in an unparalleled improvement of material development and poverty reduction. However, in order to meet the increased global demand for food, fresh water and fossil fuel, financial, political and social activities have also caused changes to ecosystems. These changes are unparalleled in history and have resulted in a significant deterioration of the air and water cleaning capabilities of the ecosystems, as well as the preservation of nature's own ability to provide protection against hazards[8].

Human activities result above all in various forms of environmental degradation and an over-utilisation of natural resources. Through extensive global deforestation man contributes to a radical degradation of the earth's ability to absorb water and hence the risk of floods and fires rapidly increases. Destruction of forest land in mountainous areas increases the risk of landslides and extensive erosion, while similar activities in coastal zones increase the risk that hurricanes and cyclones will cause far greater damage on land. Drought and desertification are part of a more drawn-out course of events, but these processes are just as heavily affected by man's over-utilisation of natural resources through overgrazing, deforestation and extensive draining of water for irrigation purposes.[9]

Many factors indicate that the global climate change contributes to increasing the frequency and the intensity of hazards. A large majority of the most prominent researchers within this field are of the opinion that economic activities contributed to the increase in climate change of the past millennium. It is, above all, the carbon dioxide emissions resulting from the combustion of fossil fuels (in sectors such as energy, transport and waste management) that risk having negative reinforcing effects on, for example, floods and drought.[10] During the entire 20th century there have been changes to both temperature and rainfall and the increased greenhouse effect already constitutes a great danger to millions of people, threatening their access to drinking water and food. Warnings have also been raised about the long-term effects of melting arctic ice, which will result in rising sea level to such an extent that inhabitants of islands and coastal areas risk seeing their assets disappear beneath the sea.[11]

The need for risk reduction measures and adaptation to the new global threat posed by climate change is apparent. Man has a signifi-

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7 The term "natural" in this report refers to conditions and processes within the ecosystem that have not been affected by human activities.

8 Millennium Ecosystem Assessment, *Living Beyond Our Means*, 2005 (draft version) p.2.

9 Abramovitz, Janet, *Unnatural Disasters*, Worldwatch Institute, p.16.

10 Sida, *Climate and Development*, 2004.

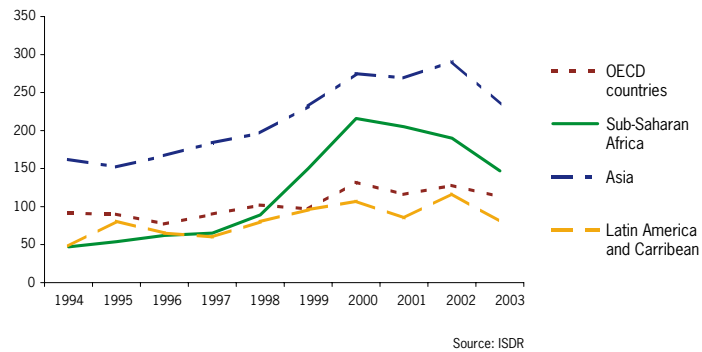
11 Trobe, Sarah La, *Climate Change and Poverty*, Tearfund, 2002.

cant impact on the occurrence of dry periods, floods and landslides, a fact that also provides us with ample opportunities to reduce the scope of these hazards. Through efforts to reduce human pressure on ecosystems, in the form of programmes aimed at reducing environmental degradation and over-utilisation of natural resources, risk reduction measures can contribute to an environmentally – and hence also socially and financially – sustainable development.

Unnatural disasters

Each year a variety of hazards have such devastating consequences for the societies in which they occur that the event turns into a disaster. There is no general consensus yet regarding when, by definition, such a transition takes place.[12] A commonly held view among researchers as well as practitioners is, however, that a hazard does not develop into a disaster until, for example, an earthquake or a hurricane has such widespread consequences for a society that it exceeds its ability to cope with the ensuing human and financial strains.[13] How often a given type of hazard occurs, and how serious the effects are to the environment and to people, varies by region. In Asia, Europe and North America, floods and storms are among those hazards that generally lead to disasters. Africa is hardest hit by drought and epidemics, while floods, volcanic eruption, hurricanes and earthquakes constitute the most frequently occurring hazards in Central America and the Andes. The island nations of the Pacific and the Caribbean, on the other hand, are mostly hit by tropical cyclones.[14] Figure 1 below shows the total number of disasters per region over the past decade.

Figure 1. Number of disasters per region 1994–2003



Source: ISDR

12 Centre for Research on the Epidemiology of Disasters (CRED) manages the internationally renowned and frequently used data base EM-DAT for the registration of disasters around the world. According to the CRED definition a disaster occurs when a hazard has such consequences that one or more criteria are met: 1) at least ten people reported killed; 2) at least 100 people reported affected; 3) if the government requires international disaster relief; 4) if the government declares a state of emergency.

13 Twigg, John, *Disaster Risk Reduction*, Good Practice Review, Humanitarian Practice Network at ODI, 2002, p.13.

14 ISDR, *Living with Risk*, 2004, p.37.

In 2004 a hurricane named Jane originated far out in the Caribbean Ocean. When the strong winds had swept past the island that is shared by Haiti and the Dominican Republic, Haiti was placed in a state of emergency with three thousand people reported dead and extensive material devastation. The Dominican Republic, on the other hand, had fared relatively well with around twenty people dead and a destruction of relatively minor proportions.[15] How is it that a hurricane sweeping in across an island results in a disaster in one of the countries, but not in the other? The answer, of course, lies not in the character of the hurricane but in the ability of these societies to protect themselves from such external pressures, as well as in the preparatory measures taken before the hurricane made landfall. The main reason for the destruction in Haiti was the extensive environmental degradation and the deforestation that had long been going on. At the time of the event approximately 70 percent of the surface of the Dominican Republic was still covered with forests, which provided considerable protection against the effects of Hurricane Jane. Leaving large parts of the forests untouched was the result of a deliberate strategy on the part of the government of the Dominican Republic, which prevented retreat into an even deeper poverty and which also saved the lives of thousands of people. This example emphasises the insight that it is primarily people's vulnerability to hazards that underlies the creation of a disaster. Figure 2 illustrates the underlying social dimensions.[16]

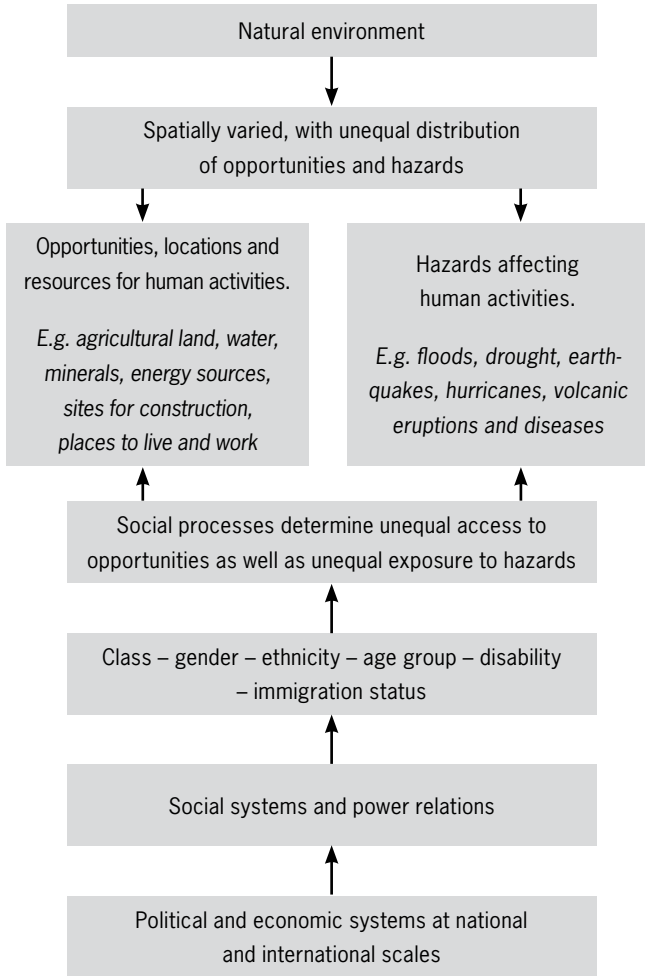
Ecosystems, as previously emphasised, provide a number of different resources, such as fertile land, water, minerals and sources of energy, which enables economic activities aimed at creating prosperity and wellbeing. At the same time natural processes contribute to the creation of various types of hazards that threaten these activities. Each geographical area is made up of more or less favourable combinations of natural assets as well as hazards. These combinations are mostly unevenly distributed, in the sense that the price of living within an area where one of the factors is favourable often requires the sacrifice of another factor. Flood plains prone to floods are relatively cheap places for production and housing, and volcanic slopes provide fertile soil for agriculture. Due to social and economic inequalities, it is primarily poor people who are forced to live in these unfavourable locations, as well as in lowland slum areas outside major cities, where the risk of hazards is particularly high.

