

# **Sanctions Assessment Handbook**

***-- Final Review Draft --***

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## Preface

*[Note: Preface to be included prior to final publication]*

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# Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>5</b>
<b>1 INTRODUCTION &amp; OBJECTIVES .....</b>	<b>7</b>
1.1 INTRODUCTION.....	7
1.2 WHY THE NEED FOR A SANCTIONS ASSESSMENT METHODOLOGY? .....	7
1.3 TARGETED SANCTIONS: INTERLAKEN, BONN-BERLIN AND STOCKHOLM PROCESSES .....	9
1.4 OBJECTIVES OF THIS HANDBOOK .....	10
1.5 ORGANIZATION OF THE HANDBOOK .....	10
1.6 SUMMARY OF SANCTIONS ASSESSMENT METHODOLOGY .....	11
<b>2 CONCEPTUAL FRAMEWORK.....</b>	<b>12</b>
2.1 OVERVIEW.....	12
2.2 CONCEPTUAL FRAMEWORK .....	12
2.3 HUMANITARIAN ASSESSMENTS UNDER SANCTIONS AND HUMAN RIGHTS .....	13
<b>3 CAUSAL MODELING.....</b>	<b>15</b>
3.1 OVERVIEW.....	15
3.2 TYPES OF CAUSES AND THE CHAIN OF CAUSATION .....	15
3.3 WHAT IS AND WHAT ISN'T A CAUSE.....	18
3.4 CREATING A MODEL OF THE CHAINS OF CAUSATION .....	19
<b>4 HUMANITARIAN INDICATORS AND DATA SOURCES.....</b>	<b>24</b>
4.1 OVERVIEW.....	24
4.2 USING INDICATORS IN CAUSAL MODELS .....	24
4.3 SOURCES AND AVAILABILITY OF INFORMATION.....	25
4.4 FURTHER SOURCES OF DATA .....	30
4.5 COMPARISONS ACROSS POPULATION GROUPS AND TIME .....	31
4.6 QUALITATIVE AND QUANTITATIVE INFORMATION.....	33
4.7 RELEVANCE AND RELIABILITY OF INFORMATION .....	35
4.8 IMPROVING THE INTERPRETATION AND REPORTING OF DATA.....	37
<b>5 SANCTIONS ASSESSMENT METHODOLOGY .....</b>	<b>40</b>
5.1 OVERVIEW.....	40
5.2 METHODOLOGICAL CHALLENGES IN STUDIES ON SANCTIONS .....	40
5.3 UNDERTAKING A BASELINE ASSESSMENT OF HUMANITARIAN CONDITIONS .....	43
5.4 METHODOLOGY FOR ASSESSING HUMANITARIAN IMPLICATIONS OF SANCTIONS.....	49
5.5 APPLYING THE ASSESSMENT METHODOLOGY .....	55
5.6 HUMANITARIAN ASSESSMENTS FOR PARTICULAR TYPES OF SANCTIONS .....	56
<b>6 STANDARDS FOR HUMANITARIAN ASSESSMENTS .....</b>	<b>59</b>
6.1 OVERVIEW.....	59
6.2 REQUESTS FOR ASSESSMENTS BY THE SANCTIONING AUTHORITY.....	59
6.3 AGENCIES AND INVESTIGATORS TASKED WITH UNDERTAKING ASSESSMENTS.....	60
6.4 CLEAR DEFINITION OF THE TASK.....	61
6.5 KEY ELEMENTS OF A HUMANITARIAN ASSESSMENT.....	62
6.6 WRITING A HUMANITARIAN ASSESSMENT REPORT .....	62
6.7 ENSURING TRANSPARENCY AND ACCOUNTABILITY.....	63
<b>7 APPLICATIONS OTHER THAN SANCTIONS .....</b>	<b>64</b>
<b>ANNEX I - PREVIOUS APPROACHES AND PROJECTS RELATED TO ASSESSMENT OF HUMANITARIAN IMPACTS OF SANCTIONS.....</b>	<b>65</b>
<b>ANNEX II - TABLE OF HUMANITARIAN INDICATORS.....</b>	<b>70</b>
<b>ANNEX III - GLOSSARY OF KEY TERMS.....</b>	<b>76</b>



## Tables & Figures

Table 1 - Criteria of causation in causal modeling .....	19
Table 2 - Summary of characteristics of three original data collection techniques .....	30
Table 3 - Potential sources and types of additional information for humanitarian assessments related to sanctions .....	31
Table 4 - Sources of quantitative information for assessments under sanctions .....	34
Table 5 - Summary of "areas of interest", indicators and data sources for four categories of targeted sanctions .....	58
Table 6 - UN documents and statements pertaining to humanitarian implications of UN sanctions .....	69
Table 7 - Humanitarian indicators for assessing the impact of sanctions .....	72
Figure 1 – Misleading billboard in Liberia depicting UN Sanctions, 2001 .....	9
Figure 2 - Simple example of process, with intermediate steps, leading from sanction to impact on humanitarian conditions .....	11
Figure 3 – Causal analysis framework used by UNICEF to identify the causes of child malnutrition .....	16
Figure 4 - UNICEF causal analysis applied to children's right to life and survival in Iraq .....	23
Figure 5 - Sample causal model identifying potential causes of child malnutrition .....	23
Figure 6 - Notional examples of possible indirect impacts of sanctions .....	43
Figure 7 - Flowchart depicting the five steps in the Sanctions Assessment Methodology .....	54
Box 1 - Elaboration of select criteria of causation from the field of epidemiology .....	20
Box 2 - A step-by-step approach to developing a causal model .....	22
Box 3 - Comparison of Conditions Across Time in Liberia .....	32
Box 4 - Indicators used by WFP for Vulnerability Analysis and Mapping in N. Iraq, 2002 .....	45
Box 5 - Priority humanitarian indicators in each of the eight human security subject areas, categorized as indicators of PROCESS or OUTCOME. These indicators are drawn from the UN Common Country Assessment (CCA) indicator framework to ensure maximum compatibility with the CCA process ....	48
Box 6 - Checklist for undertaking a baseline assessment .....	49
Box 7 - Simple example of cumulative or 'cascading' impact of sanctions .....	53



