

Human-Driven Disasters

Violent Conflict, Terrorism and Technology

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Inter-American Development Bank

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Foreword

The term “disaster” conjures many images, most often of such natural hazard as earthquakes, hurricanes, floods and fires. However, there are other types of disasters that are equally catastrophic and are a result of human actions and accidents. Such “human-driven” disasters can be classified as “technological” events (e.g., dam breaks and oil spills) or derived from “violent conflict” (terrorist acts, civil conflict).

The Inter-American Development Bank has been in the forefront of development assistance in Latin America and the Caribbean for several decades. The IDB’s current policy on Natural and Unexpected Disasters (OP-704) focuses mostly on natural hazards. Definitions are needed concerning how to cover risk management and response in the area of human-driven disasters in Latin America and the Caribbean.

While dealing with natural hazards has been a part of the Bank’s development agenda, the management of human-driven disasters will demand a more comprehensive risk management framework. Such events as violent conflicts and terrorism are having a great impact on the socioeconomic development of the region. The Bank’s role in assisting countries in reaching their development goals must also encompass this broader agenda of mitigation and response to human-driven disaster scenarios. This paper outlines such an approach, based partially on the results of the seminar on “Human-Driven Disasters: Violent Conflict, Terrorism, and Technology” organized at the IDB in June of 2003.

Human-driven disasters are a fact of life in Latin America and the Caribbean. The Bank needs a clear set of policies and good practices to guide its actions. Through a mix of risk mitigation investments and well defined financial protection strategies the IDB, borrowers, and the private sector can shift from a primarily improvised *ex post* response to more comprehensive strategies of risk management. Such an approach will greatly enhance the progress and sustainability of current and future development assistance.

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Executive Summary

The Inter-American Development Bank is reviewing its policy on natural and unexpected disasters (OP-704), which currently focuses primarily on natural hazards in Latin America and the Caribbean. This paper explores and expands on the definition and scope of “human-driven” disasters in order to strengthen the policy in its present area of “unexpected” disasters. Disasters are herein divided into two broad groups: natural and human-driven, with the latter further categorized into violent conflict and technological hazards. It does not consider chronic emergencies such as famine and disease resulting from drought and global contagion, respectively, nor financial meltdown as in the Asian, Mexican, Argentine, and other financial crises. It is assumed that these types of emergencies are addressed under separate IDB institutional policies and instruments.

This paper tries to clarify definitions, present a typology of disasters, and analyze current IDB disaster policy gaps and issues through a human-driven lens. It also discusses related eligibility and financial criteria, and analytical, programming and financing instruments. Experience from Latin American and Caribbean countries and other international financial organizations such as the World Bank and the Asian Development Bank, the United Nations and select bilateral agencies working in the area of human-driven disasters is drawn upon. Finally, recommendations are made pertaining to strengthening current IDB policies in the area of “unexpected” or “human-driven” disasters. The intended goal of this paper is to expand the IDB’s current disaster policy in the area of human-driven disasters.

Although differing somewhat in the trigger, scope, duration, and requisite actions, most disasters—both natural hazard and human-driven—generally result in widespread physical damage, death, disability, and displacement, as well as the disruption of economic and social activities. However, regardless of the type of disaster, they all necessitate speed, flexibility, and accountability in response.

Natural and human-driven disasters also share the relative importance of risk management and vulnerability assessment, early warning, mitigation, preparedness and related preventive measures, as well as needing an organized response at the national level and a clear understanding of the roles of international organizations.

In the case of human-driven disasters, there is a special relationship between poverty, human-driven disasters and development that needs to be addressed. Given the strong link between poverty and human-driven disasters, achieving the overarching IDB mandate of poverty reduction depends heavily on preventing, mitigating, and managing the risk, vulnerability, and impact of such disasters. The IDB currently has a number of existing social and institutional development strategies, programs, and instruments to address human risk and vulnerability through various mechanisms.

The Bank's overall strategic approach to disaster risk management and response, that is, moving upstream to emphasize the assessment of risk and vulnerability, and the attendant risk management, mitigation and prevention, is consistent with the strategically phased actions required to address human-driven disasters of other donors. However, while “unexpected disasters” feature prominently in the title of the existing IDB disaster policy, what constitutes such disasters (e.g., the definition, scope, and eligibility criteria for engagement and financing, as well as the analytical, programmatic, and resources instruments) requires further elaboration.

A recent evaluation of the IDB’s current policy effectiveness has shed light on its overall weaknesses and strengths. In sum, the IDB will need to revise its current policy to (i) clearly define the types of disasters it covers; (ii) integrate the efforts of its various departments to mainstream disaster risk reduction; (iii) encourage proactive risk management policies in borrower countries

through specific resource and time commitments; (iv) prepare the ground for increased private participation in risk transfer in vulnerable countries; and (v) assess the benefits of reformulating loans by better documenting their processes. In addition, this evaluation makes several detailed recommendations for the Bank's programming and financing strategies for natural and unexpected disasters (IDB, 2004).

The IDB's current financing of programs on violence prevention and social inclusion is central to addressing human-driven disasters of a political and communal nature and cannot be underestimated. In addition, the pre-established menu of eligible activities for emergency financing from its Immediate Response Facility (IRF) includes help in speeding up the restoration of services, financing temporary repairs, and cleaning up. The Bank also contributes to multi-donor trust funds such as the one established in the wake of Hurricane Mitch. The reallocation of undisbursed funds and portfolio restructuring is utilized to provide financial assistance in the wake of a disaster.

In addition to the above types of funding, there is a need to consider other forms of financing. The countries should evaluate their methods of loss financing, be it through reserve funds, calamity funds, contingent credit, insurance or through external credit. The level of use of each instrument should be a result of an integrated risk management strategy.

The IDB should be guided by a clear set of country eligibility, operational (rules of engagement),

and financing (items eligible for expenditure) criteria in human-driven disasters emanating from violent conflict, acts of terrorism and technological disasters. In addition, a review of human-driven disaster indicators for risk and early warning and the formation of an integrated conflict analysis instrument could be carefully integrated and mainstreamed into existing IDB strategic country programming and sector work, such as for country strategy papers, programming exercises and poverty reduction assistance.

In the immediate aftermath of a disaster, where a country assistance strategy is absent, outdated or inadequate due to the changed circumstances, an interim or Transitional Assistance Strategy (TAS) may be required to guide short- to medium-term IDB emergency response.

Regarding risk management financing instruments and services, it is recommended that the IDB evaluate existing mechanisms to identify links, overlaps and gaps in areas of information needs, institutions, delivery mechanism and systems, and coverage and costs. These range from traditional family self-insurance schemes depending on remittances and savings to compensatory finance to stabilize export earnings; commodity prices; reducing the costs of insurance; catastrophe bonds and international reinsurance markets; weather-based insurance replacing traditional crop insurance; rural finance institutions (cooperatives and banks); micro-insurance schemes; community projects; social funds; targeted work welfare programs; free food; and grants.

Definitions, Typology and Triggers

DEFINITIONS

Expanding on the current IDB definition,¹ the term *disaster*, as used in this paper, refers to an emergency caused by natural hazards or human-induced actions and resulting in a significant change in circumstances over a relatively short time period. Examples are death, displacement, disease or disability, food insecurity, damage to physical and service infrastructure, depletion of human and social capital, institutional weakening, and a general disruption of economic and social activity.²

Violent conflict is defined as organized acts of social and political violence pitting one or more groups against one another and/or the state, or pitting states against each other. Violent conflict can be manifested in some form of armed conflict.³ While conflict is a normal and not necessar-

ily negative part of social and economic transformation, violent conflict is always destructive.

Violent conflict is distinguished from criminal violence (organized and otherwise) and household (domestic) violence in that it is typically massive in scale and organized with political or ideological ends. Violent conflict is exemplified by war and armed struggle between one or more groups (e.g., organized peasants, indigenous peoples, labor and/or political groups) resulting in mass violence.

Terrorism, a form of warfare, is a classical example of violent conflict. It is defined as the use of violence, often against people not directly involved in a conflict, by groups operating clandestinely, which generally claim to have high political or religious purposes, and believe that creating a climate of terror will assist in the attainment of their objectives.

¹ As defined in IDB OP-704, "Natural and Unexpected Disasters," the term "disaster" refers to "any emergency due to natural, accidental, or human-generated actions that cause death, damage to the physical and service infrastructure of any borrowing member, or a loss of material goods so extensive that economic and social development is affected" (IDB, 1999).