It is essentially social processes, such as economic, political and social conditions, that determine whether individuals have secure access to resources like arable land, water and safe housing. The impact of these processes on where and how different social classes

15 The example is taken from an interview with Sálvano Briceño, head of the UN Inter-Agency Secretariat of the International Strategy for Disaster Reduction (ISDR). From World Chronicle, No. 968, Feb 28th, 2005.

16 Wisner, Ben et.al, *At Risk*, 2004, p.6ff

Figure 2. The social causation of disasters



live and work, as well as on their ability to prepare themselves for hazards and stay informed about them, consequently decides which individuals are most vulnerable to different types of hazards. Hence the different consequences of hurricane Jane for the inhabitants of Haiti and the Dominican Republic respectively should be seen as an interaction between two opposing forces: the active forces behind the hazards and the social processes generating vulnerability.[17]

17 Ibid, p.49f.

Activities aimed at reducing disaster risk consequently require focusing on:

- reducing the occurrence of hazards and
- reducing people's vulnerability to the effects of such hazards.

Risk =	**Propability of a specific hazard occuring**	**X**	**People's vulnerability to this hazard**

Poverty and disasters

Between 1994 and 1998 an average of 428 disasters per year were reported. Between 1999 and 2003 this figure was 707. The largest increase occurred in the developing countries, where the number of disasters increased by 142 percent.[18] As illustrated by the above discussion regarding the risk of disasters, poor people constitute the most vulnerable groups in society. More than half of all deaths caused by disasters occur in developing countries, where inhabitants only make up 11 percent of the global population. These statistics point to a strong connection between vulnerability and poverty.[19] Poor people live in unsafe houses on marginal land areas and lack information about what risk reduction measures to take in order to best protect themselves. Millions of slum dwellers are forced to live outside the social structures of major cities, without a chance to share the social safety net or to protect their assets against the threat of disasters.[20]

Over the past decades an extensive urbanisation has taken place. This global trend contributes to making millions of people increasingly vulnerable to various types of hazards. Today nearly half of the world's population lives in and around cities (a fourfold increase since 1950) and the urban population is presently expanding more than three times as fast as the rural population.[21] Concurrent with the increased concentration of people and material assets to cities, the risk of disasters has also increased; that is, both the risk of a hazard occurring as well as the risk of this event exceeding people's ability to cope with the ensuing human and financial strains. This is because of the town dweller's great dependence on a functioning physical and economic infrastructure to meet their vital needs – in contrast to the populations of rural areas that possibly, having learnt from experience, stand a better chance of finding water and food supplies after a disaster.

At the same time that poverty reinforces people's vulnerability to hazards, the occurrence of disasters in itself constitutes a highly contributing reason for the drastic increase in poverty. The earth-

18 IFRC, *World Disasters Report*, 2004, chapter 8.

19 Wisner, Ben et.al., *At Risk*, 2004, p.12.

20 DFID, *Disaster risk reduction: a development concern*, 2004, i.

21 Abramovitz, Janet, *Unnatural Disasters*, Worldwatch Institute, p. 23

quakes in El Salvador and Seattle resulted, for example, in an estimated 2 billion dollars' worth of financial losses. While the US budget was able to cover these costs with no apparent difficulties, the same sum equalled 15 percent of the total El Salvadorian GNP of that year.[22] The violent ravaging of Hurricane Mitch over Central America in 1998 was afterwards estimated to have left three million people entirely dependent on humanitarian assistance. It also reversed the financial development of Honduras back to the stage it was 20 years ago.[23] Increased environmental degradation, urbanisation and an increased climate change today make more people vulnerable to disasters. The reduction of our impact on the environment coupled with efforts to strengthen vulnerable people's ability to protect themselves and quickly recover after disasters, are key factors in global poverty reduction.

22 UNDP, *Reducing Disaster Risk – A Challenge for development*, 2004, p.20.
23 Tearfund, *One Disaster Too Many*, 2005, p.13.

2. Reducing disaster risk

The insight that people's degree of vulnerability to hazards is crucial for the efforts to achieve the Millennium Development Goals, has resulted in an increased understanding of the importance of risk-reducing measures.[24] Measures aimed at strengthening the economic development of poor countries and at reducing poverty do not have a clear risk reduction purpose, for the most part. As stated in previous chapters, human activities intended to spur economic growth frequently result in an increased risk of disasters. Consequently measures solely intended to spur economic growth also risk increasing not only the likelihood of, for example, floods and erosion occurring but also poor people's vulnerability to these hazards. The most evident example of this can once more be taken from the ravaging of Hurricane Mitch in Central America. Afterwards several studies pointed out that the extensive international support to rehabilitation and long-term development completely overlooked the vast need for disaster risk reduction measures. The focus has instead been put on reconstruction and on promoting regional economic growth.[25] As a consequence of this lack of risk perspective within development cooperation, it is estimated that more Central Americans are vulnerable to disasters today than before Hurricane Mitch.[26]

Disasters are said to be the result of failed development processes. Economic activities contribute, through increased carbon dioxide emissions, to environmental degradation and through overutilisation of natural resources, to increasing the risk of disasters occurring. Consequently, there is a great need for a disaster risk reduction perspective in development cooperation. This is partly

24 UNDP, *Reducing Disaster Risk – A Challenge for development*, 2004, p.15.

25 See among others Rocha, José Luis & Christoplos, Ian, *Disaster Mitigation and Preparedness on the Nicaraguan Post-Mitch Agenda*, in "Disasters", 2001, 25(3):pp. 240–250.

26 Contribution from a CEPREDENAC representative, during a workshop on the theme "Natural Disaster Hotspots". Arranged by the Norwegian Geotechnical Institute, Oslo, September 27, 2004.

to avoid the possibility that development programmes increase the occurrence of hazards and partly to work actively toward reducing people's vulnerability to these events. Programmes and projects that provide education regarding disasters, develop early warning systems and build disaster-proof houses constitute some hands-on examples of disaster risk reduction measures. However, it is mainly when a risk perspective is integrated into all parts of development cooperation work that Sida's programmes and projects can contribute to a more sustainable development and poverty reduction.