## Executive Summary

The purpose of this handbook is to provide guidance to humanitarian practitioners and policymakers on identifying and measuring possible humanitarian consequences of sanctions. The information and guidelines presented here are relevant to a range of sanctions, including: arms embargoes, financial sanctions, travel-related sanctions and targeted trade sanctions. At the core of this handbook is an assessment methodology which facilitates evaluation of possible humanitarian consequences of sanctions. The methodology can be applied in advance of-, during-, or following sanctions, and aims to address two key challenges associated with humanitarian assessments under sanctions: (I) accurate determination of the current status of humanitarian conditions, and (II) separation of the impacts of sanctions on health and well-being from those due to other causes.

The early identification of possible humanitarian consequences of sanctions can reduce confusion about humanitarian conditions and their causes, and can help responsible parties mitigate any unintended consequences. It can also help improve the targeting of humanitarian assistance to best meet the needs of vulnerable groups.

The assessment methodology presented here is based on a human security conceptual framework (Chapter 2), and uses models of cause and effect (Chapter 3), combined with indicators of process and outcome (Chapters 4 & 5), to assist practitioners in identifying the unique impacts of sanctions. This conceptual framework operationalizes human security by defining two clusters of humanitarian and socio-economic conditions, each of which contains four subject areas: a "core" cluster -- comprising subject areas of Health, Food & Nutrition, Water & Sanitation, and Education -- and a "systemic" cluster: Governance, Economic Status, Physical Environment, and Demography. This configuration is referred to as the "4 + 4" human security subject areas.

Causal models identify how one thing causes another to occur. They feature causal pathways consisting of inter-related, intermediate steps linking actions with measurable outcomes. The use of criteria of causation -- including the temporal relationship between two variables; the strength of association between two factors; the consistency in the relationship between a number of factors; and the plausibility of the relationship between two factors -- assists in clarifying whether a causal relationship exists between variables. Identification of different types of causes -- including direct; indirect; adequate and sufficient causes -- also helps in identifying the intermediate steps in the chain of causation.

Causal models can be constructed by: clearly defining the actions and outcomes of interest (in this case: sanctions and humanitarian conditions); associating variables that may belong in causal chains; identifying potential, and then likely, causes; and constructing the pathways linking cause and effect.

Humanitarian indicators measure people's conditions of life. They may take the form of measures of PROCESS -- such as the number of children treated for malnutrition -- or measures of OUTCOME such as the percentage of children that are malnourished. The essence of the sanctions assessment methodology is to determine whether there are changes in humanitarian conditions (as measured by indicators) that may be due to sanctions.

This handbook includes a reference list of humanitarian indicators in each of the eight human security subject areas (Annex II). To ensure complementarity with existing assessment processes, priority indicators that are compatible with those indicators used in the Common



Country Assessment (CCA) process have been identified in each of the human security subject areas. These indicators are used to provide a starting point for assessing humanitarian conditions, for monitoring those conditions over time, and for identifying possible changes in conditions due to sanctions.

When constructing causal models, the PROCESS indicators will generally relate to measurement of the intermediate steps in the chain of causation while the OUTCOME indicators will be used to measure humanitarian conditions. Some of the PROCESS and OUTCOME indicators can be used as reference benchmarks against which to measure future changes, while others will be more suitable to measuring change during sanctions (Table 7).

Prior to assessing possible changes in humanitarian conditions that may be due to sanctions, a baseline assessment of conditions at an initial point in time (ideally prior to- or at the time of the imposition of sanctions) must be undertaken to establish a reference point against which to measure changes. The following points provide a checklist for undertaking a baseline assessment: (i) gather information on humanitarian conditions using primary and secondary data sources and leveraging other assessment processes; (ii) assess current conditions and recent trends in each of the "4 + 4" human security subject areas; (iii) identify possible factors influencing those conditions; (iv) establish a profile of vulnerability within the population; (v) identify 'gaps' or deficiencies in existing data/information; and (vi) prepare to use the baseline as a reference for future assessment of changes in conditions. Assessment of humanitarian vulnerability represents a key component of the baseline assessment and can be undertaken using approaches such as the Vulnerability Assessment and Mapping (VAM) technique.

The methodology for assessing the humanitarian implications of sanctions consists of five steps:

**Step I** - Clearly identify the sanction measures (types of sanctions proposed or in place) and outcome (humanitarian conditions) of interest;

**Step II** - Undertake a 'baseline' assessment of conditions prior to sanctions;

**Step III** - For each of the "4 + 4" human security subject areas, construct causal models to identify possible linkages between sanctions measures and humanitarian conditions;

**Step IV** - Identify potential sources of information for each of the PROCESS and OUTCOME indicators identified in the causal models, and gather the necessary information to complete the models;

**Step V** - In each human security subject area, identify and extract the contribution of sanctions to the observed effects, separate from effects due to other causes

Identification of indicators and data sources unique to different types of targeted sanctions -- including arms embargoes, financial sanctions, travel-related sanctions, and targeted trade sanctions -- facilitates the application of this generic methodology to these types of sanctions.

Standards for humanitarian assessments outlined in this handbook (see Chapter 6) include consideration of the elements that must be contained in such assessments, and the required elements of an assessment report. The following section headings provide a template for drafting assessment reports: *Introduction; Procedure & Methodology; Baseline and Prior Assessments; Assessment of Current Conditions; Results of Causal Modeling; Humanitarian Implications of Sanctions; and Findings.*

Finally, this assessment methodology can be applied to situations other than sanctions, including: identifying the unique impact of conflict, or HIV/AIDS, on overall humanitarian conditions; contributing to the UN Common Country Assessment process; and undertaking humanitarian needs assessments (Chapter 7).