² Technically, "natural disasters" are actually "natural hazard events" though the term natural disasters is often employed and understood to refer to such events.

³ According to the Peace Research Institute in Oslo (PRIO), an armed conflict is a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths. The separate elements of the definition are operationalized as follows:

(1) Use of armed force: use of arms in order to promote the parties' general position in the conflict, resulting in deaths. Arms: any material means, e.g., manufactured weapons but also sticks, stones, fire, water, etc.

(2) 25 deaths: a minimum of 25 battle-related deaths per year and per incompatibility. The Stockholm International Peace Research Institute (SIPRI) uses a combat-related parameter as a basis for establishing the definition and intensity of armed conflict, with 1,000

deaths over the course of a conflict being utilized to determine an armed conflict.

(3) Party: a government of a state or any opposition organization or alliance of opposition organizations. Government: the party controlling the capital of the state. Opposition organization: any nongovernmental group of people having announced a name for their group and using armed force.

(4) State: a state is an internationally recognized sovereign government controlling a specified territory, or an internationally unrecognized government controlling a specified territory whose sovereignty is not disputed by another internationally recognized sovereign government previously controlling the same territory.

(5) Incompatibility concerning government: incompatibility concerning the type of political system, the replacement of the central government or the change of its composition. Incompatibility concerning territory: incompatibility concerning the status of a territory, e.g., the change of the state in control of a certain territory (interstate conflict), secession or autonomy (<http://www.prio.no/cwp/ArmedConflict/>).

Natural hazards result from natural phenomena such as earthquakes, hurricanes, tidal waves, droughts, volcanic eruptions and landslides. They typically leave physical destruction, disability and death in their wake and disrupt economic activities and production. Natural hazards can also provoke severe pollution and other environmental damages. However, unlike violent conflicts, they are not typically characterized for producing severe effects on institutions, social capital and social cohesion. In fact, the populace tends to galvanize around natural disaster response and social solidarity is often reinforced. They are usually of short and intensive duration, and episodic or seasonal in character.

Technological disasters are those originated by faulty design, construction or operation of man-made materials and systems. Examples range from structural collapse to explosion, conflagration, pollution, contamination and/or some combination thereof. Like natural hazards, technological disasters may be short in duration, but have long-term impacts such as in the case of a nuclear meltdown.

Vulnerability to disasters refers to a weakened state of the economic and social asset base from which one can prepare, prevent, and/or recover from a disaster. The poor are typically most vulnerable and suffer the greatest impact from natural and human-driven disasters because their settlements are often in high-risk areas.

The *linkages* between natural hazards and human-driven disasters and distressing environmental and humanitarian situations are increasingly present, particularly as the poor are compelled to exploit

scarce environmental resources simply for survival. Deforestation, land degradation, and related food security are shaped by human resource use (e.g., urban squatting on marginalized hillsides), in turn sometimes creating conditions for flooding, landslides, and drought.

TYOPOLOGY

There are two broad categories of disasters: natural hazards and human-driven. The human-driven ones may be further classified into two basic types: violent conflict, and technological hazards (see table 1 below). In addition to these broad categories, the onset and duration of any type of disaster needs to be considered. For example, while many disasters can have a sudden onset and be of short duration (e.g., earthquakes, terrorist acts, tidal waves, etc.), others can have a long onset (such as drought and civil conflict) or be of long duration (e.g., winter emergency, nuclear contamination, civil war, etc.). Yet other disasters can be cyclical in nature, such as seasonal events like hurricanes and flooding. These factors need to be taken into consideration when formulating a disaster policy.

TRIGGERS

Disasters have a range of triggers. Natural hazards may be triggered by events such as earthquakes, tidal waves (tsunamis), hurricanes, volcanic eruptions (lava, ash, rock), floods, drought, epidemics, forest fires, and erosion, or some combination thereof; and technological accidents by such human-made events as explosions, oil spills, and chemical mishaps.

Table 1: Typology of Disaster Triggers

Natural Hazards	Human-driven Disasters	
	Violent Conflict	Technological Hazards
Earthquakes Floods / Riverbank erosion Landslides Cyclones / Typhoons / Hurricanes Tsunami/ Tidal Waves Volcanic eruptions Fires – forest, other Unusually cold weather / Winter emergencies Droughts	Mass violent civil disturbances International conflict Civil war Localized armed conflict Terrorism	Nuclear contamination Industrial disasters Poisoning of water courses– chlorine, cyanide, mercury, lead, etc. Environmental pollution Dam and structure failures Oil spills

Adapted from UNICEF (2001) and Albala-Bertrand (2002).

Violent conflicts are typically triggered by poor governance, institutional failure, and economic, political, or identity struggles. Terrorism is often inspired by hatred, revenge, greed, or political and psychological insecurity by groups that have chosen to operate outside the bounds of civilized discourse (Carr, 2003).

In general, patterns of development over the past few decades—such as widespread poverty, rapid and uncontrolled urbanization, and environmental degradation—have led to an increased severity in damages associated with natural hazards. Institutional failures, weak state performance, and a sense of exclusion, inequity, and despair have been closely associated with human-driven disasters. Technological disasters mostly derive from poor quality design, operation and maintenance.

While there are general trends in the pattern of both natural and human-driven disasters, there are exceptions to the norm. For example, natural hazards tend to be localized, short and intense in duration, require more technically oriented responses, and usually result in social cohesion. However, a natural hazard like a drought can be just the opposite: regional, long-term and resulting in social upheaval. Likewise, human-driven disasters originating in violent conflict tend to occur in weak or failing states, are often subregional, regional or global in dimensions, prolonged and episodic in duration, politically-oriented in response, and result in social fragmentation and weakened social cohesion. An obvious exception to this generalization is the 9/11 terrorist attack in the United States, that occurred in a strong state, was localized, short and intense in duration, and resulted in social cohesion.

Technological disasters do not necessarily exhibit a trend, as they can happen anytime and anywhere. For example, the Three Mile Island nuclear accident occurred in the United States and the Bhopal chemical accident in India, two very different situations politically, socially, environmentally and economically. It may be said, though, that human-driven disasters are largely derived from societal and institutional weakness and failures and often reflect human behavioral mishaps.

Although differing somewhat in the trigger, scope, duration, and requisite actions, disasters generally result in widespread physical damage, death, disability, and displacement, as well as the disruption of economic and social activities. Economic disruption (whether from natural hazards, technological accidents or from violent conflict and terrorism-driven emergencies) usually leads to a downturn in growth and a rise in unemployment, fiscal imbalances, and increased indebtedness. The costs of the conflict in Colombia are estimated to be in the millions of dollars annually. The 9/11 terrorist attack has led to over US\$50 billion in economic losses.

Regardless of their type, all disasters necessitate speed, flexibility, and accountability in response. Natural hazards and human-driven disasters also share the overwhelming importance of risk management and vulnerability assessment, early warning, mitigation, preparedness and related preventive measures, as well as needing an organized response at the national level and a clear understanding of the roles of international organizations.

Global and Regional Trends and Impacts

GLOBAL TRENDS

The international community has come to regard the issue of disasters as a subset of the overall development challenge. Over the past decade, worldwide disasters driven by natural and human actions have increased by about 60 percent (from 500 cases in 1991 to 784 in 2000). During the same period, almost 3 million people have been killed (two-thirds from violent conflict); another 2.4 billion affected (millions displaced and homeless); and trillions of dollars in financial investments and physical assets foregone and destroyed. In 1999 alone, disasters claimed more than 100,000 lives across the globe, and resulted in total losses of around US\$100 billion.⁴

Comparing the decades of 1983-93 and 1992-2002, the International Federation of Red Cross and Red Crescent Societies (IFRC) reported global deaths from natural and technological disasters (not including conflict and terrorism-driven disasters) to have fallen by 38 percent, while the numbers of people affected have actually risen by 54 percent. The bulk of the reported natural hazards and technological accidents have occurred in Asia (41 percent), with Latin America and the Caribbean (21 percent) and Africa (20 percent) at close second and third places. The global disasters distribution was rounded out with 15 percent in Europe and 3 percent in Oceania, respectively.⁵

⁴ Figures are taken from the World Disasters Report 2001, International Federation of Red Cross and Red Crescent Societies, Geneva, Switzerland.

⁵ Figures are taken from the World Disasters Report, 2003, International Federation of Red Cross and Red Crescent Societies, Geneva, Switzerland. A number of other organizations, such as Munich Reinsurance, Swiss Reinsurance, and the Center for Research on Epidemiology of Disasters (CRED) at the Catholic University of Louvain in Belgium, maintain databases predominantly on natural disasters (Freeman et al., 2002a).