Three ways to reduce disaster risk

The disaster risk – that is, the risk of a hazard such as floods, a tsunami or an earthquake occurring, and the risk of this event exceeding people's ability to cope with the human as well as the financial strains – is more or less present in all of Sida's partner countries. As stated in previous sections, disasters are highly contributory reasons for people remaining poor and for increased poverty. For this reason it is of utmost importance that Sida's support to programmes and projects takes the disaster risk into consideration and manages this appropriately. To what degree this issue is pressing depends, of course, on the specific character of the programme, as well as on local environmental and social conditions. This report defines three complementary approaches that should be considered with regard to development cooperation, in order to reduce the disaster risk:

1. *To consider the impact of disaster risk on the preparation and implementation of each respective programme.* In order to avoid the results of poverty reduction work being lost when a disaster occurs, all of Sida's project and programme support must contain an analysis of how the disaster risk might affect each programme.
2. *To ensure, when preparing and implementing programmes, that they do not increase the disaster risk.* By analysing the way in which Sida's project and programme support affects the disaster risk, Sida personnel will be able to ensure that Sida operations do not contribute to increasing people's vulnerability to hazards. Such an analysis should preferably be carried out within the framework of the environmental impact assessment and should be a minimum requirement for all Sida efforts.
3. *To provide support to projects and programmes that aim directly at reducing disaster risk.* Within this category of measures Sida provides support to projects and programmes that have as their main objective, or as part of it, to reduce disaster risk. In contrast with the two other categories, these measures aim directly at the reduction of disaster risk, through, for example, re-planting forests or by strengthening the local people's preparedness for specific hazards.

It is of utmost importance that Sida, during preparation and implementation of all programme and project support, considers how each contribution affects, and is affected by, disasters. These efforts, however, have as their limited scope to ensure that the specific programme does not in itself increase the risk of a disaster. It is primarily within the framework of the third category that measures having disaster risk reduction as a clearly stated objective could contribute to an efficient disaster risk reduction programme and, in the long run, to sustainable development.

Sida's capacity to reduce disaster risk

Presently Sida lacks a specific strategy governing the agency's disaster risk reduction work.[27] This is the fundamental reason why a vast majority of Sida's efforts to reduce disaster risk constitute components of projects and programmes with other, more comprehensive, objectives. Consequently Sida's disaster risk reduction efforts in general only form part of the objective, and therefore often tend to become secondary objectives. For a more detailed review of Sida's current disaster risk reduction measures, see the Appendix.

Policy and guideline documents

The survey of Sida's disaster risk reduction work has identified only a few ongoing projects within this area. This result might partly be attributed to the fact that Sida lacks a strategy governing the process in which development cooperation could help promote disaster risk reduction programmes and projects. In order to clarify the opportunities to increase the future scope and quality of Sida's disaster risk reduction work, it is of utmost importance to map the documents and processes that might facilitate an integration of disaster risk reduction work into Sida's development cooperation, at both strategic and policy levels.

In addition to financial support, there are a number of policy and guideline documents and processes that help reinforce the ability of Sida and its partner organisations to reduce poor people's vulnerability to hazards. Over the past few years there has been a considerable development at policy and strategic levels, which brings about good prospects for an integration of a disaster risk reduction perspective into Sida's work. In 2003 the Swedish Parliament adopted a Government bill regarding a new integrated policy for an equal and sustainable development: *Shared Responsibility – Sweden's Policy for Global Development*.[28] This comprehensive policy states that cross-sector issues regarding, for example, environmental concerns and development must be managed more efficiently and with more force. A sustainable use of the environment and of natural resources

27 Memorandum, *Om Sidas arbete med förebyggande av naturkatastrofer*, Aug 23rd, 2004.
28 Government bill: 2002/03:122

constitutes one of the requirements for the long-term success of global development. This requires social adjustments in order to restrain the effects of environmental degradation, climate change and the consequences of disasters. In order to reduce poor people's vulnerability, the need for environmentally sustainable development and growth strategies is therefore emphasised. The Government policy, together with the supplementary Government bill Swedish Strategy for a Sustainable Development[29], provides directives on how to pursue international development cooperation.

In 2004 Sida published *Climate and Development,*[30] a booklet describing Sida's view of the climate issues. Here the reasons behind climate change are described, at the same time as the opportunities for development cooperation to reduce the effects of these changes – for example, when disasters occur – are emphasized. Sida's *Climate action plan* is based on this document and establishes how Sida should integrate environmental considerations into development cooperation, and further allocates the responsibility for specific areas among different departments and sectors. Programmes and projects aimed at strengthening the adaptation to climate change and disaster risk reduction measures have many things in common. Therefore it is important that Sida's work towards reducing the risk of disasters is designed according to the directives laid out in these two key documents.

In 2004 the Environmental Policy Division of Sida published a manual[31] containing accumulated knowledge on environmental issues, with the aim to promote the integration of an environmental perspective into Sida's overall work towards achieving a sustainable development. The manual is primarily intended for Sida personnel and describes, among other things, the linkages between sustainable utilisation of natural resources, environmental degradation and poverty alleviation. A special section deals with the issue of how people affect, and are affected by, disasters as well as the need for disaster risk reduction measures in order to achieve sustainable development and poverty reduction.[32]

Through cooperation between the Swedish Embassy in Bangkok and the Asian Disaster Preparedness Center, Sida has also supported a study regarding the links between environmental issues, utilisation of natural resources and disasters in Asia.[33] This study has received broad international recognition and has been employed by international actors operating within the field of disaster risk reduction.

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29 Government letter 2003/04:129

30 Sida, *Climate and Development*, Environmental Policy Division, 2004

31 Ibid.

32 Ibid. pp.30–31

33 Sida decision No: SENSA200306

Ongoing processes regarding disaster risk reduction

In 2004 Sida was involved in Sweden's preparations for the country's participation in the *UN World Conference on Disaster Reduction,* held in Kobe, Japan, Jan 18–22, 2005. The work that was part of this project, such as surveying Sida's disaster risk reduction efforts, and the series of seminars on the theme "The opportunities for development cooperation to reduce poor people's vulnerability to hazards", were included in these preparations. These processes have, among other things, deepened the understanding of the concept of disaster risk reduction and have also created opportunities for increased discussions between the Division for Humanitarian Assistance and the departments for long-term development cooperation. This has, in particular, led to intensified cooperation between the Department for Natural Resources and the Environment (NATUR) and the Division for Humanitarian Assistance (Hum), resulting in follow-up discussions regarding the prerequisites for an integration of a disaster risk reduction perspective into Sida's current method support, such as providing tools for environmental impact assessments.

In late spring 2005 Sida's regional humanitarian advisors in Bangkok, together with SENSA, arranged a regional seminar under Sida's management. Participants included representatives of several Swedish embassies in Asia, international experts and regional organisations with experience of disaster risk reduction work. The conclusions that were reached at the UN conference in Kobe constituted the starting point for these discussions. The purpose of the seminar was to analyse and identify obstacles and opportunities regarding an integration of disaster risk reduction efforts, environmental concerns and the maintenance of natural resources within development cooperation work. During the autumn of 2004 Sida took another positive step towards reinforcing cooperation with other international actors regarding these issues. Through discussions between SEKA and ProVention Consortium, Sida has been asked to be part of the organisation's steering committee. ProVention Consortium is an international organisation gathering actors such as donors, the UN, international organisations, NGOs, the World Bank, regional development banks and industry with the goal of strengthening international cooperation, hence increasing the knowledge of, as well as the efforts towards, reducing people's vulnerability to hazards.