# 1 Introduction & Objectives

## 1.1 Introduction

The purpose of this handbook is to provide guidance to humanitarian practitioners and policymakers on identifying and measuring possible humanitarian consequences of sanctions.

The information contained in this handbook is relevant to a broad range of sanctions, including: arms embargoes, financial sanctions, travel-related sanctions and targeted trade sanctions. The methods presented here are applicable to United Nations (UN)-imposed sanctions and to those imposed unilaterally or by regional actors.

Sanctions were imposed by the United Nations Security Council (UNSC) in twelve cases between 1990 and 2003.<sup>1</sup> They had been imposed only twice during the UN's prior four decades.<sup>2</sup> Concern about humanitarian damage caused by sanctions has accompanied their expanded use, and two projects in the 1990s undertook to address this concern.<sup>3</sup> While these projects increased awareness of the need to assess humanitarian impact, they failed to provide a reliable approach to identifying the unique effects of sanctions, separate from those due to other causes.

In light of this increased concern for unintended consequences of sanctions, and the *ad hoc* approach to assessing humanitarian conditions in sanctioned states during the 1990s, the UN Office for the Coordination of Humanitarian Affairs (OCHA) initiated a project in September 2002 to develop a standard approach to assessing the humanitarian implications of sanctions.

This handbook is one of two main outputs generated under that project, and constitutes a reference manual for those involved in humanitarian assessments under sanctions. It is intended also to inform policymakers of how such assessments should be undertaken. A partner publication to this handbook -- a set of *Field Guidelines* -- provides concise guidelines to assist practitioners in undertaking or contributing to humanitarian assessments under sanctions.

## 1.2 Why the Need for a Sanctions Assessment Methodology?

Where international political confrontations or armed conflicts are accompanied by multilateral sanctions, little may be known about the condition of people's lives. Good assessments are needed to determine humanitarian conditions, identify whether and how sanctions cause harm, improve the quality of people's lives by anticipating potential negative impacts, and to get maximum humanitarian benefit from available resources. A reliable assessment methodology will help address these needs. In the absence of such a standardized approach, there has been a great deal of confusion surrounding the humanitarian impact of sanctions, as the following examples demonstrate:

<sup>1</sup> This includes imposition of sanctions on states, groups of states, and sub-state entities, and does not count multiple applications of sanctions to any one case. The twelve cases, listed with the initial authorizing Security Council resolution (SCR) and date of first application of sanctions, are: Iraq (SCR 661) - August 1990; Former Yugoslavia (SCR 713) - September 1991; Somalia (SCR 733) - January 1992; Libya (SCR 748) - March 1992; Liberia (SCR 788) - November 1992; Haiti (SCR 841) - June 1993; Angola-UNITA (SCR 864) - September 1993; Rwanda (SCR 918) - May 1994; Sudan (SCR 1054) - April 1996; Sierra Leone (SCR 1132) - October 1997; Afghanistan (SCR 1267) - October 1999; Ethiopia and Eritrea (SCR 1298) - May 2000.

<sup>2</sup> The two cases of UN sanctions prior to 1990 were: (1) South Africa, 1977 to 1994; and (2) Southern Rhodesia, 1966 to 1979.

<sup>3</sup> Eric Hoskins, *The Impact of Sanctions: A Study of UNICEF's Perspective* (New York: UNICEF Office of Emergency Programmes, February 1998); Larry Minear, David Cortright, J.Wagler, G. Lopez, and T. Weiss, *Towards More Humane and Effective Sanctions Management: Enhancing the Capacity of the United Nations System*. Occasional Paper No. 31 of the Thomas Watson Jr. Institute for International Studies (Providence, RI: Brown University, 1998).





In **Yugoslavia** during the 1990s, Ministry of Health officials were convinced that sanctions had caused the infant mortality rate to double. In reality, the rate had instead declined more rapidly than in any neighboring country.<sup>4</sup> In **Serbia** between 1992 and 1995 sanctions were blamed for blocking the importation of medicines. Sanctions had caused some contract delays but at the same time the UN-oversight of imports had assured payments to suppliers. When sanctions ended many companies stopped trading with the Ministry of Health altogether and shortages of essential drugs grew worse, not better. Contrary to perception, UN sanctions had helped to ensure access to medicines by providing commercial guarantees.

In **Liberia** during 2001, billboards depicted the UN sanctions as a dangerous elephant, crushing a hospital and school (See Figure 1). The targeted UN sanctions in place at the time contained no restrictions on humanitarian goods used by hospitals or schools. Similarly, in **Afghanistan** during 2000 and 2001, the Taliban-controlled media undertook a sustained campaign against sanctions, blaming them for the poor socio-economic conditions in the country. This resulted in a general public perception that sanctions were having a direct impact on socio-economic and humanitarian conditions, even though the sanctions in place at the time were targeted to cover travel prohibitions, limited financial restrictions, diplomatic restrictions, and an arms embargo.<sup>5</sup> Given the operating environment in the country, the UN had limited opportunities, and in any event made almost no attempt, to respond to this misinformation.

During thirteen years of comprehensive sanctions, the Government of **Iraq** used the sanctions to gain sympathy by arguing that they caused half a million or excess child deaths. The temporary system of humanitarian exemptions in place from 1996-2003 -- the "Oil-for-Food" Programme -- provided high dollar inputs for certain commodities, but few reliable assessments were carried over the lifespan of the sanctions (1990 to 2003). The Government of Iraq pointed to sanctions as the primary cause of suffering in Iraq, while others blamed the authorities in Baghdad. A reliable assessment could have identified the processes by which humanitarian conditions were being affected, and could therefore have assisted in mitigating the unintended negative consequences of sanctions.