Disasters pose an increasing threat to poverty reduction and sustainable development. It is projected that by 2050 more than 100,000 lives will be lost annually to natural hazards, and that the yearly global cost of these events will be in the range of US\$300 billion (World Summit on Sustainable Development, 2002). While it is difficult to quantify the diversity of disaster management programs, concepts and data sources, official assistance for humanitarian purposes following disaster emergencies has averaged about US\$5.5 billion annually in recent years. As a share of official development assistance (ODA), humanitarian assistance has increased from 4 percent of the total in 1990 to about 11 percent in 2000. A majority of this assistance has gone to complex emergencies or human-driven crises resulting from the breakdown in authority and violent conflict (IMF, 2003).⁶

Both natural hazards and violent conflict have increased substantially over the last few decades. Torben Andersen (2002) cites global warming as the most likely reason for the increased frequency of natural hazards, while Wallenstein and Sollenberg (1998) at the Peace Research Institute, University of Uppsala, reported that from 1989 to 1998, the overall number of violent conflicts rose from 32 to 108, with 101 of the 108 violent conflicts being internal civil wars.

More recently, according to Marshall and Gurr (2003) at the Center for International Development and Conflict Management (CIDCM), University of Maryland, global warfare subsequently declined from 1998 to 2002 to around 33 “major armed conflicts” concentrated in Africa, South-central Asia, and Southeast Asia and the Pacific.⁷

⁶ The World Food Program (WFP) spent about 32 percent of its food aid for emergency relief from 1988-1990 and over 72 percent for complex emergencies in the 1996-98 period.

⁷ The magnitude of each major armed conflict is evaluated according to its comprehensive effects on the state or states directly affected by the warfare, including

Nevertheless, the actual number of major conflicts is irrelevant to the scope of their damage and the number of people affected.

REGIONAL TRENDS

The end of the Cold War was purported to bring about “peace dividends” and a shift of scarce resources from military expenditures into other sectors. Instead of peace, however, we have seen a rise in armed conflicts and acts of terrorism. Between 1989 and 2000, more than 4 million people were killed in violent conflicts, while terrorist attacks increased from about 342 a year between 1995 and 1999 to 387 between 2000 and 2001. Low- and middle-income countries have borne the brunt of such violence with almost 70 percent of major armed conflicts occurring in Asia and Africa and about 80 percent of the terrorist attacks between 1996 and 2000 occurring in Latin America (the majority being in Colombia).

Disaggregating conflict into severe crisis (violent conflict), crisis, and latent conflict, the Heidelberg Institute on International Conflict Research (2002), University of Heidelberg, estimated 173 political conflicts worldwide in 2002. Forty-two of these conflicts are predominantly violent with the remaining 131 being nonviolent disputes divided into 52 crises and 79 latent conflicts. In the Americas, the only full fledged war being fought is in Colombia, with other violent conflicts existing in Haiti, Chiapas (Mexico), Venezuela, Brazil and Bolivia.

However, the more interesting indicator is that of latent or potential violent conflicts, particularly if one is interested in managing risk and preventing violent conflict. Latin America has a total of 15 latent conflicts or about 20 percent of the globe’s potential violent conflicts. These range from mass protests and street violence in Venezuela, Bolivia, Argentina, Brazil, Paraguay, Uruguay, Ecuador and Peru, to organized violent conflict in Haiti and Guatemala, and sporadic border disputes between several neighboring countries.

numbers of combatants and casualties, size of the affected area and dislocated populations, and extent of damage to the infrastructure.

The Andean countries appear to bear the brunt of the risk of violent conflict. The potential for violent conflict, in and of itself, should raise concern from a development policy perspective to monitor these situations and to undertake development actions to manage the risk of such latent conflict escalating into violent conflict.⁸

Between 1991 and 2002, Latin America had 34 percent, or the highest number (1,507), of terrorist attacks in the world, followed by Western Europe and Asia.⁹ Such attacks destroy human lives and economic assets, cause severe dislocations to normal economic activity and daily life, and generate large welfare costs as well as material losses. Perhaps more subtle but deeper wounds are incurred in the psychology of the population in that they live their daily lives in a heightened state of fear and anxiety resulting from the unpredictability of such attacks. This is an enormous intangible on which it is difficult to place a monetary value.

The region has also had its share of technological disasters. Over the past three decades an estimated 40 major technological disasters occurred in Latin America, ranging from an explosion in the city sewers of Guadalajara in 1992 killing over 200 people, to the more recent 2002 Rio Pomba chemical waste spill from a paper factory in Brazil (Gutierrez, 2003).¹⁰ Technological accidents create not only material costs but, like all disasters, they frequently incur health costs and lasting environmental degradation in the affected systems. In many ways, the distinction between natural disasters and human or man-made ones are somewhat artificial in that the magnitude of the effects of both of them depends on the degree of human preparedness and mitigation. A classic example is the location of housing in hurricane and flood-prone mountainside and lowland areas. Such

⁸ Heidelberg Institute on International Conflict Research, University of Heidelberg. 2001.

⁹ *Patterns of Global Terrorism*. 2002. United States Department of State, Washington, D.C. For additional analysis, see also the *International Country Risk Guide* (ICRG) ratings on conflict as a proxy for the combined risk from terrorism and conflict.

¹⁰ See Awareness and Preparedness for Emergencies on a Local Level, APELL website, <http://www.uneptie.org/pc/apell/disasters/lists/disasterioc.html> 2003.

housing is directly in harm's way without being necessarily prepared for withstanding natural hazards. Also, the inadequate design and application of building codes can aggravate the impact of an earthquake or tropical storm.

IMPACTS

The socioeconomic impacts of disasters can have direct or capital stock effects (e.g., infrastructure and labor); indirect capital flow effects (e.g., production and income, savings and investment); and institutional effects (e.g., governance, human and social capital and social cohesion). In sum, disasters of all types deplete and/or transform in varying degrees four types of capital: physical, financial, human, and social (Albala-Bertrand, 2002).

In their study of the relationship between armed conflict, terrorism, and economic performance,

Gupta et al. (2002) demonstrate how economic performance is undermined by such human-driven disasters. Their research confirms that during an armed conflict inflation increases dramatically, and that real GDP growth drops just before and during a conflict. Conflict also has a significant negative effect on government revenues, expenditures and budget deficits. Real levels of expenditure on education and health suffer during a conflict as they fall with the overall decline of economic activity and the tax revenue base.¹¹

Although all types of disasters generally have macroeconomic, budgetary, and financial impacts, leaving a trail of death, displacement, and destruction in their wake, those disasters emanating from violent conflict have the added impact of weakened governance and institutional capacity, depleted human and social capital, and fragmented social cohesion (Colletta and Cullen, 2000a; Colletta, et al., 2001).

¹¹ Sanjeev Gupta, et. al., 2002. Also see Mulder, 2002a.

Poverty, Conflicts and Development

POVERTY

Poverty and vulnerability are both a cause and consequence of human-driven disasters (Coletta, 2002). The gains in the fight against poverty over the past three decades are being eroded by the creeping impact of human-driven disasters. Given the strong link between poverty and human-driven disasters, achieving the overarching IDB mandate¹² depends heavily on preventing, mitigating, and managing the risk, vulnerability, and impact of such disasters. However, disasters resulting from violent conflict have the unique distinction of compounding conditions of poverty with poor governance and weak institutions (judiciary and rule of law) for mediating conflict before it becomes violent. Prevention in this context requires a different type of intervention than that required for natural hazards. The focus needs to be more on strengthening governance, the rule of law and local institutions in general and on helping the government satisfy the essential needs of the population.

In short, disaster assistance is consistent with the IDB's core areas of intervention in support of poverty reduction: (i) sustainable economic growth, (ii) inclusive social development, and (iii) governance for effective policies and institutions. However, when addressing disaster prevention, the risk factors delineated in the Bank's Social Development Strategy take on added meaning. The implications for revising the current policy are either to introduce such risk management factors and approaches into the existing disaster strategy or to formulate a separate policy or strat-

¹² The IDB's Eighth Capital Replenishment mandates the Bank to achieve sustainable economic growth, reduce poverty, and promote social equity through a more comprehensive approach to development that seeks to consolidate economic reforms while promoting internal socioeconomic cohesion, regional integration, democratic institutions, and civil society (Strategy for the Modernization of the State, GN-2235-1, July 2003).

egy for human-driven disasters, particularly those of a political nature (e.g., civil conflict and mass street protest and violence).