3. Integrating a disaster risk reduction perspective

As previous sections of this report have shown, development cooperation can play an important role in the efforts of reducing people's vulnerability to hazards. It has also become evident that disaster risk reduction measures are critical to achieving the Millennium Development Goals relating to sustainable development and global poverty reduction. Even though this objective in many respects is addressed in Sida's policy and guideline documents, the survey of existing disaster risk reduction measures shows that within Sida these aspects are not taken into consideration to the extent that might be desirable.[34] There is no difference in this respect between Sida and many likeminded donors.[35]

An important first step in promoting increased integration of a disaster risk reduction perspective within Sida's development cooperation is to identify key fields of knowledge and organisational issues that might constitute obstacles or opportunities. Through interviews with Sida personnel a few such areas have been identified. On the basis of the conclusions drawn from the interviews, these areas are analysed further below.

Understanding of and knowledge about disaster risk reduction

The individual's knowledge of the opportunities for development cooperation to reduce the risk of disasters, as well as the awareness of the importance of disaster risk reduction measures to poverty reduction, varies among Sida personnel. All the interviewed programme officers who have a thorough understanding of these issues also belong to the personnel group that is considered to be best informed about the meaning and importance of environmental concerns and sustainable development. The apparent discrepancy

34 See Appendix for a detailed presentation of the results and conclusions of the survey.

35 Trobe, Sarah La & Venton, Paul, *Natural Disaster Risk Reduction*, Tearfund, 2003, p.7.

between this group and other interviewees illustrates the fact that basic environmental skills constitute a direct necessity for a programme officer's ability to acquire a disaster risk reduction perspective. But a majority of the interviewees lack skills in, as well as experience of, how Sida's development cooperation could contribute to reducing disaster risk. Such information would be desirable to them in their line of work.

In the light of the above observations, basic training on environmentally sustainable strategies for poverty reduction should be increased and reinforced. The fact that Sida's recurring internal environment training programme had to be cancelled in the autumn 2004 due to a low number of registered participants is, in this perspective, quite worrying. There are of course a number of factors explaining the lack of interest for such training. But the most important of these is that the Sida programme officers are being pressed for time, as well as, the amount of time required for the integration of other mainstraming issues (an obstacle that will be discussed in the following sections). The apparent interest in environmental issues shown by the vast majority of the interviewees further emphasises the need for additional analysis of the reasons behind the low personnel turnout at such training sessions. The internal training programme on environmental issues (basic education as well as courses aimed towards departments and divisions) is an important forum for enhancing personnel skills regarding poor people's vulnerability to hazards. Integrating a risk perspective into this training programme would constitute an important first step towards introducing a disaster risk reduction perspective into Sida's development cooperation.

The interviews moreover illustrate the fact that at least one or two employees in each department represented in this study possess considerable knowledge of disaster risk reduction activities. The autumn seminar series on this topic both revealed and contributed to this situation. It is of utmost importance that their understanding of the concepts and line of reasoning of this study is reinforced and utilised. These individuals are key persons for the integration of a disaster risk reduction perspective to relevant areas of development cooperation work.[36] As is the case with, for example, Sida's integration of climate issues into development cooperation, these representatives of relevant departments can form focal points for the integration of a disaster risk reduction perspective. In order to provide these key persons with the necessary support it is important to intensify the cooperation between Sida's Division for Humanitarian Assistance and NATUR, as well as INEC.

Among the regional departments the Department for Latin America (RELA) stands out with regard to awareness of the impor-

36 Trobe, Sarah La & Venton, Paul *Natural Disaster Risk Reduction*, Tearfund, 2003, p.17.

tance of disaster risk reduction measures for long-term development cooperation. One explanation for this is RELA's experiences from 1998, when Hurricane Mitch took the lives of more than 10,000 people and made two million Central Americans homeless. These tragic events – which were largely caused by floods and landslides and which set the financial development of Honduras back 20 years[37] – illustrated the need to reduce poor people's vulnerability to hazards. Sida's collected experiences from Mitch were afterwards published in a couple of documents.[38] These state, among other things, that disaster risk reduction measures within the extensive reconstruction package from Sweden, as well as many other donors, is an area that is not given high enough priority.[39] The lack of a risk perspective with regard to reconstruction is also confirmed by the Central American organisation CEPREDENAC, which works on strengthening the disaster risk reduction capacity of government agencies. According to estimates from this organisation, more Central Americans are vulnerable to disasters today than before Hurricane Mitch.[40] Sida should be able to draw many valuable conclusions from RELA's post-Mitch experiences, when effective forms of cooperation in the reconstruction phase were established between the humanitarian assistance and the long-term development cooperation departments.

Reducing disaster risk – an activity that is hard to define

In order to reduce poor people's vulnerability to hazards, access to qualitative information about the local and regional risk situation is required. Such risk information includes multiple environmental, social and individual factors, which makes it complex and difficult to understand. Therefore programme officers need to be able to combine expertise with a broad multidimensional poverty perspective. [41]

Consequently, disaster risk reduction is a broad area of operations affecting most parts of humanitarian assistance and development cooperation. This puts great demands on a holistic approach to poverty reduction. For this reason *Sida's Perspectives on Poverty*[42] is a key document for increasing Sida personnel's risk awareness, and constitutes a central tool for the implementation of a disaster risk reduction perspective into development cooperation. This docu-

37 Twigg, John, *Disaster risk reduction*, Good Practice Review, Humanitarian Policy Group, 2002, p. 9

38 See Sida publications: *Mitch and After*, 2001 & *Turning Disasters into Opportunities*, 2002

39 Sida, *Mitch and After*, 2001, p.29.

40 Contribution from a CEPREDENAC representative, during a workshop on the theme "Natural Disaster Hotspots". Arranged by the Norwegian Geotechnical Institute, Oslo, September 27, 2004.

41 *Disaster Risk Management and Climate Change*, Vulnerability and Adaptation Resource Group (VARG), draft discussion paper published in preparation for the UN conference in Kobe 2005, p. 23.

42 Sida, *Perspectives on Poverty*, 2002. For an international discussion about the multidimensional character of the poverty concept, see also *Voices of the Poor*, the World Bank, 2002.

ment describes poor people's specific vulnerability to economic, social, political and environmental factors. With regard to the latter, emphasis is given to poor people's dependence on vital natural resources such as fresh water, clean air, forests and fertile land to satisfy the need for food, energy and protection. A sustainable use of natural resources and protection of the environment are factors that, seen from this perspective, constitute prerequisites for successful poverty reduction.

As vulnerability to hazards constitutes part of being poor,[43] efforts should be made to integrate a risk perspective into Sida's existing approach to poverty. In order to facilitate the implementation of a multidimensional poverty perspective into Sida's development cooperation efforts, there is presently an ongoing internal process aimed at developing operational methods and supporting tools. This is a highly important process, which provides an opportunity for analysing how Sida's future development cooperation work could be enhanced with a better integrated disaster risk reduction approach.

Ownership of Sida's disaster risk reduction measures[44]

The division of Sida's work into geographic and thematic areas of responsibility makes the integration of a disaster risk reduction perspective a difficult task. As a result of this division important issues and perspectives within Sida's work are threatened of being overlooked, as no department has the primary responsibility for them. Such issues are mostly of a broad thematic character and do not easily fit into the existing division of responsibilities. Disaster risk reduction is an area where the issue of ownership has fallen in a gap between humanitarian assistance and long-term development cooperation.

Sida's humanitarian assistance work is governed by the humanitarian imperative and aims to reduce human suffering through meeting the immediate needs of those in most distress. Disasters and armed conflicts around the world require rapid humanitarian assistance, which of necessity implies a relatively short timeframe. Despite the fact that risk is a very tangible factor in humanitarian assistance work, the humanitarian actors more often than not have to accept that risk-reducing measures require a development perspective, as well as long-term financial commitment. For this reason actors within the humanitarian sector frequently emphasise the

43 The then head of division of SEKA/Hum Johan Schaar, as quoted in *Natural Disaster Risk Reduction*, Tearfund, 2003, p.25.