These examples highlight the need for credible humanitarian assessments in advance of, and during, sanctions. The approach to such assessments should be made explicit, be consistent across countries and over time, and be rigorous enough to clarify the specific impact of sanctions among other possible humanitarian threats. Only in this way will such assessments be politically neutral and technically legitimate.

No methodological approach is foolproof, but is it credible? Do those assessing the humanitarian implications of sanctions make explicit their sources of information, the mechanisms by which they think sanctions cause harm, and the strength of the evidence available to support their claims? If they do that, others can judge if a convincing and credible case has been put forward. This handbook aims to provide guidance on how to undertake an assessment, but cannot guarantee that it is done well! To help ensure that humanitarian

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<sup>4</sup> See, Richard Garfield, *Economic Sanctions, Health, and Welfare in the Federal Republic of Yugoslavia: 1990-2000* (New York and Belgrade: OCHA and UNICEF-Belgrade, 2001) : 47 - 50.

<sup>5</sup> See the following two reports of the Secretary-General published during 2001: United Nations Security Council, *Report of the Secretary-General on the Humanitarian Implications of the Measures Imposed by Security Council Resolutions 1267 (1999) and 1333 (2000) on Afghanistan*, UN Doc. S/2001/695 (New York: United Nations, 13 July 2001); United Nations Security Council, *Report of the Secretary-General on the Humanitarian Implications of the Measures Imposed by Security Council Resolutions 1267 (1999) and 1333 (2000) on the Territory of Afghanistan under Taliban Control*, UN Doc. S/2001/1215 (New York: United Nations, 18 December 2001).



assessments are credible, Chapter 6 outlines standards for *WHO* is best qualified to carry out such an assessment and *WHAT* their assessment should include.

This handbook builds on several important earlier efforts, including analyses and methodologies by the (then-) United Nations Department of Humanitarian Affairs (DHA), the United Nations Children's Fund (UNICEF), and the Humanitarianism and War Project. The contribution of these earlier initiatives to assessing the humanitarian implications of sanctions is summarized in Annex I.



**Figure 1 – Misleading billboard in Liberia depicting UN Sanctions, 2001**

### 1.3 Targeted Sanctions: Interlaken, Bonn-Berlin and Stockholm Processes

Since the late 1990s, three international initiatives have been undertaken to develop and refine political approaches to the targeting of sanctions, with the goal of increasing their effectiveness.

The first of these, The Interlaken Process, was initiated by the Swiss Government in 1998 and focused on targeted financial sanctions. Consultations during the Process identified the role of humanitarian exemptions in designing targeted financial sanctions and mentioned briefly the role of humanitarian impact monitoring. The report of the contributions to the sanctions debate resulting from the Process did, however, suggest draft text for incorporating provisions relating to monitoring of potential humanitarian consequences in UN Security Council resolutions.<sup>6</sup> This 'model' text for Security Council resolutions is described in more detail in Section 6.2.

The second initiative, the Bonn-Berlin Process, organized by the Foreign Office of the Federal Republic of Germany in 2000, focused on arms embargoes and travel sanctions. The consultations under this process did not address directly how to assess the potential humanitarian implications of the measures under discussion.<sup>7</sup>

<sup>6</sup> The Thomas J. Watson Jr. Institute for International Studies, *Targeted Financial Sanctions: A Manual for Design and Implementation - Contributions from the Interlaken Process* (Providence: The Thomas J. Watson Jr. Institute for International Studies, October 2001).

<sup>7</sup> Michael Brzoska Ed., *Design and Implementation of Arms Embargoes and Travel and Aviation Related Sanctions: Results of the 'Bonn-Berlin Process'* (Bonn: Bonn International Center for Conversion, 2001).



The third initiative in this triad, the so-called *Stockholm Process on the Implementation of Targeted UN Sanctions*, was coordinated by the Swedish Ministry of Foreign Affairs, and took place during 2002. The final report of this initiative was presented to the UN Security Council in February 2003.<sup>8</sup> Recommendations contained in that report mentioned the need for an "established methodology" for undertaking regular humanitarian and socio-economic impact assessments.

Taken together, these three initiatives guide much of the UN's political work to create and implement targeted sanctions. For the UN Security Council, sanctions constitute one of the tools available to the Council -- of a range of options between diplomacy and military force -- to restore peace and security. It is important, therefore, that these measures be well designed and implemented, and that any unintended harm they may cause can be minimized and mitigated.

This handbook is intended to complement the reference documents produced under the three international processes on more effective and targeted sanctions, and to assist in minimizing potential humanitarian impacts of sanctions implemented according to the guidelines and recommendations produced during those processes.

## 1.4 Objectives of this Handbook

The primary objective of this handbook is to present a clear and flexible methodology, which can be used by practitioners to assess potential humanitarian impacts in advance of, during, or following sanctions. In fulfilling that objective, this handbook aims to:

- Present the elements of the sanctions assessment methodology, and show how the methodology can be used during different stages of sanctions;
- Provide guidelines for the minimum requirements to adequately undertake a humanitarian assessment;
- Identify possible areas for humanitarian impacts of sanctions;
- Improve how assessors use and interpret data for assessment of living conditions;
- Provide guidance on how to identify those population groups most likely to be affected by sanctions; and,
- Provide a basis for decision makers to determine how to minimize unintended harm and improve well-being.

This handbook draws on methods and approaches from several disciplines, particularly the field of impact evaluation in the social sciences. These research methods are applied here to the specific task of assessing the influence of sanctions on conditions of life in targeted regions.

Theoretical textbooks often show how to undertake a study under ideal conditions --when all relevant information is available, where funds and time are not constraints, and when social conditions are stable. This handbook is instead oriented to helping the reader uncover meaningful and valid findings within the extant resource- and operational constraints.