According to a 2003 report published by the United Nation's Economic Commission for Latin America and the Caribbean (ECLAC), Latin Americans are worse off now than in 1997. The report stated that "six lost years" of depreciating currencies, faltering global demand, weak domestic activity, and financial, political, and fiscal crises combined to hold average per capita GDP to 2 percent below 1997 levels.

For those less sanguine about the prospects for peace and economic development in Latin America and the Caribbean, William Robinson's recent commentary is quite sobering. Peasant insurrection in Bolivia, aborted coups d'état in Venezuela and Haiti, five presidents in seven years in Ecuador, organized street violence in Paraguay, Brazil, Uruguay and Peru, and escalating civil war in Colombia, appear to be the order of the day. Events in Argentina starting in December of 2001 illustrate the connection between rising poverty and violence, as unemployment has shot up from 3 to 20 percent and the number of people living in poverty has risen from one million to 14 million (Robinson, 2003b). Organized popular protest and violent crime have since increased notably, principally in Buenos Aires.

Data from the Economic Commission for Latin American and the Caribbean show that per capita income declined an average of 0.9 percent every year in the 1980s, and by an average of 1.5 percent each year in the 1990s. Poverty levels and deprivation indicators have spiraled in most countries over the past 20 years.

While the policy debate in Latin America in the 1990s was dominated by macroeconomic stabilization and the need to tame high inflation, restore growth, and stabilize economies, the goal had turned to equity-enhancing reforms through insti-

tution building (Graham and Naim, 1998). Although macroeconomic reform is a necessary precondition for growth and development, institutional reforms that promote equity, justice, and inclusion are requisite conditions for peace and socially sustainable development (Birdsall, et al., 1998). A recent study by the World Bank on Latin America has come out with a similar conclusion (de Ferranti et al., 2003).

CONFLICTS

International research shows that it is not poverty per se that leads to violent conflict, but economic decline and relative deprivation (widening disparities) coupled with poor governance (Elbadawi, 1999; Addison and Murshed, 2000; Colletta, 2002). The IDB strategy paper (2003) on modernization of the state focuses heavily on governance reform and capacity (effective, transparent and accountable government) and is clearly a step in the direction of preventing violent conflict.¹³

Alejandro Bendaña (2003) summarized this inextricable linkage between poverty, injustice and development as follows, “Conflicts will continue in Latin America as long as injustice persists. There can be no *post-conflict* situation as long as conflicts are part of the development process, principally in those nations characterized by high levels of inequity. The objective is not, therefore, to *prevent conflicts*, but to help channel them through a nonviolent and institutional causeway from becoming *violent conflicts* (author’s emphasis).” This is a clarion call for a greater emphasis on equity and justice in the development equation as a means of preventing and mitigating violent conflict as a human-driven disaster.

The relationship between development assistance and the prevention of violent conflict is not always duly acknowledged. Nevertheless, while poverty and violence are often associated, one cannot necessarily be reduced to the other. While conflict inevitably deepens poverty (especially for those who are the victims), the reverse is not al-

ways true, that is, poverty does not always result in conflict (Colletta, 2002).

The Peace and Development Policy of the Development Assistance Committee (DAC) of the OECD is attuned to this relationship, emphasizing greater coherence and transparency in conflict prevention initiatives through the establishment of *early warning* and *conflict monitoring systems* that closely link development decision-making and the coordination of preventive development programming.

The World Bank is utilizing two new analytical instruments—a watching brief and a conflict analysis framework—to monitor the development impact of existing conflicts and to assess the risk of conflict in potential conflict-affected areas. The *Watching Brief* (World Bank, 2000) is applied in countries or areas of countries in conflict where the portfolio is inactive, in order to (i) maintain an institutional knowledge base by monitoring the social and economic trends, (ii) build partnerships, especially with relief and other non-development actors, and (iii) position the Bank for early response. The *Conflict Analysis Framework* (World Bank, 2002) is utilized to assess the risk of conflict. It covers six categories of variables for information and analysis:

- Social and ethnic relations,
- Governance and political institutions,
- Human rights and security,
- Economic structure and performance,
- Environmental and natural resource management, and
- External forces.

A number of bilateral agencies and the UNDP, as well as the DAC and the World Bank, have also invested heavily in developing conflict analysis frameworks and tools and mainstreaming them in the standard Country Economic and Sector work, Country Assistance Strategy, and Poverty Reduction Support Programs (PRSPs).¹⁴ In addition, the

¹³ See IDB’s Strategy for the Modernization of the State, GN-2235-1, July 2003. See also Biebesheimer and Payne, 2001a and 2001b.

¹⁴ Development Assistance Committee, OECD Policy on Peace, Conflict and Development, 2000, Paris. See also the World Bank Policy on Conflict and Development Assistance, OP. 2.30, 2000; and Conflict Analysis

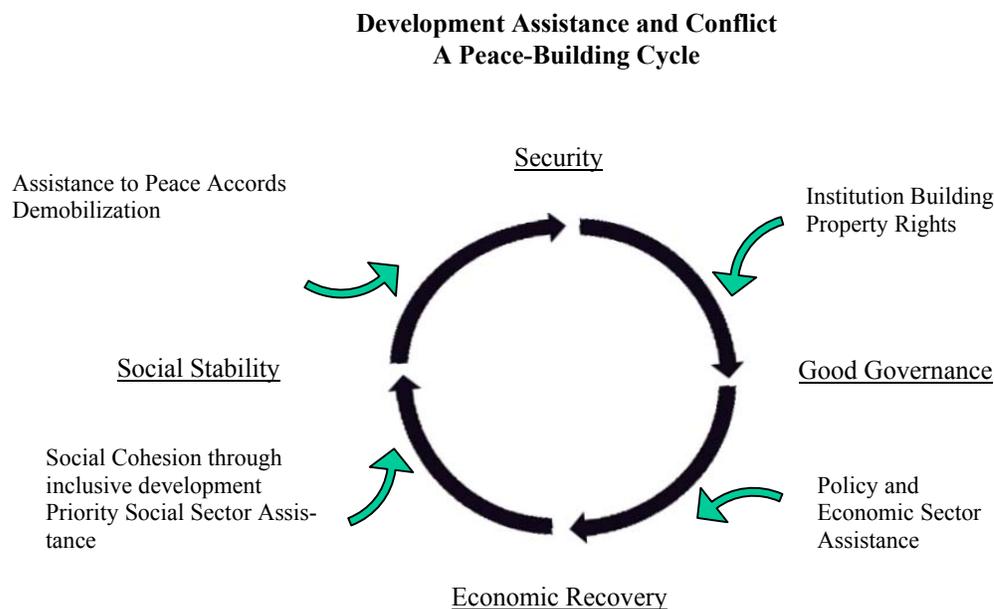
World Bank has developed a new reporting instrument, the *Quarterly Monitoring Report on Conflict-afflicted Countries* as a means of informing its senior management and Board of Directors on conflict and development programming. The IDB might do well to strengthen its own social and institutional analysis by integrating the type of conflict analysis pioneered by the World Bank and others.

DEVELOPMENT

Regarding the linkages between terrorism, poverty and development, as demonstrated by Gupta et al. (2002), terrorism has a negative impact on foreign investment and economic growth, as well as being an enormous diversion of resources (public expenditure). It is estimated that the September 11, 2001 terrorist attack in the United States has cost the US economy more than US\$50 billion. Extreme events associated with terrorism also substantially increase the solvency risk of insurers as they strain the financial capacity of private insurance companies (Solimano, 2003).

Hopelessness, humiliation, and rage provide the potential shock troops for terrorist organizations. Poverty of resources, combined with limited prospects and indignity, create ready recruits. In addition, besides taking advantage of existing discontent and inequities in the region, terrorist causes also frequently “attract individuals who simply use philosophical or political rationalizations to veil their more fundamental greed and bloodlust” and thus are not merely criminal in nature but a form of warfare (Carr, 2003).

Given such a scenario, attacking poverty, alienation and hopelessness will indirectly address the sources of terrorist operatives. While not a panacea in and of itself, development can fight terrorism through the promotion of economic opportunity, justice, human rights, the rule of law, equity, access to basic services, social welfare, and government capacity to regulate and control illicit activities that finance terrorism. The following diagram demonstrates how IDB policy can impact three major areas of influence in resolving conflict through development.



Source: Nat Colletta, presentation at the IDB seminar, “Human-driven Catastrophes: Conflict, Terrorism and Industrial Disasters.” June, 19, 2003, IDB, Washington, DC.