44 In 2003 Sarah La Trobe and Paul Venton at Tearfund carried out a survey mapping the disaster risk reduction work of a number of donors. The purpose was partly to evaluate what prioritisations and methods form the basis of such work, and partly to identify possible obstacles which donors themselves regard as a hindrance to improved efficiency in this area of operations. This section is partly based on the discussion of this study. *Natural Disaster Risk Reduction*, Tearfund, 2003, p.20ff.

need to strengthen the development sector's ownership of disaster risk reduction measures.

At the same time that this standpoint is reasonable, such an ownership has been hard to bring about in reality. A fundamental reason for this is the fact that development actors often view disasters as unpredictable and unavoidable deviations from continuing development. This misconception makes it difficult to clarify the impacts of development processes on disaster risks. Along the same line, development is considered to be disaster risk-reducing on its own – "Reducing poverty is the same thing as reducing the disaster risk." As has been previously emphasised in this report, there are significant flaws to such a line of reasoning. Development projects rarely include necessary and specific risk-reducing efforts, such as the construction of early warning systems, earthquake-proof buildings or specific training programmes concerning disasters. The incorrect views on disasters, together with the assumption that development efforts are always, by definition, disaster risk-reducing, constitute two prevailing misconceptions that were also expressed in the interviews with Sida programme officers.

The present division of areas of responsibility between Sida's Division for Humanitarian Assistance and the departments for development cooperation clearly illustrates that a lack of ownership of programmes and projects aimed at reducing disaster risk is also an issue within Sida.

There are no easy solutions to these problems. At the same time, risk constitutes one of the areas where the two worlds actually do meet, according to Johan Schaar, the former head of Sida's Division for Humanitarian Assistance. Therefore the obstacles presented by the lack of understanding of the true meaning of the concepts of risk and vulnerability provide an actual possibility to bridge the gap between humanitarian assistance and the development sector.[45] In addition to giving specific emphasis to training programmes and to increased cooperation between the departments, user-friendly and easy-to-understand methods and supporting tools must be developed in order to facilitate understanding and identification of risks and vulnerability.[46]

Financing

Currently neither the sector for humanitarian assistance nor that of development cooperation has the main responsibility for disaster risk reduction measures. Consequently risk-reduction efforts remain underfunded.

As has been stated in the previous section, the financing of Sida's humanitarian efforts is characterized by a short-term per-

45 *Natural Disaster Risk Reduction*, Tearfund, 2003, p.25.

46 For a review of different tools for analysing vulnerability and risk, see *Living with Risk*, ISDR, 2004.

spective, which renders it more difficult to adopt a long-term risk-reducing perspective in situations other than the immediate recovery phase. Previous sections have also pointed out that the development sector's limited financing of risk-reducing efforts depends, among other things, on a number of existing misconceptions concerning the causes and effects of disasters.

A further complicating factor constituting an impediment to the opportunities for increasing the financing of preventive measures is the inherent insecurity that exists within this area. Through previous experience and current analyses of social and environmental conditions, we have today the possibility to estimate, with a relatively high degree of precision, which societies run the highest risk of being exposed to disasters. However, it is never possible to predict the exact time and place that hazards will occur, which makes it even more difficult to prove the need for risk-reducing efforts. This uncertainty may direct the financing of disaster risk reduction efforts towards more tangible issues, such as conflict management. It consequently tends to manifest itself in a "wait-and-see" attitude, and therefore constitutes a highly contributing factor for the underfunding of risk-reducing efforts.

Despite the availability of reliable prognoses on coming hazards, several examples show that this is no guarantee that risk-reducing measures will be taken. Six months before the floods disaster in Mozambique in 2000, warnings were issued about unusually extensive torrential rains. The government of Mozambique asked the international community for 2.7 million dollars to be able to take preparatory measures, but received less than half of this sum. Once the floods was a fact, Mozambique received 100 million dollars in humanitarian assistance and, at a later stage, a further 450 million dollars for reconstruction.[47]

One of the explanations for the difficulties in finding financing of risk-reducing measures is the fact that once such programmes and projects have been implemented it is difficult to prove their direct benefits. The difficulty, as pointed out in the quote by Kofi Annan in the foreword of this study, lies in the fact that the effect of disaster risk reduction measures often are intangible. It cannot be proven that a non-event is the result of risk-reducing measures. Even if the need for "cost-benefit" analyses within this field is still immense, a number of recent studies have pointed to the apparent benefits of preventive measures (in addition, of course, to the apparent positive effects for the human population). According to UNESCO calculations, 4 out of every 100 dollars that are spent on humanitarian assistance are allocated to risk-reducing measures, despite the fact that each dollar spent on disaster risk reduction results in savings of up to 25 dollars

47 *Natural Disaster Risk Reduction*, Tearfund, 2003, p.12

in avoided disaster losses.[48] These calculations, as well as a number of others, illustrate the substantial financial savings that can be made by financing disaster risk reduction.

Sida's financing of risk reduction efforts must be increased. This should, however, take forms other than the setting up of a separate budget account for this area of operations. Such an approach would make the integration of a risk perspective into all Sida's areas of operations more difficult, since a too distinct division would reduce the individual programme officer's sense of responsibility for these issues.

Competition among other mainstreaming areas

Evaluations of previous experiences of integrating a new perspective into development work show that such efforts invariably lead to an initial increase in the workload of the individual programme officer.[49] This fact is also emphasised throughout the interviews, when a number of Sida programme officers point to the current workload, which is generally substantial, and feel that there is no room for yet another perspective. These conditions must of course be taken into consideration and are issues affecting general organisational and work-related circumstances within Sida. At the same time it is important to emphasise that the integration of a risk perspective into Sida's development cooperation largely implies strengthening the already existing multidimensional poverty, environmental and rights-based approaches. Hence this is not about carrying out major changes to the extent or the direction of the work of Sida programme officers, but rather about reinforcing the multidimensional approach that already exists within Sida's overall operations.

In the efforts of integrating a "new" perspective into Sida's overall operations it is of course also important to take into consideration the ongoing efforts of integrating other important sector areas. These presently constitute cross-cutting agency issues such as conflict management, HIV/AIDS, gender equality and environmental concerns. By identifying and cooperating around points that are of common interest to the sector areas, integration efforts (such as joint training programmes) could have mutually reinforcing effects and lead to an efficient integration of the different perspectives. A positive example of this is the joint training programme regarding gender equality, environmental concerns and conflict management, which is part of Sida's recurring expatriate training programme. This has generally been much appreciated by course participants as well as representatives of the different sector areas.

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48 *Disaster Risk Management in a Changing Climate*, Vulnerability and Adaptation Resource Group (VARG), 2005, p.24f.

49 *Mainstreaming Disaster Risk Reduction,* Tearfund, 2005, p.7.

4. Recommendations

As a follow-up of the SEKA seminar on vulnerability and disaster risk reduction, NATUR initiated a discussion in January 2005 of future efforts to integrate the issues into Sida's development cooperation. Representatives from SEKA, the Stockholm Environment Institute (SEI) and Sida's two help desks participated in the discussion, which was based on eight central areas identified as critical to reinforcing Sida's disaster risk reduction work. These areas were presented by Mats Segnestam, head of the Environmental Policy Division. The following recommended action plan for integrating risk and vulnerability to hazards in Sida's development cooperation work is based on that discussion and reflects the conclusions of this report.