## 1.5 Organization of the Handbook

The following three chapters of this handbook describe the main elements of the assessment methodology: Chapter 2 outlines the conceptual framework used to guide development of the

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<sup>8</sup> Peter Wallensteen et al. Ed., *Making Targeted Sanctions Effective: Guidelines for the Implementation of UN Policy Options* [Final Report on the Stockholm Process on the Implementation of Targeted Sanctions] (Uppsala: Department of Peace and Conflict Research, Uppsala University, 2003).

methodology. Chapter 3 provides an overview of the causal modeling approach, and Chapter 4 elaborates on the role of humanitarian indicators and data sources in sanctions assessments.

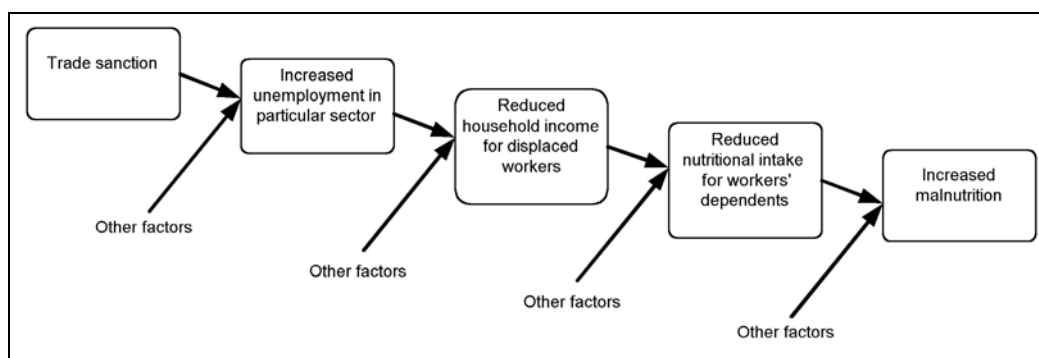
Chapter 5 combines the elements presented in the three preceding chapters to construct the actual sanctions assessment methodology, and therefore constitutes the core of the handbook. Standards for conducting humanitarian assessments are presented in Chapter 6, while Chapter 7 outlines the potential for applying the methodology to situations other than sanctions.

## 1.6 Summary of Sanctions Assessment Methodology

The methodology outlined in this handbook is based on a causal modeling approach: It employs structured models of cause and effect to trace the processes that lead from an **action** (the application of sanctions) to **outcomes** (for example, changes in humanitarian conditions) across economic and social sectors. The models also specify indicators of process to identify intermediate steps through which sanctions may affect humanitarian conditions.

By identifying pathways from actions to outcomes, the approach makes explicit the causal mechanisms by which harm may occur and illuminates areas of focused inquiry for investigators to pursue. For example, the imposition of a targeted trade sanction may result in reduced employment opportunities in a particular industry sector. In the absence of alternative employment opportunities, this may result in reduced household income for displaced workers, thereby contributing to decreased household food security and reduced nutritional intake among workers' dependents. Malnutrition among the more vulnerable household members would be a possible resulting outcome.

In this example, the process, with intermediate steps, links the action (sanction) to the outcome (increased malnutrition) (See Figure 2). Since other factors may also influence nutritional intake, the identification of the processes that lead to changes in humanitarian conditions is intended to assist in isolating and measuring the effects that are specifically attributable to sanctions.



**Figure 2 - Simple example of process, with intermediate steps, leading from sanction to impact on humanitarian conditions**

The methodology presented here does not in any way presuppose a particular type of impact due to sanctions. The impact of sanctions on humanitarian conditions in a particular case may be positive, neutral or negative. Investigators must keep an open mind in this regard and make their hypotheses explicit. The methodology helps in examining if a particular hypothesis is consistent with relevant data.



## 2 Conceptual Framework

### 2.1 Overview

This chapter explains the conceptual framework underpinning the sanctions assessment methodology -- a framework which is based on the concept of "human security." Eight human security subject areas are used to capture the status of conditions of life, and these eight areas are organized within two clusters: a core cluster – relating to the basic existential needs of the individual; and a systemic cluster which relates to the socio-economic environment within which those core needs are located. This construct provides a foundation for structuring the assessment methodology.

This chapter also elaborates on two aspects of the interface between human rights and the humanitarian implications of sanctions. First, considerations of human rights under sanctions are incorporated when taking account of discriminatory access to goods and services, or limits to the participation of key groups in political, social and economic activity that may occur because of sanctions. Second, by identifying the impact of sanctions on humanitarian conditions, the assessment methodology can provide a foundation upon which practitioners can build human rights assessments by incorporating additional considerations of the duties and obligations of various actors.

### 2.2 Conceptual Framework

The approach to assessing the humanitarian implications of sanctions presented in this handbook is based on the concept of human security.<sup>9</sup> In contrast to other types of security, human security is a people-focused concept, which captures the status of the safety of the individual from critical threats to well-being. It provides a construct for assessing possible threats to, protection of, and needs for the survival and development of people.

Moreover, since the concept of human security is predicated on the safety of individuals and groups, it is well suited to the purposes of assessing the humanitarian implications of sanctions, as these assessments ultimately seek to improve human health, well-being and safety by minimizing potential unintended impacts.

Human security recognizes a "vital core" of human activities and capabilities of highest importance to be protected. Since it is focused on threats to actual living conditions, human security can be assessed by measuring key aspects of people's conditions of life. It is this focus on multiple measurable dimensions of people's lives and their safety, and consideration of *threats* to these facets of a person's security, that distinguishes human security from other concepts, principles and frameworks used for capturing the status of living conditions.

The conceptual framework employed here operationalizes human security by establishing **two clusters** of humanitarian and socio-economic conditions, each of which contains four subject areas. These are referred to as the "**4 + 4**" **human security subject areas**. Each subject area contains a number of indicators, or variables, that are useful for measuring conditions of life. For example, the "health" subject area contains indicators such as child mortality, malnutrition rates, and immunization rates.