Framework, 2002, Conflict Prevention and Reconstruction Unit (CPR), World Bank, Washington.

In the development arena, building resilient communities is the best approach to conflict management (see Colletta and Cullen, 2000b). This approach is exemplified in the work of the World Bank in Colombia. The overarching objective of the Colombia Country Assistance Strategy is to promote peace and development through a focus on the socioeconomic determinants of violence. It addresses political, economic, and social violence through an integrated structural, institutional and interpersonal framework of causality. The analysis links the financing of armed violence through drug-related criminal activity to long-standing social conflicts (e.g., over land, impunity, inequality, and the capture of the state by interest groups) related to an exclusionary political, economic, and social system. It concludes that achieving sustainable peace and development requires structural changes involving a redistribution of power and assets within Colombian society (Arboleda, 1999).

The IDB also has a number of analytical instruments and services for building resilient communities. For example, the Bank's Colombia program includes both investment- and policy-based loans, as well as technical cooperations, that work together to build community resilience to violence generated by armed conflict and societal unrest.

First, a series of policy-based loans (CO-0252, CO-0268, CO-0261) has protected the allocation and execution of expenditures on humanitarian assistance and social development during a period of extreme fiscal constraints, which began with the recession of 1997. These programs have also

served to stimulate the extension of coverage in health insurance and social assistance for the poor, as well as improving both targeting and overall expenditure efficiency in the social sectors.

Second, investment loans such as the Network of Social Assistance (CO-0247) have created alternatives for the poorest groups in the most vulnerable and impoverished municipalities in the country. Preliminary results of the Families in Action conditional cash transfer program suggest that beneficiaries are more likely than nonbeneficiaries to maintain residency in a municipality during a period of armed conflict. These assistance programs are complemented by investments in health and education service improvements financed under other operations (CO-0139). Other investment programs focus directly on improving government response to societal violence in the major cities.

Finally, the IDB strategy seeks to deal directly with the consequences of armed conflict through its technical cooperation programs. These programs seek to improve prevention and management of domestic violence, provide input into the peace process, and document the magnitude and effects on well being caused by forced migration due to armed conflict. An example of one such project is the Social Effects of Population Displacement in Colombia: Assessment, Monitoring Tools and Action Plan project (TC-03-06-00-5-CO) that focuses on improving the government's effectiveness in responding to the social effects of armed conflict and reducing the negative impact on displaced populations, of which the majority are poor women and children.

Box 1 – The Colombia Country Assistance Strategy

The World Bank-financed Colombia program draws on a range of loan and grant instruments to address the key cross-cutting economic and social issues of land reform, access to justice, security of life and property, fighting corruption, citizen empowerment, and political reform in an integrated manner. A number of community-based and -driven projects (e.g., Magdalena Medio Regional Development, Peasant Enterprise Zones, Rural Education, Productivity Partnerships for Peace, and Integrated Youth Development Services, among others) emphasize increasing the capacity of individuals and communities to take charge of their own development, particularly in a climate of conflict. The process takes into account the initial state of citizens and organizations, builds on that gradually at their own pace, and recognizes and supports existing organizations and experiences. While the programs are community- and target group-focused (internally displaced, disenfranchised rural peasants, out of school youth, etc.), linkages to broader regional and national policies programs, budgets, value chains, markets, and social networks are strategically included. Third party mediation and implementation—be it private sector, NGO or civil society actors—is seen to be an effective way to balance larger competing interests.

Building Capacity to Address Technological Disasters

Building capacity to prevent, mitigate, and manage technological disasters is also an important subset of human-driven disasters. The Awareness and Preparedness for Emergencies at the Local Level (APELL) program originated under the auspices of the United Nations Environmental Program (UNEP) to minimize the number and impact of accidents and emergencies caused by chemical production. Launched in the 1980s as a joint UN strategy with support from the business and government sectors of the OECD, it advocates business planning for the preparation of and response to emergencies involving communities. It contains a series of steps for a coordinated emergency response of various entities (firefighters, civil defense, Red Cross, etc.) emphasizing community involvement, optimizing resources, and mitigating the impact on the community and the environment. The APELL program approach has been promoted in the region since 1990 and has been implemented largely as a business sector initiative.¹⁵

The National Emergency Prevention and Response System (SNPRE) experience (with regard to technological and industrial risk management in Latin American and the Caribbean region) is a mechanism created to be built upon and disseminated. The SNPRE program has been implemented in nine countries and is currently maintained in seven (Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, and Peru).

In other countries not using SNPRE, technological risk prevention activities are the responsibility of such ministries as health, labor, and the environment. However, they are not always coordinated. Some countries, such as Colombia, have specific “professional risk legislation” which regulates and coordinates the functioning of different bodies (including the private sector) with respect to technology norms and standards, monitoring, emergency planning and the like.

International strategies involving communities also exist in the technology risk management arena. One such program, “Responsible Care,” emerged as a consequence of an evaluation of the chemical industry following large accidents in the 1970s and 1980s in Latin America. It has developed a code of management practices involving communities that addresses the preparation for and response to emergencies. The Community Preparation Code for Emergency Response encourages businesses to be prepared in the event of a technological accident by establishing relationships with communities, evaluating risks, creating an emergency plan, training response personnel, carrying out drills and inspections, and maintaining open dialogue with communities (Gutierrez and Alfonso, 2003). There is a great potential for strengthening and disseminating SNPRE, Responsible Care and the APELL programs throughout the region.

¹⁵ See the APELL website for an elaboration on definitions and a list of technological disasters; www.Uneptie.org/pc/apell/disasters/lists/natural.html.

Current IDB Approaches: Gaps and Issues

DISASTER RISK MANAGEMENT APPROACH

A recent evaluation of the IDB's current policy effectiveness has shed light on its overall weaknesses and strengths. In sum, the IDB will need to revise its current policies to (i) clearly define the types of disasters they cover; (ii) integrate the efforts of its various departments to mainstream its approach to disasters; (iii) encourage proactive risk management policies in borrower countries through specific resource and time commitments; (iv) prepare the ground for increased private participation in risk transfer in vulnerable countries; and (v) assess the benefits of reformulating loans by better documenting their processes. In addition, the evaluation makes several detailed recommendations for the Bank's programming and financing strategies for natural and unexpected disasters (IDB, 2004).

The IDB approved US\$3.8 billion in new disaster-related financing between 1995 and 2002, corresponding to an average of about US\$470 million per year (IDB, 2004). The current policy on natural and unexpected disasters (OP-704) of 1998, clearly moved the institution upstream, taking a more proactive stance toward reducing the impact of disasters through a more comprehensive approach prior to, during and after disasters. The Action Plan of 2000 included the concept of disaster risk management. Disaster prevention and mitigation are at the heart of this approach. Identifying and addressing the root causes of vulnerability and managing risk is central to its success.

The Bank's overall strategic approach to disaster management and response—(moving upstream to emphasize the assessment of risk and vulnerability, and the attendant risk management, mitigation and prevention) is consistent with the strategically phased actions required by other donors to address human-driven disasters. However, while “unexpected disasters” feature prominently in the title of the existing IDB disaster policy, what consti-

tutes such disasters (e.g., the definition, scope, and eligibility criteria for engagement and financing, as well as the analytical, programmatic, and resources instruments) requires further elaboration.

There are basically three main categories of violence: political, economic, and social. They more or less correspond, respectively, with armed conflict between contesting political or ideological groups; street crime and organized crime; and interpersonal or domestic violence, particularly against women, children and the elderly.

The historical links between political, economic and social violence are strong. The availability of small arms as well as deep societal divisions, weakened the rule of law and the state's capacity in general, and formed a legacy of violent conflict that unfortunately persists into the post-conflict phase of peace building and development. The homicide rate alone (last reported in 1990) for Latin America was 22.9 per 100,000 or twice the worldwide average of 10.7 homicides per 100,000. These figures, when disaggregated by country, are especially high for countries either in, or recently emerging from, armed or violent conflict, such as Guatemala (150), El Salvador (150), and Colombia (89.5). The prevalence of household or domestic violence is also high in countries with a long history of political and social violence.

The costs of violence—direct financial (value of goods and services devoted to prevention and treatment), non-monetary (health-related morbidity and mortality), economic (labor market, income, savings and investment) and social multiplier (socialization, social capital and participation)—are difficult to quantify but presumed to be very high (see Solimano, 2001).

The IDB has a number of existing social and institutional development strategies, programs, and instruments to address human risk and vulnerability.