1. Integrate disaster risk reduction in Sida's development cooperation

As this report makes clear, effective disaster risk reduction is a critical element of the efforts of development cooperation to reduce poverty and attain the Millennium Development Goals. Disaster risk reduction must be integrated into Sida's development work to enable the organisation to contribute to reducing the occurrence of hazards and human vulnerability to them.

2. Develop a strategy for managing Sida's disaster risk reduction initiatives

Sufficient integration of a disaster risk reduction perspective in Sida's development cooperation cannot be achieved without a long-term strategic plan. For that reason, it is critically important that Sida develops a strategy for how the integration process should be designed and maintained. Within the framework of the strategy, Sida should also consider the feasibility of allocating special funds to implement it.

3. Support partner countries' incorporation of risk assessment in PRSPs

National risk factors are observed in only a few current PRSP processes.[50] By means of grants to partner countries, Sida should promote the incorporation of risk assessments in these key documents, as they constitute an essential tool for the development of significant disaster risk reduction initiatives. Sida's participation in the OECD/DAC *Environment* group should be a central forum for that effort. In this process, SEI's present study of how the risk of disasters is dealt with in PSRP:s should also be an important source of related knowledge and experience in the area.

4. Promote flexibility in Sida's financial mechanisms to facilitate broad-based funding of disaster risk reduction

Disaster risk reduction is long-term by nature and activities must accordingly be funded within the budget frameworks of development cooperation. The fact that much of Sida's collective expertise on disaster risk reduction is currently found within the Division for Humanitarian Assistance must not be considered a reason for allowing humanitarian assistance work to bear the costs of disaster risk reduction alone. Within the framework of development cooperation, Sida should also provide multilateral support to build up financial resources in partner countries, organised as joint funds for disaster risk reduction purposes.

5. Integrate a disaster risk reduction perspective in Sida's country strategies, country analyses and programmes and projects

Guidelines for the orientation and scope of development cooperation are worked out in Sida's country strategies for each partner country. These strategies are designed based on information about national, regional and local conditions. Sida's efforts in collecting and processing this information should include an assessment of risk levels and vulnerability to hazards. As understanding of needs and solutions at the national and local levels is naturally found among the people of partner countries it is critical that Sida includes support for national capacity, national ownership and institutional expertise in disaster risk reduction. Sida's instructions for strategic country analysis are currently being revised. This process should integrate risk as a natural component of Sida's future development of country strategies. SEKA should work with Sida's sector departments to identify which types of information about local risk conditions are required to make satisfactory analyses in this area. In

50 *Disaster Risk Management and Climate Change*, Vulnerability and Adaptation Resource Group (VARG), draft discussion paper presented at the UN conference in Kobe, 2005.

accordance with the Swedish Policy for Global Development, Sida should also cooperate in this effort with Swedish NGOs, government ministries and institutions.

6. Integrate risk assessment in Sida's methodological tools for environmental impact assessment

Sida should explore opportunities to develop risk assessment methods in connection with existing tools used for environmental impact assessment as a step towards ameliorating the negative impact of development cooperation on risk and vulnerability. Sida should also ensure that its help desks are given the opportunity at the earliest possible stage to participate in processes related to assessing projects and developing country strategies. Only by these means can Sida ensure that contributions have undergone satisfactory risk assessment and thus have the potential to reduce the risk of disasters.

7. Identify specific areas of responsibility for Sida departments and units

Identifying central actors and fields of endeavour aimed at strengthening Sida's contributions to reducing the risk of disasters is essential for integrating a risk perspective into all aspects of Sida's development cooperation. Accordingly, it is important to specify every department's and unit's areas of responsibility in harmony with the existing environmental management system and action plan on climate issues. In light of SEKA's substantial knowledge and experience regarding risk and vulnerability, it is thought to be the most suitable department to identify and summarise distinct departmental roles in the area of disaster risk reduction. The conclusions of Sida's project on rehabilitation, which analysed the gap between activities within the humanitarian assistance and development cooperation, should be a valuable source of knowledge for this process.

8. Identify high-priority sector areas for Sida's disaster risk reduction initiatives

Sida should identify sector areas within development cooperation that are obviously closely related to risk and vulnerability. This should be done at an early stage of the integration process. This will allow established methods and approaches to be utilised in order to smoothly integrate risk. Such sector areas should include climate issues, governance, health and sustainable use of natural resources. First and foremost, Sida's climate network may constitute a useful forum for enhancing knowledge related to disaster risk reduction.

9. Provide disaster risk reduction training to Sida personnel

Sida should carry out training initiatives aimed at deepening knowledge among staff pertaining to risk and vulnerability to hazards and thereby increase understanding of the capacity of development cooperation to promote disaster risk reduction initiatives. Training of this kind may be organised as a complement to current internal environmental training. Towards the goal of integrating a disaster risk reduction perspective in Sida's development cooperation, training should clarify the connections between disaster risk reduction and poverty. Sida's document Perspectives on Poverty should be regarded as an essential tool in such a process. Environmental degradation and over-utilisation of natural resources linked to the risk of disasters should be emphasised. It should be possible to base future interdepartmental distribution of information on the knowledge reaped from the SEKA seminars. Experts within Sida's help desk functions and partner organisations in the environmental area are a vital asset in this effort. Special training initiatives should initially be carried out for SEKA staff in order to facilitate the integration process. The objective here is to reinforce the function of the Division for Humanitarian Assistance as a catalyst that advances the integration of these issues in Sida's development cooperation.

10. Produce fact sheets to disseminate lucid information about risk and vulnerability

Sida should consider a variety of methods for continually spreading new knowledge and sharing experience related to risk and vulnerability. The production of fact sheets on various related themes in the disaster risk reduction area is a suitable and proven method. Fact sheets secure the supply of basic information about risks related to disasters and transfer up-to-date knowledge about possible strategies towards disaster risk reduction.

11. Reinforce knowledge transfer between Sida's head office, embassies and partner organisations

Sida personnel working at Swedish embassies often have longstanding experience of disaster risk reduction initiatives. For that reason, Sida's regional departments should take action to increase the flow of information related to risk and vulnerability between embassies and the head office. Intensifying this knowledge transfer is considered a critical factor in strengthening the development departments' ownership of disaster risk reduction issues within Sida's development cooperation. At the same time, it is important to maintain the fuller cooperation between Sida and Swedish, regional and international partner organisations, such as that achieved by the series of seminars organised by SEKA. Swedish actors such as the Swedish Rescue Services Agency, Swedish Geotechnical Institute, the Red

Cross and Swedish Environment Institute as well as the Ministries of Foreign Affairs, Sustainable Development and Agriculture, Food and Consumer Affairs are valuable partners in the development of Swedish disaster risk reduction efforts.

12. Enable annual follow-up and evaluation of Sida's disaster risk reduction activities

Several measures should be taken to facilitate regular follow-up of Sida's work towards reducing risk and vulnerability to hazards. In particular, Sida's economic system for planning contributions (PLUS) should be enabled to categorise the sub-objectives and main objectives of programmes as reducing disaster risk. Such categorisation would provide good conditions for continuously monitoring the scope and quality of Sida's support of risk reduction initiatives, which would in turn shed light on the importance of activities within this field of work. These measures should thus be regarded as part of the efforts to integrate a risk perspective and deepen staff insight into these issues.

13. Take advantage of the current political will to strengthen disaster risk reduction initiatives

The work to implement the preceding recommended actions to strengthen the integration of risk into Sida's work should commence as soon as possible. With nearly 500 dead, Sweden was the hardest hit of all countries outside Southeast Asia by the catastrophic effects of the tsunami last December. One month later, Sweden participated in the largest conference ever on the subject of risk and vulnerability to hazards, at which the Swedish delegation urged major efforts to bolster disaster risk reduction initiatives around the world. This is evidence of strong political will to reduce the risk of disasters. In addition, the Ministry for Foreign Affairs was an initiator and driving force during the autumn in processes within the area. Accordingly, the opinion is that opportunities are particularly good at the moment to increase funding of disaster risk reduction initiatives and to reinforce the integration of risk and vulnerability to hazards in all aspects of Sida's development cooperation. Sida should not let this unique opportunity go to waste.