<sup>9</sup> For more on the concept and applications of human security, see, for example: The Commission on Human Security (CHS), *Human Security Now* (Final Report of the Commission on Human Security) (New York: Commission on Human Security, 2003) [Available at <http://www.humansecurity-chs.org> (as of March 2004)]; See also: Kanti Bajpai, *Human Security: Concept and Measurement*, Occasional Paper # 19 of the Joan B. Kroc Institute for International Peace Studies, University of Notre Dame. August 2000.



### 2.2.1 "Core" and "Systemic" Human Security Clusters

The **core cluster** of four subject areas comprises groups of indicators of conditions related to immediate survival and development of humans. The subject areas in this cluster are: **1. Health; 2. Food & Nutrition; 3. Water & Sanitation; and 4. Education.**<sup>10</sup> Taken together, these four pillars represent the "vital core" of human security.

The indicators and groupings proposed here parallel established "minimum standards" for humanitarian assistance developed under the Sphere project, and relate closely to fundamental human rights as codified in the relevant covenants and declarations, including the International Covenant on Economic and Social Rights and the Convention of the Rights of the Child.<sup>11</sup> These elements provide substance to address the question, *"What are the current conditions of people's lives?"* Most of these data will be at the level of the individual person while the statistical measures used to describe these conditions are generally expressed as rates in a population.

The second cluster deals with the systems and social context in which people strive to secure the core human needs. The subject areas of this cluster are: **1. Governance; 2. Economic Status; 3. the Physical Environment; and 4. Demography.** These structures frame the environment in which outcomes that characterize the vital core are influenced. Most of these data will be at the level of groups of persons or communities.

These two clusters of subject areas - the "core" and "systemic" clusters - provide a template covering most of the essential conditions for assessing humanitarian status.

## 2.3 Humanitarian Assessments Under Sanctions and Human Rights

In developing the sanctions assessment methodology, one of the key issues considered was how to define the interface between the methodology and human rights. Essentially, the question was: *"to what degree should human rights feature in assessment of the humanitarian implications of sanctions?"* This presents significant challenges, since any considerations of the degree of fulfillment of human rights involves judgments on the legal obligations of certain actors (the targeted state; the sanctioning authority; and other States Parties to the relevant human rights Covenants and agreements) in upholding and safeguarding those rights.

The central purpose of the methodology presented in this handbook is to assess humanitarian conditions in sanctioned countries and regions. Assessment studies using this methodology will analyze the basic status of people's living conditions and identify how these conditions evolved as they did, including the specific impact of sanctions.

By focusing on the possible impacts of sanctions on the basic conditions of life of those in sanctioned states, the methodology highlights two key dimensions of the interface between assessment of the humanitarian impacts of sanctions and human rights: (1) human rights problems which manifest as a result of discriminatory access to resources; and (2) application of the methodology to provide an analytical basis for undertaking human rights assessments of sanctions.

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<sup>10</sup> The inclusion of Education in the core cluster mirrors the increased role education has played in considerations of basic conditions of life, especially for children, in recent years. See, for example: Graça Machel, *The Impact of Armed Conflict on Children: A Critical Review of Progress Made and Obstacles Encountered in Increasing Protection for War-affected Children*, International Conference on War-affected Children, Winnipeg, Canada, Sept. 2000 : p. 27.

<sup>11</sup> For more information on the Sphere Project, see: <http://www.sphereproject.org>





### 2.3.1 Discriminatory Access to Resources Under Sanctions

Certain limitations on human rights that are associated with discrimination and prejudiced access to basic resources can be identified and tracked through the subject areas outlined in the preceding section, insofar as these constraints influence processes that affect humanitarian conditions. For example, where sanctions result in increased discrimination against women seeking employment in particular sectors, the human rights impact is manifest in economic and employment data. Thus, when undertaking humanitarian assessments, it is important for investigators to inquire about the potential for sanctions to change resource allocations in favor of particular groups in the population.

### 2.3.2 Empirical and Analytical Basis for Human Rights Assessments

In the literature on sanctions and human rights consequences, there is much confusion about how indices of humanitarian conditions relate to changes in human rights. It is important therefore to define these terms and how they overlap.

Humanitarian conditions are defined here as those conditions of life that relate most directly to physical survival, health and well-being and critical aspects of human development. Humanitarian conditions are empirical in nature and can be examined by discrete measures. Human rights -- being rights of individuals -- are universal, independent and indivisible. Fundamental human rights that relate to the very existence of the individual (among other rights) are non-derogable. Human rights are aspirational (everyone can aspire to fulfillment of their human rights) and normative (every person *should* be able to enjoy complete fulfillment of his/her human rights). Perhaps most importantly, human rights confer entitlements, and define obligations, both in a legal and moral sense.

Because human rights are entitlements of every person, and cannot be diluted or diminished, it is not possible to measure human rights, *per se*. When people speak of human rights indicators, they are referring to measurement of the degree to which human rights are being fulfilled. To measure this, one must identify and use indicators that provide an assessment of the degree to which human rights are being fulfilled.

Practitioners in the two domains of human rights and humanitarian affairs each have developed empirical measures upon which to base assessments of their respective variables of interest. Human rights practitioners have identified indicators to assess the degree to which human rights are being fulfilled. Humanitarians have identified indicators of humanitarian conditions. There is significant overlap in these groups of indicators.

However, indicators of humanitarian conditions and human rights differ in one key area: assessments of humanitarian conditions are based on empirical and analytical determinations of existing conditions. In the case of indicators used to assess the fulfillment of human rights, indicators of humanitarian conditions provide the empirical basis upon which human rights practitioners can make an additional judgment as to whether the observed conditions constitute a breach of, or constraint on, human rights.