The IDB Violence Prevention Program has identified access and quality issues regarding education, health, and justice as integral sources of domestic and social violence. Programs to improve the coverage and effectiveness of such social service areas (public goods) along with media campaigns, housing and urban development, and the strengthening of civil society in general (popular participation of people in decisions that affect their lives) are instrumental in prevention and mitigation.¹⁶

The current IDB violence prevention program focuses on domestic and social violence (including crime), rather than communal and political violence associated with civil war, armed conflict, mass protest movements and terrorism. This is a gap that a revised IDB disaster policy might also consider addressing.

A second IDB program to combat social exclusion due to race, gender or ethnic background goes more to the heart of addressing the underlying inequities and divisions fueling communal and political violence. Also, socially excluded groups (e.g., indigenous, Afro-descendants, etc.) are often the most vulnerable to natural hazards, and have the least access to services in the post-disaster period. A case in point is Colombia, where the war has shifted to the dominant, chronically poor and isolated Afro-Colombian regions, thus the conflict has taken on a whole new dimension of worsening already great social and economic divides in the country. In short, natural and human-made disasters have the potential to widen disparities within a country, creating worsening exclusion unless explicitly included in disaster risk and vulnerability analysis and response in the IDB's disaster policies and practices.

Social exclusion is defined as the "chronic scarcity of opportunities and access to basic and quality services, labor markets and credit, physical conditions, adequate infrastructure and the judicial system."¹⁷ Promoting social inclusion is central to

achieving the IDB's goals of reducing poverty, and promoting social equity and sustainable development. This is reflected in the new Social Development Strategy adopted this year. The program includes three priority activities: capacity building within the Bank and the region; knowledge building and research to better identify and understand social inclusion; and projects that test new approaches to promoting social inclusion. For example, some current IDB programs include social investment funds with special reference to social inclusion (Peru, PR-0125), rural development (Bolivia, BO-0179) and integrated regional development (Panama, PN-0116).

Three important measures identified for effectively implementing such programs are (i) strengthening the role of country offices in identifying local capacity and in monitoring and implementing programs; (ii) mainstreaming the analysis of issues of race, gender and ethnicity into Bank country papers and programming; strengthening national policy-making and awareness on social inclusion, and including data collection on race and ethnicity; and (iii) piloting new Bank lending and grant support to the region for socially-inclusive operations. Several projects have been identified or are ongoing which will serve as testing grounds for learning about the dynamics of exclusion/inclusion, violent conflict, and development outcomes in the region (see IDB Action Plan for Combating Social Exclusion due to Race and Ethnic Background, 2002).

In effect, the social inclusion agenda is a potential programmatic source for the development of both "conflict analysis" and the design of "conflict preventative actions." Additional analytical instruments may not be necessary if racial and communal analytical instruments can be developed to assess the risk and vulnerability to human-driven violent conflict. These instruments can then be translated into effective policy and program interventions.

The IDB programs on domestic violence prevention and social inclusion help to address underlying problems that may lead to human-driven disasters of political and communal nature and cannot be underestimated. Violent conflict is the stepchild of human insecurity and exclusion. Eco-

¹⁶ "Violence in Latin America and the Caribbean: A Framework for Action." IDB, 1999. See also "Technical Notes on Violence Prevention," IDB, 2000.

¹⁷ Action Plan for Combating Social Exclusion due to Race or Ethnic Background. IDB, October 2002.

conomic insecurity and social and political exclusion often propagate fear, hatred and intolerance, which lead to violence (see the report of the Global Commission on Human Security, 2003).

However, a contingent and equally powerful factor instigating human-driven disasters—be they armed conflict, terrorism or technological—is the capacity of the state. In the conflict literature, state failure or collapse has been identified as a major source of civil war as well as a hotbed for breeding, supporting and undertaking terrorist activities. In this regard, the work of the IDB, through the Modernization of the State and Strengthening of Civil Society Program, is critical to an agenda of conflict prevention and management. Therefore, like the IDB programs on violence prevention and social inclusion, this program is an indirect endeavor in the overall Bank effort to address the underlying causes of human-driven disasters.

In fact, state functioning, particularly in setting and enforcing norms and standards and in its overall regulatory role (citizen protection), is also critical to preventing and mitigating human-driven, as well as natural, disasters. This is accomplished through design, inspection, oversight and compliance related to a range of economic activities, be it arms export and import licensing, the design and construction of nuclear power plants, quality control, land use for urban settlement, or an industrial waste disposal system. In addition, strategic planning in the case of accidents should be included in all safety planning.

Political and institutional weaknesses, resulting from a persistent democratic deficit, have often been manifested in the phenomena of authoritarianism, corruption, and the capture of public institutions, policies, and programs by special interest groups. Political and social exclusion, rampant corruption and mismanagement are a prescription for state failure and violent conflict.

Institutional functioning, especially regarding the key elements of democracy, rule of law, state/market/societal interface, public sector management, decentralization and empowerment of the community, are critical in assessing and strengthening the overall state and societal capac-

ity for social control, conflict resolution, and social cohesion.

These areas of Bank action (democratic system, rule of law, state, market and societal relations and public sector management), and their relation to sustainable economic growth and poverty reduction strategies –(as spelled out in Annex 1 of the Strategy for the Modernization of the State, GN-2235-1) are also useful for preventing and mitigating violent conflict. Combining such a comprehensive vision for state reform with a selective and gradual approach to specific institutional development enables a learning-by-doing process.

The Bank has existing analytical instruments and services for institutional development already being applied to state modernization and civil society strengthening which are also highly adaptable to the needs of conflict-prone and affected countries. At the national level, Bank country operational strategy and dialogue is useful for identifying and tailoring institutional development actions for each country. The national Poverty Reduction Strategy Papers (PRSPs) are another available instrument for advancing state modernization in a multi-donor coordinated fashion. Finally, sector studies and institutional diagnostic instruments – (such as the IDB Country Financial Accountability Assessments, CFAAs, and the Public Expenditure and Management Reviews, PEMRs) are readily available for in-depth analysis.

Lending instruments are also becoming more flexible and adaptive, although trust funds and grant resources in general allow for more flexible and varied interventions. The combination of sector lending instruments with technical assistance programs are a source of increased financing flexibility and implementation support which can readily address human-driven disasters.

The issue of vulnerability must also be addressed when choosing lending instruments for human-driven disasters. Vulnerability in mainstreaming deals with regular loan projects while vulnerability in reconstruction has to do with not rebuilding vulnerability into the reconstituted infrastructure or productive capacity. Although a country's government is ultimately responsible for the vulner-

ability of its sovereign social and institutional framework, the IDB can support institutional reorganizations or strengthening if the country so desires.

In addition to the above analytical instruments and services, projects such as the “Colombia Support for Peaceful Coexistence and Citizen Security” are important pilot efforts. The Colombia project centers on capacity-building activities emphasizing diagnostic, information, evaluation, training and management skills, with attendant program interventions and media communications support. Its objective is to reduce levels of violence and insecurity in several areas through justice and policy reform. Another good example is the Jamaican “Citizen Security and Justice Program” (JA-0105). Its objective is to enhance citizen security and justice through strengthening crime prevention and the criminal justice system, as well as through community action oriented toward promoting mobilization and social cohesion along with improved community/police relations.

FINANCING DISASTER LOSSES

In 1998, the IDB created a new financial instrument to enable the rapid mobilization of fresh resources in post-disaster situations: the Emergency Reconstruction Facility for Natural and Unexpected Disaster Support (ERF). The facility’s original endowment limitation of US\$100 million, usable for emergency-related temporary rehabilitation projects, was lifted when it was reformu-

lated to become an Immediate Response Facility (IRF) in 2003. In addition to the IRF, the Bank’s country representative can immediately make available up to US\$50,000 in grant resources to the national emergency agency. Such resources can also be used to finance humanitarian assistance such as medicines and shelter, based on what the country’s expressed needs are.

The pre-established menu of eligible activities for financing includes help in speeding up the restoration of services, financing temporary repairs, and cleaning up. The country’s request for the use of these funds triggers a fast-track process of loan approval (2-4 weeks) for up to US\$20 million per project chargeable to the Bank’s Ordinary Capital, or up to US\$10 million chargeable to the Fund for Special Operations for eligible countries on highly concessional terms. The Bank also contributes to multi-donor trust funds such as the one established in the wake of Hurricane Mitch. The reallocation of undisbursed funds and portfolio restructuring is utilized to provide financial assistance in the aftermath of a disaster.