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Appendix:
Sida's support to disaster risk reduction

Methods and delimitations

In recent years knowledge about disasters has increased among researchers as well as practitioners. There has been a considerable increase in the number of published research studies and reports treating disaster risk reduction. Such research has strongly contributed to increasing our understanding of the human and ecological causes of disasters. Environmental and development actors have collected experiences from multiple local and regional disaster risk reduction projects and provided examples of feasible methods for reducing a society's vulnerability to hazards. Despite the fact that both researchers as well as practitioners often emphasise the central role of development cooperation and donors for disaster risk reduction, there is very little documentation regarding how donors view their own efforts within this area, and in which way they de facto contribute to meeting these objectives. In order to obtain a better understanding of these issues, Sida initiated the survey below.

Sida's computerised registration system for projects supported by the agency presently does not enable Sida programme officers to systematically categorise measures as related to reducing the risk of disasters.[51] For this reason, information that is relevant to meeting the objective of this report has been impossible to retrieve through this system. Instead, this survey is to a large extent based on interviews with selected Sida programme officers and managers. Priority has been given to interviewing personnel at regional departments and thematic departments working with countries and/or sector areas that are specifically connected to the causes and effects of disasters. These include the AFRA, ASIEN, RELA, INEC, NATUR, SAREC and

51 The fact that Sida does not have well-established and clear routines that enable the assembly of disaster risk reduction measures constitutes a barrier to implementing a disaster risk reduction perspective into Sida's ongoing work. This report therefore suggests that such a system should be developed.

SEKA departments. Discussions have also been carried out with staff of other Sida departments. In addition to performing the interviews a limited review of relevant policy and guideline documents has also been conducted

The methodological structure of this study is in many respects copied from two recently published studies developed by Tearfund.[52] The analytical framework used to treat the interview documentation is based on Tearfund's performance targets and indicators[53]. When analysing the results of the survey, drawing conclusions and putting these in a context the Tearfund study of the disaster risk reduction efforts of nine donors has been most useful.[54] With these studies as a base, it has been possible to draw better-informed and more general conclusions.

The limited amount of time allowed for performing the survey has limited the number of interviewees to a small fraction of Sida's staff. This fact, in addition to the difficulties in retrieving relevant material from Sida's electronic registration system, implies that the study cannot give a complete picture of Sida's disaster risk reduction efforts. This survey should instead be seen as presenting a sample of Sida's support to disaster risk reduction efforts. Despite this, a clear picture of Sida's disaster risk reduction efforts has emerged, through the interview documentation as well as through other meetings with Sida programme officers and managers. This picture has formed a sufficient basis for the conclusions that have been drawn from the report.

Terminology and definition of disaster risk reduction measures

It is not easy to agree on a definition of what constitutes a "disaster risk reduction project".[55] The area of disaster risk reduction lacks well established, appropriate Swedish terminology.[56] A consequence of this is, among other things, the fact that Sida programme officers in general do not employ the terminology and the perspectives included in the disaster risk reduction discourse.[57] These circumstances have contributed to a certain terminology confusion. They have also made the setting up of precise criteria for which measures should be classified as disaster risk-reducing and what measures fall outside this category more difficult. The way in which this categorisation is designed has, for obvious reasons, a significant impact

52 Tearfund is a British NGO whose efforts in the fight against poverty, founded on Christian beliefs, largely concerns disaster risk reduction measures. http://www.tearfund.org

53 Trobe, Sarah La & Davis, Ian, *Mainstreaming disaster risk reduction*, Tearfund, 2005.

54 Trobe, Sarah La & Venton, Paul, *Natural Disaster Risk Reduction*, Tearfund, 2003.

55 See, among others, *Natural Disaster Risk Reduction*, Tearfund, 2004, p.24.

56 For a good list of English terminology within the field, see the ISDR terminology homepage; http://www.unisdr.org/eng/library/lib-terminology-eng%20home.htm

57 The reasons for, and the consequences of, these circumstances are many and are treated in greater detail in chapter 3.

on the results, the conclusions and the organisation of the study. In consultation with Sida, this study has aimed first and foremost at surveying the measures that have as their main objective, or as parts thereof, to reduce people's vulnerability to hazards. Hence disaster risk reduction measures in this study are defined as: programmes and projects that have disaster risk reduction as a clearly stated objective in supporting documents.

Several Sida programme officers have emphasised during the interviews the disaster risk-reducing effect that poverty reduction might have for vulnerable people in Sida's partner countries.[58] Taking such a starting point makes it possible to perceive all of Sida's operations as disaster risk-reducing. This is, however, a problematic approach. It is evident that development cooperation frequently has a significant impact on disaster risk. It is, however, erroneous to make the a priori assumption that this potential effect is positive, consequently ignoring the previously proven fact that measures aimed at promoting development also risk increasing poor people's vulnerability to hazards. In those cases when the underlying mechanisms behind the expected outcome of a specific effort have not been clearly stated or described in the supporting documents, it has not been possible to categorise, with a good enough degree of certainty, the measure as disaster risk-reducing. Circumstances such as these have constituted the main obstacle to a more accurate survey. Consequently the interviews have tended to be relatively broad and of a more general character. The potential scope of interpretation of the interview material has, accordingly, been extended. During all interviews the discussion has had its starting point in the following fundamental issues:

- How the interviewee perceives development cooperation as affecting the occurrence of disasters, and in which ways disasters might affect poverty.
- In which way the interviewee perceives his/her line of work as affecting or being affected by poor people's vulnerability to hazards.
- How Sida's operations in general and the regional/thematic work of the interviewee in particular, can contribute to reducing the occurrence of, as well as people's vulnerability to, hazards.
- Whether the interviewee is working with any ongoing projects that have as their main objective, or as parts thereof, to reduce poor people's vulnerability to hazards.
- Whether the interviewee feels that he/she needs to increase his/her knowledge of how development cooperation can reduce the risk of disasters, and whether he/she sees any obstacles or

58 Similar discussions on potentially disaster risk-reduction effects have also been carried out with regard to measures that have sustainable development as their main objective, or as parts thereof.

threats to the opportunities for further developing Sida's disaster risk reduction efforts.

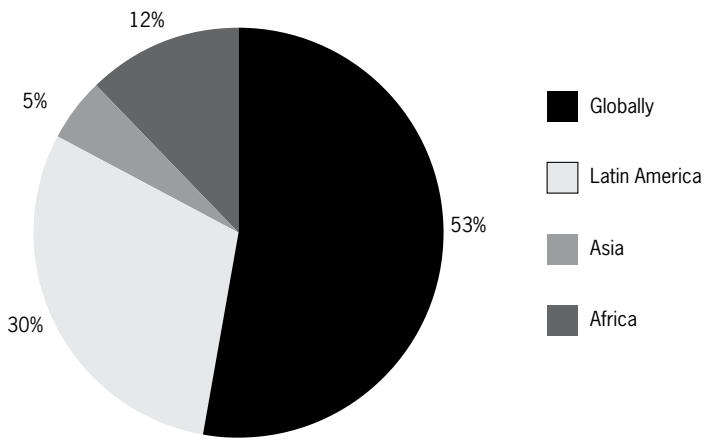
Sida's overall operations

In 2004 Sida allocated approximately 200 million SEK in support to measures that have as a clearly stated objective, or as parts thereof, to reduce the risk of disasters.[59] As no inventory has previously been made, it has not been possible to compare this result with that of other time periods. The number of potentially risk-reducing measures is believed to be significant.