By analyzing the basic conditions of people's lives and assessing the impact of sanctions on those conditions, the methodology presented in this handbook can provide an analytical foundation, which others can use to determine compliance with the duties and obligations of the actors involved in creating and redressing these conditions. This empirical basis will be a necessary precursor for human rights assessment of sanctions, which will require additional judgments and interpretation.



## 3 Causal Modeling

### 3.1 Overview

Causal modeling identifies how one thing causes another to occur. In the realm of humanitarian assessments, such modeling is necessary to understand the effects of one possible cause in the context of other possible causes of changes in humanitarian conditions, namely, impoverishment, disease, death, or other worsened conditions of life. To be useful, a model -- which specifies key variables and the relations between them -- should specify steps by which actions lead to outcomes through intervening variables. Such a model helps focus attention on what information to collect, the nature of the relationship between variables, and how and in what way each contributes to the humanitarian outcomes examined. For the task of developing a sanctions assessment methodology, causal modeling represents the core technique that will assist in elucidating the unique effects of sanctions apart from those due to other causes.

Causal modeling has been employed by the United Nations Children's Fund (UNICEF) in a number of areas, including exploration of the multiple causes of child malnutrition (See Figure 3).<sup>12</sup> Causal analysis is also suggested as a means of analyzing the root causes of development challenges in the UN's Common Country Assessment (CCA) Process. It is an even more important tool when examining the impacts of sanctions, because the causal pathways are more diverse and complicated.

This chapter describes how to employ causal modeling techniques for humanitarian assessments in general, and can therefore provide useful guidance to practitioners using other assessment processes (such as the UNICEF and CCA approaches mentioned here). The general principles described in this chapter will be applied to the specific task of identifying the unique humanitarian implications of sanctions in Chapter 5. The sections that follow explore types of causes and causation; criteria for determining what is or is not a cause; the process of inferring cause; and how to construct a causal model.

### 3.2 Types of Causes and the Chain of Causation

There are several different types of causes that can be identified in building models of cause and effect. Becoming aware of different types of causes and their inter-relationships can assist in exploring possible linkages between social, political and economic factors, and changes in humanitarian conditions.

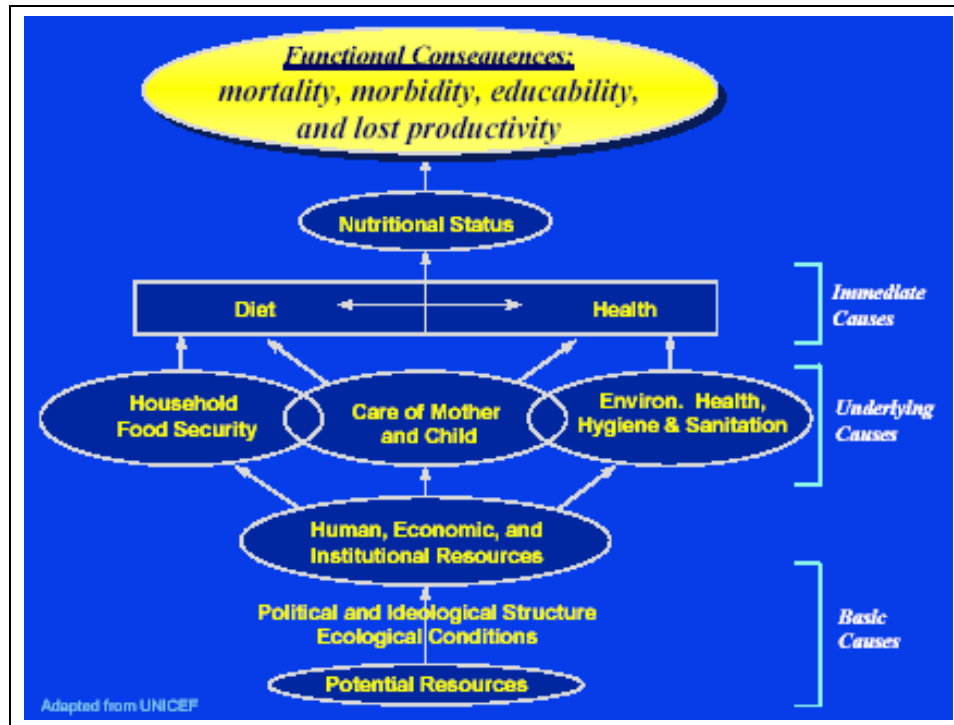
#### 3.2.1 Proximal and Distal Causes in the Chain of Causation

A **proximal cause** is the event that immediately precedes the outcome of interest. There may be prior events that lead to the proximal cause. Such events that are more removed in the sequence of causal events are referred to as **distal causes**. By detailing steps, tracing backward from the outcome or forward from an initial event, we elaborate **causal pathways**. The steps from distal and proximal causes to an outcome of interest are collectively referred to as **a chain of causation**.<sup>13</sup>

<sup>12</sup> For an example of the use of causal analysis by UNICEF, see section on "Causes of Child Malnutrition" in, United Nations Children's Fund, *The State of the World's Children, 1998* (New York: Oxford University Press, 1998) : 23-35.

<sup>13</sup> There are many names used for establishing chains of causation from a variety of social science fields. They include rationale explanation, reason analysis, process tracing, historical analysis, objective trees, and logical networks, and logical network analysis.





**Figure 3 – Causal analysis framework used by UNICEF to identify the causes of child malnutrition**

By identifying proximal and distal causes the process of causation can be better examined to define the order and relations among relevant variables. Some elements of a causal chain may turn out to be superfluous, and are eliminated from the model. More often, increasing knowledge leads to further specification of steps in a causal chain. The best causal models identify all key events, their order of occurrence, and the character and magnitude of their influence on one another.

For example, a hypothesis that smoking causes cancer was first put forth in the 1940s by observing that smokers frequently got cancer, even though exactly how the causation occurred, biologically, was not yet known. It is now understood that smoking results in the inhalation of specific harmful chemicals that cause DNA damage when they come in sufficient contact with certain types of vulnerable cells. It is those DNA changes, in turn, which lead to cancer.