In addition to the above emergency funding, there is a need to consider other forms of financing. Emergency short-term credit (in addition to the immediate grants referred to above) is critical to jump-start productivity, revitalize livelihoods and create jobs. While savings (and remittances) can provide more efficient self-insurance to help mitigate and cope with risk, it is not a sufficient resource for the poor in disaster-affected situations.

Box 2 – Emergency Lending for Uruguay

The IDB offers emergency lending to those countries that need a rapid response to an internal crisis. The primary objective of emergency lending is to provide financial support to help address the effects of international financial crises on the region’s economic and social progress, to mitigate the effects of the crisis on the poor and vulnerable, to protect funding for social programs that benefit the poor, and to avoid reversal of policy reforms. In 2002, Uruguay suffered a massive financial crisis that required emergency international aid to rescue the faltering economy. The IDB responded with a US\$500 million loan from emergency lending that included protecting the national budget for education, health and social security for the country’s poorest inhabitants. In addition, the IDB emergency loan stipulated the protection and sustainability of the reforms recently made in those sectors so the full impact of the national financial crisis would not fall upon the poorest sectors. Uruguay was successful in meeting the loan’s goals in protecting its social programs and maintaining its policy reforms.

(Source: Uruguay: Programa de protección y sustentabilidad social ; Relato de experiencia. IDB internal document, 2003.)

The countries should evaluate the ways in which they finance losses, be it through reserve funds, calamity funds, contingent credit, insurance or through external credit. The level of use of each instrument should be a result of an integrated risk management strategy. If conversions of existing loans are considered, the criteria for their use should be openly discussed in advance, and not be left to a potentially hasty decision-making process during an emergency. It is noted that in many countries in the region insurance is included as an alternative government tool. However, considerable savings or substantial increases in insurance protection could be accomplished if countries systematically reviewed insurance purchasing opportunities (Freeman et al., 2003).

In developed countries a large amount of potential private and part of the government disaster losses tend to be insured. However, not all risks are actuarially insurable, even when perfect financing and insurance markets are available. In order for a risk to be insurable, the probable event and its ensuing damage must be quantifiable and the calculation of the insurable damage must not be influenced by the insured's behavior (i.e., moral hazard). In addition, the insurability of the risk needs to be balanced against the premium's costs (pricing and ability to pay) and the compensation payments. The type of risk needs to be clarified as to whether it is physical (human) or economic in nature. Economic risk can be valued through a cost/benefit analysis while physical risk can be valued based on cost-effectiveness criteria.

For losses with a high frequency of recurrence (e.g., seasonal flooding, ongoing civil war, etc.) as well as for low frequency but high loss events (such as terrorism or a technological disaster) insurance for the poor might be relatively expensive and then provide only limited relief. In addition to the premiums, the transaction costs for finance and insurance tend to be high for the poor. Thus, even when insurance seems to be, in theory, a rational choice, cost and other concerns might preclude it (Siegel, 2000). The IDB might want to

explore ways to support the gradual creation of insurance markets in the region.

Insuring against commodity risks (e.g., loss of crops to natural disasters, large fluctuations in price, etc.) is also a means of protecting the poor and transferring risk in times of disaster. However, the conditions required for such a program to work are quite stringent, especially for the poor. In a recent (1999) roundtable on commodity risk management, Donald King, the Secretary-General of the International Federation of Agricultural Producers, noted four key elements required for such risk management to work: democratic farmers' organizations; a well functioning system of financial intermediation; a legal system protecting property rights and access; and international standards of production (Siegel, 2000). This is a high bar for most farmers in developing countries.

Solimano (2003) has suggested that adequate solutions to insuring against human losses and the destruction of economic assets due to civil war and acts of terrorism require some combination of public and private insurance. Public insurance is likely to be necessary in the case of protracted and costly civil conflicts where victim compensation and public intervention are required. However, he is quick to caution that while there is a potentially large scope for market insurance for terrorism and conflict-related losses, the issues of pricing, returns, risks and moral hazards need to be weighed. He gives the example of catastrophe (or "CAT") bonds as a means of transferring to investors in the capital market, through a suitable security issued by insurance or reinsurance companies, the risk of extreme events that generate large losses. The key element of the bond is that in the event of extreme risk, the investor may not recuperate the principal of the bond, relieving the insurer of the CAT bond of a large liability. Thus the CAT bond reduces the strain on the capital base and the solvency of insurers in the event of large losses. Of course, interest rates paid to investors will have to be at a level to attract investors to bear the CAT bond's unprotected principals.

Policy Recommendations

COUNTRY ELIGIBILITY, OPERATIONAL AND FINANCIAL CRITERIA

The IDB should be guided by a clear set of criteria concerning country eligibility, operations (rules of engagement), and financing (items eligible for expenditure) in human-driven disasters emanating from violent conflict, acts of terrorism and technological disasters.

Country eligibility criteria. It is recommended that the following country eligibility criteria be contingent conditions for IDB involvement in such human-driven disasters and incorporated into the revised policy:

- (i) With regard to human-driven disaster assistance, in view of its mandate, the IDB may not directly engage in peacemaking, peacekeeping, and the delivery of direct humanitarian relief per se. These are functions assumed by other donors, regional bodies, nongovernmental organizations, and the United Nations;
- (ii) Socioeconomic considerations shall be relevant to IDB decisions. Its interventions shall take place only at the request of, or with no objection from, the member country concerned.

Operational entry criteria. In addition to the above country eligibility criteria, it is recommended that the IDB adhere to the following minimum operational entry criteria, especially in conflict and terrorism-driven emergencies:

- (i) Security of IDB staff to undertake operations in the affected areas should be guided by OAS and UN security norms and clearance. This could include formal arrangements between the IDB, the OAS and concerned UN agencies regarding such matters as security-related information sharing, monitoring of staff movements, and emergency evacuation when necessary;

- (ii) A government or transitional authority recognized by the United Nations should be in place and assistance formally requested; and

- (iii) To the extent possible, risk and burden sharing with other key donor partners should be encouraged.

Items eligible for financing. While the items eligible for financing in the current policy (OP-704) sufficiently cover the immediate requirements of natural hazards, it is recommended that for any policies related to human-driven disasters the IDB consider including the following additional items for emergency funding:

- (i) Temporary recurrent budget support to salaries of critical basic service workers including health workers, teachers, police and rescue workers;
- (ii) Micro and small enterprise credit to jumpstart affected livelihoods (business, farming, and fishing) and create temporary public works employment for priority rehabilitation; and
- (iii) Immediate short-term technical assistance to buttress capacity for assessment, planning and implementation functions (particularly policing and justice sectors) of weakened institutions at the national, provincial and community levels.

In addition to the above, recommendations for reviewing and strengthening analytical tools and lending instruments for disasters are described below.

ANALYTICAL TOOLS OF HUMAN-DRIVEN DISASTER RISK

The following set of human-driven disaster-sensitive analytical and early warning indicators and assessment tools could be carefully integrated

and mainstreamed into existing IDB strategic country programming and sector work such as for country strategy papers, programming exercises and poverty reduction assistance. It may be advisable to consider creating an independent party to evaluate the appropriate type of standards and criteria for reconstruction loans following a disaster.

Review of Human-driven Disaster Indicators for Risk and Early Warning.

As noted earlier, a number of donors have introduced conflict-sensitive analytical tools and indicators into their work in order to assess, provide early warning, and undertake preventative action to the risk and impact of violent conflict and acts of terrorism. In this regard, it is recommended that the IDB consider jointly reviewing with key donors (perhaps through a coordinated human-driven disaster monitoring and early warning research program) such specific conflict and terrorism indicators. If internationally agreed upon, they could form a basis for the common global measurement of human-driven disasters.

Formation of an Integrated Conflict Analysis Instrument.

Institutional tools for state modernization could be consolidated with the social development and social assessment tools to create a streamlined set of conflict analysis instruments for disaster risk and vulnerability policy. In conjunction with the above review of human-driven disaster indicators and methodology, it is recommended that:

- (i) The IDB combine and streamline the existing institutional assessment tools for the state modernization program with social assessment tools that monitor social equity, exclusion and violence on a communal, ethnic or political level, to form an integrated conflict analysis instrument for identifying risk and vulnerability to human-driven disasters. Such analytical tools could also form the basis for the design and financing of early warning watch systems and preventive development interventions; and
- (ii) Research that relates governance to violent conflict and terrorism, complemented by in-

depth case studies of the above and other relevant project interventions, be undertaken by the State, Governance and Civil Society Division to establish a best practice knowledge base for further operational interventions addressing human-driven disasters.