Sida lacks a specific strategy that governs the agency's disaster risk reduction efforts.[60] This is the fundamental reason why a vast majority of Sida's efforts to reduce the risk of disasters constitute components of programmes with other, more comprehensive, objectives. Consequently Sida's disaster risk reduction efforts in general only form part of the objective, and therefore often tend to become secondary objectives.

Geographic distribution

A majority of the surveyed support includes programmes and projects that are to be implemented at a global level. Otherwise measures often tend to be specifically limited to certain geographic areas. The support is primarily concentrated to regions where the effects of disasters have received specific attention. Sida's support to disaster risk reduction measures at a global level totals 106.2 million SEK; Latin America 60.65 million SEK; Africa 25.1 million SEK and Asia 10.8 million SEK. (See Figure 3 below)



59 Refers to measures that have as a clearly stated objective, or as parts thereof, to reduce people's vulnerability to natural disasters.

60 Memorandum, *On Sida's risk reduction work*, Aug 23, 2004

Global support

Sida's support to disaster risk reduction measures at a global level includes, among other things, providing support to ISDR/OCHA's disaster risk reduction efforts (2 million SEK)[61], as well as supporting the national Red Cross and Red Crescent organisations in order to strengthen the international Red Cross and Red Crescent Federation's work towards the building up of local competence for developing "early warning systems", cyclone protection as well as a rapid reaction to disasters (100 million SEK).

Latin America

The fact that 30 percent of Sida's additional support today is allocated to efforts in Latin America can partly be explained by the high annual frequency of disasters in the region, and partly by the attention which the area has received after suffering the devastating consequences of Hurricane Mitch in 1998. As part of the follow-up work regarding Hurricane Mitch Sida provided support to the reconstruction of disaster-proof housing in El Salvador (12.7 million SEK)[62] as well as 2.5 million SEK for rural development in Nicaragua, with the focus being on strengthening preparedness for disasters.[63]

Asia

Among Sida's support to programmes in Asia is a risk-reducing component that is part of a major rural development program in Vietnam (5.4 million SEK)[64]. In its country strategy for Vietnam for 2004–2008 Sida has, moreover, emphasised the need for national disaster risk reduction efforts, as well as for efforts intended to increase the preparedness for these disasters, as these constitute some important measures that need to be taken in order to achieve poverty reduction[65]. Within the framework of the Vietnam Partnership for disaster reduction Sida prepared a dialogue concerning support to an international resource in the form of a disaster management fund. In North Korea, Sida provided 4 million SEK in support during the previous year to the re-planting of forests in order to prevent erosion.[66] The fact that only 5 percent of the total support directed towards reducing the risk of disasters is allocated to efforts in Asia is remarkable, partly with regard to the fact that more than one third of all reported disasters occur in this

61 Decision No: SEKA 449/04 Edoc
62 Decision No: INEC376/01
63 Decision, AMUNIC, 62000278
64 Number of measure; the Quang Tri component: 46000159
65 Government Decision No: UD2003/64881/ASO
66 Decision No: SEKA 427/04

region,[67] and partly because more than three-fourths of the total number of deaths globally that can be attributed to disasters occur in Asia.[68]

Africa

Sida's efforts to reduce people's vulnerability to hazards in Africa are to a large extent part of a series of measures promoting regional cooperation, with the aim of strengthening the capability of African countries to maintain shared river systems.[69] In the 2004 "Strategy for Swedish Support to Poverty Reduction and Sustainable Development in the Lake Victoria Region 2004–2006"[70] disaster risk reduction efforts are considered to be an integral part of Sida's work towards poverty reduction and sustainable development in the Lake Victoria region.

Support to research regarding disaster risk reduction

Sida provides substantial support to research and methodological development within the field of disaster risk reduction. One explanation for this is that research within this field has received more attention over the past decade, as a result of the introduction of the concept "sustainable livelihoods", which in many respects concerns people's ability to protect themselves from traumas as well as deal with them (among them disasters)[71]. Moreover, research institutions in Sida's partner countries tend to prioritise research and methodological development within the field of disaster risk reduction. Approximately 2 million SEK have also been directed to research cooperation between Swedish universities and institutions in Sida's partner countries on, among other things, risk surveys, town planning aimed at reducing vulnerability, as well as on the development of methods for risk analysis. In addition to this the Stockholm Environment Institute received 2 million SEK[72].

Through the cooperation between the Swedish embassy in Bangkok and the Asian Disaster Preparedness Center, Sida has also provided support to the development of a study regarding the links between the environment, the utilisation of natural resources and disasters in Asia[73]. This study has received international attention and has been employed by international actors working within the field of disaster risk reduction. For a further description of Sida's support to research on disaster risk reduction, see table 1 below.

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67 Statistics include disasters reported between 1994 and 2003. Figures retrieved from the CRED International Disaster Database and presented by ISDR.

68 Abramovitz, Janet, *Unnatural Disasters*, Worldwatch Institute, p 8

69 Decision No: NAT122/02, NAT88/04, NAT59/02, NAT/65/03, Component No: 73004559, 73000538

70 Regulatory decision no. UD2004/43530/AF

71 Wisner, Ben et.al, *At Risk*, 2004, p 95

72 Decision no. NATUR240/04

73 Decision no. SENSA200306

In view of the highly delimiting selective criteria and the definition problems arising as a result of the lack of appropriate Swedish terminology, Table 2 illustrates Sida's total support to disaster risk reduction measures in 2004. Note that the programmes and projects described are those that have as a clearly stated objective, or as parts thereof, to reduce the risk of disasters. This collection does not include the vast number of measures that are estimated to be potentially disaster risk-reducing.

Table 1. Sida's support to research in disaster reduction (SEK)

Organisation or institution	Financial support	Geographic research area	Thematic research area
SEI	2,000,000	Global	Research and methodological development
ADPC	200,000	Global	Study on the relationship between natural resource usage and disasters.
Stockholm University	450,000	Mozambique, Tanzania, Vietnam	Developing risk analysis methods for flood risks.
Stockholms universitet	450,000	Argentina	The effects of disasters on society's collective memory
Lund University	450,000	Kenya, Philippines	Risk reduction and handling in connection with disasters in built-up areas
Lund University	400,000	Vietnam	Survey and develop early warning systems for floods
Swedish University of Agricultural Sciences	450,000	Vietnam	Household strategies and institutional capacities for handling disasters
Total	**4.4 MSEK**		

Table 2. Sida's support 2004 (MSEK)

Global	
IFRC	100
ISDR/OCHA	2
PAHO	2
SEI	2
Sida/ADPC	0,2
	106,2
Africa	
NELSAP	0,5
Okavango Delta Mngmt Plan	2
PUNGUE	6,5
ZACPRO	8,3
Small Holder System Innovative	4,4
Global Water Partnership	2,5
Stockholm University	0,45
Lund University	0,45
	25,1
Latin America	
FUSAI	12,7
FOCUENCAS	41
AMUNIC	2,5
Stockholm University	0,45
ISDR/OCHA	4
	60,65
Asien	
ISDR/OCHA	0,5
CONCERN/TRIANGLE	4
CHIA SE	5,4
Lund University	0,4
Swedish University of Agricultural Sciences	0,45
	10,8
Totalt	**202,7**

Halving poverty by 2015 is one of the greatest challenges of our time, requiring cooperation and sustainability. The partner countries are responsible for their own development. Sida provides resources and develops knowledge and expertise, making the world a richer place.

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