Introducing New Strategic Instruments into IDB policies.

In the immediate wake of a disaster, when a country assistance strategy is absent, outdated or inadequate due to the changed circumstances, an interim or transitional assistance strategy (TAS) may be required to guide short- to medium-term IDB emergency response. The World Bank, Asian Development Bank and African Development Bank have all developed such instruments to modify their strategic thinking in the aftermath of a disaster. It is recommended that the IDB:

- (i) Develop an interim or transitional assistance strategy similar to that of other international funding institutions to guide actions in the wake of human-driven disasters. Such a strategy allows for immediate- to medium-term priority setting and resource allocation based on assessed conditions to be crafted in such a way that it serves as to guide institutional decision-making and to inform the Board; and
- (ii) Explicitly incorporate country portfolio restructuring as a first order part of such an interim or transitional support strategy in order to make a timely response and effective use of available resources. Restructuring should explore expenditure reallocation possibilities within and across existing projects and sectors.

The Special Case of Terrorism.

With reference to terrorism, in addition to the above analytical tools focusing on the risk of violent conflict, it is recommended that the IDB explore four program areas through enhanced but separate programmatic guidelines:

- (i) Provide technical assistance to strengthen the capacity of member states to develop and im-

plement national legislation on terrorism consistent with UN Resolution 1373;¹⁸

- (ii) Enhance cooperation with the OECD, the Financial Action Task Force (FATF) and CARICOM to suppress the financing of terrorism and illegal money laundering through the strengthening of banking and customs systems of cross border regulation and control; and
- (iii) Develop education curricula and life experience programs that promote a culture of tolerance, peace, and justice.

Capacity Building for Improving Disaster Management.

It is a common objective of international development agencies to advance capacity building and strengthening of institutional arrangements at the national, regional and local levels, in order to address risk reduction as an ongoing concern. This includes related legislation, land-use regulations, building codes and reinforced links to environmental protection for natural disasters. This might further include an integrated disaster risk management plan covering areas of risk assessment and monitoring, early warning systems, training and public awareness programs as well as emergency response management, ready resources and the strengthening of community level organizations. The following recommendations accent the need to build national and local capacity for human-driven disaster risk management.

- (i) Enhancing NGO capacity for risk management, conflict analysis and early warning. With respect to human-driven disasters, it is recommended that the IDB, in line with each

¹⁸ UN Security Council Resolution 1373 creates a uniform set of obligations for all 191 member states in responding to terrorism, going beyond the 12 international treaties that now bind them. It specifically requires all member states to deny all forms of financial support to terrorist groups; to suppress the provision of safe haven, sustenance, or support for terrorists; and to share with other governments information about any groups practicing or planning terrorist attacks. It bars active and passive assistance to governments supporting terrorists.

member government's financing requests, enhance the capacity, particularly of NGOs, civil society networks and organizations at the community level, for conflict analysis, early warning, mitigation, and resolution (the capacity to monitor, anticipate, alert about and respond to potential violence) through conflict mapping including polling and focus group methodologies. As referred to earlier, several multilateral and bilateral donor agencies have already developed a number of useful conflict analysis frameworks, tools and indicators as well as capacity building programs in conflict management which might be useful in this regard; and

- (ii) Enhancing capacity for technological disaster management. It is recommended that the IDB support an evaluation of the various country public and private approaches to technological disaster risk management, including scope, strategy, legal, technical, and financial instruments, coordination and effectiveness. This could also form the basis for a systematic IDB-assisted program of capacity building for national systems and private sector technological disaster risk management, and project lending where appropriate.

Given the broad scope and sensitive nature of human-driven disasters, the IDB should consider employing a third party to advise, on a consensual basis, both the lender and borrower countries about the appropriate level of standards and performance related to natural hazard vulnerability.

FINANCING MECHANISMS

Regarding risk management financing instruments and services, it is recommended that the IDB evaluate existing mechanisms to identify links, overlaps and gaps in areas of information needs, institutions, delivery mechanism and systems, and coverage and costs. The traditional family self-insurance schemes include dependence on income generation from commodities (affected by yearly market fluctuations), remittances and savings. More sophisticated, risk transfer instruments include insurance; catastrophe bonds and international reinsurance. Rural finance institutions (co-operatives and banks) are in key role among the

poor through micro-credit and micro-insurance schemes. Other sources of financial protection include social funds, community projects, targeted work welfare programs; free food; and grants.

It is important to consider combinations of the above to manage risk at the micro, meso, and macro levels. Financial protection systems are

required because preventive and mitigation measures cannot totally eliminate risks. There is no single approach to risk management for the poor. A tailored and integrated approach may be required (Keipi and Tyson, 2002). Table 2 summarizes the actions, policies and instruments necessary for preparing and responding to natural disasters and conflict.

Table 2 –Elements of Risk Management

A. Natural Hazards

Phase	Actions	Instruments
Before	<ul style="list-style-type: none"> - Institutional development for prevention and mitigation; - Risk and vulnerability analysis; - Prevention, mitigation and preparedness investments; - Financial protection design and support to risk transfer market development. 	<ul style="list-style-type: none"> - Disaster Prevention Facility loans (GN-2085-4); - Sector investment loans with prevention and mitigation components; - Technical cooperation for prevention and mitigation; - Policy-based lending.
During	<ul style="list-style-type: none"> - Damage and needs assessment; - Reestablishment of basic services and critical infrastructure; - Clean-up and repair of damages caused to the environment; - Humanitarian assistance (limited to emergency technical cooperation). 	<ul style="list-style-type: none"> - Immediate Response Facility loans (GN-2038-12); - Portfolio restructuring and reallocation; - Technical cooperation for emergencies.
After	<ul style="list-style-type: none"> - Rehabilitation and reconstruction investments; - Adaptation of productive investments to future disaster risk reduction. 	<ul style="list-style-type: none"> - Portfolio restructuring and reallocation; - Investment and sector loans for reconstruction; - Technical cooperation for reconstruction and transformation.

Source: Internal IDB draft policy profile (May 2004).

B. Conflict

Phase	Actions	Instruments
Before	<ul style="list-style-type: none"> - Institutional capacity building for prevention through good governance; - Conflict and vulnerability analysis; - Development of instruments of prevention; - Promotion of increased stakeholder participation in program development; - Positioning for rapid response. 	<ul style="list-style-type: none"> - Development loans with prevention components; - Technical cooperations with focus on prevention; - Policy-based lending.
During	<ul style="list-style-type: none"> - Humanitarian assistance; - Bridging relief to development; - Providing incentives and sanctions for peace; - Damage and needs assessment. 	<ul style="list-style-type: none"> - Watching briefs; - Transitional support strategy; - Emergency loans.
After	<ul style="list-style-type: none"> - Restoration and capacity building of critical state institutions; - Demobilization and reintegration of ex-combatants; - Return and reintegration of displaced persons; - Creation of and support for new livelihoods; - Rehabilitation of critical infrastructure; - Reconstruction investments. 	<ul style="list-style-type: none"> - Portfolio restructuring and reallocation; - Reconstruction loans; - Technical cooperation for reconstruction and transformation.

Conclusion

In the final analysis, society itself, by creating and modifying institutions, political and social relationships, and technological and environmental interactions, may increase or reduce its proneness and vulnerability to human-driven disasters.

The many recommendations above can form the basis for revising existing IDB policies to expand the emphasis on addressing human-driven disasters of a political and technological nature, or to prepare a separate policy or strategy for, at least, politically-driven disasters.

The IDB has systematically facilitated the use of development assistance as an instrument of disaster prevention, mitigation, and preparedness by strengthening national capacity for natural hazard mapping, climatic monitoring, early warning, improved engineering standards, and land use planning, *inter alia*.¹⁹

Regarding technologically driven disasters, as recommended above, more work will have to be done to evaluate existing mechanisms for mitigating such disasters. Based on that analysis, clear policy recommendations beyond capacity building can be derived to revise the current IDB disaster policy, which should, to the extent possible, continue to include technological disaster risk management.

Regarding conflict-driven disasters, the IDB possesses the basis within the social development and modernization of the state strategies and programs to address such politically driven disasters. However, to systematically address human-driven disasters resulting from violent conflict would entail further work related to these two strategies, and analytical and lending instruments, with a view to integrating relevant aspects of these into a coherent IDB conflict policy or strategy paper.

¹⁹ See the background document for the World Summit on Sustainable Development, 2002, as well as “Managing Disaster Risk in Emerging Economies,” World Bank, 2000, for an elaboration on natural disaster preparedness, mitigation and prevention.

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