The same logic can be applied to sanctions: If it is believed that sanctions might lead to increased malnutrition among children in a particular situation, the next step is to test the validity of this assertion by seeking answers to questions such as: Do sanctions increase unemployment or impoverishment through increased costs and decreased sales? Do they lead to inflation and devaluation of the currency, causing food imports to cost more? Sanctions may lead to any and all of these things. The investigator needs to determine which of these factors may be operating in the country being examined. Relevant data for each of these variables can then be collected to determine if, and how much, it influences the next link in the chain.



### 3.2.2 Direct and Indirect Causes

The simplest models are composed of **direct causes**, where event *A* leads straight to outcome *B*. Continuing with the example of possible linkages between sanctions and child malnutrition mentioned above (Section 3.2.1): perhaps none of the possible direct causes mentioned is the cause of increased malnutrition. Perhaps instead the government drove up food prices by holding back stocks, or sold food crops to buy weapons. Perhaps sellers in other countries, knowing that the sanctioned country had fewer possible sources of supply, inflated their prices. These would be **indirect causes** ... indirect in that they operate through other, parallel (and possibly unanticipated) causal mechanisms (See also Figure 6). By building models and examining data, investigators can determine how direct and indirect causes relate to one another and act together through a step-by-step chain.

Another example of an indirect cause is seen in the case of targeted UN sanctions against Liberia that were considered, but not imposed, during 2001. During a pre-assessment of possible humanitarian implications of the proposed sanctions on the timber, rubber sectors and the shipping registry, investigators asserted that the political debates on the imposition of sanctions alone had been sufficient to contribute to reduced confidence in the Liberian economy, which in turn impacted local currency exchange rates and drove up prices of imported commodities.<sup>14</sup> Even though in this case the sanctions were not imposed (timber sanctions were later imposed in 2003), it highlights the indirect and unintended impacts that may occur beyond the immediate target area of sanctions.

A causal model can also help to highlight which data will be needed for examining pathways of causation and making predictions about expected outcomes. In the most specific models where relevant quantitative information is available, a causal model can be used to attribute how much of an outcome is due to a set of events. It might be possible, for example, to establish that 40% of a reduction in crop yield is caused by drought and 20% is due to sanctions-related restrictions on the importation of fertilizer.

### 3.2.3 Necessary and Sufficient Conditions

An event is **sufficient** to cause an outcome if no other events are required for this outcome to occur. There may be many sufficient events, any one of which could cause the outcome. In the case of sanctions, one obvious sufficient cause is a prohibition on importing a particular item. In practice few items can be prohibited completely, but the attempt to do so reduces access and increases its cost.

There may instead need to be more than one event that needs to occur if the outcome is to result. In such a case no single event is sufficient. For example, if a country normally is self-sufficient in grains but suffered a crop failure during that year, restrictions on foreign exchange or the closing of border posts *together* with the crop failures may explain a rise in malnutrition.

Among a group of events, there may be one factor that must always be present for an outcome to occur. This is termed a **necessary** condition, in that the observed outcome cannot happen in the absence of this factor. Some conditions may be “necessary, but not sufficient” to lead to an outcome, which means that they are definitely required for the outcome to be observed, but that other factors too are required.

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<sup>14</sup> United Nations Security Council, *Report of the Secretary-General in pursuance of paragraph 13 (a) of resolution 1343 (2001) concerning Liberia*, UN Doc. S/2001/939 (New York: United Nations, 5 October 2001).



For example, prohibition of sale of Iraqi oil was a necessary condition for sanctions to harm the population, in that this reduced funds available to government. This necessary condition was accompanied by the Government of Iraq's failure to use its more limited funds for humanitarian purposes. Together, these necessary and sufficient conditions spelled disaster for the general public.

Any variable can be examined to determine if it is proximal or distal, sufficient, and/or necessary. These examinations can assist in identifying where the variable acts in the chain of causation linking cause and effect, and the importance of the variable to the observed outcome.

### 3.3 What Is and What Isn't a Cause

In social science research there is often no clear-cut, simple formula for determining what causes what. This determination will probably involve a judgment call among several possible criteria.

**Intentionality** is often ascribed to events purported to be causes. When it is possible to establish intent, this strengthens the argument that a factor is a cause. But this is not yet sufficient proof. The intent may be there, but the intended events may not have occurred, or may have occurred through actions by others. Intent is usually difficult to prove and subject to interpretation.

Events speak louder than words, and intent is only important if it is related, in a causal chain, to the purported causal events. Establishing intent does not prove that "sanctions caused the children to die". Instead, one has to ask, "*What did they die of? Did the lack of key goods contribute to a higher death rate? Did sanctions reduce access to those goods?*" If all of this can be shown, evidence of intent can form the first link in a chain of causation.

Moreover, cause is not the same as responsibility, in a legal or political sense. Identification of proximal and distal causes helps in elaborating a case for what is responsible or who is accountable for a particular action. Too often, those seeking to establish blame for changes in humanitarian conditions make claims of cause without building such a case or providing substantive evidence.

In addition to considering intentionality, one must also be careful to differentiate between **correlation and causation** in establishing linkages between different variables. There may indeed be a correlation between two variables, but there may not be a direct (or even an indirect) causal linkage. To say that "*household food security declined during the period of sanctions*" is to suggest that there was some correlation between household food security and sanctions, for that particular case. This is a much weaker relationship than causation, which would require demonstration that sanctions actually caused, or contributed to, reduced household food security. Just because there are firefighters at the scene of a fire, does not mean that they caused the blaze to occur!

#### 3.3.1 Inferring Cause Using Criteria of Causation

How does one variable relate to another in a causal chain? How does one make decisions about "*which came first, the chicken or the egg?*" These judgments are at the heart of elaborating realistic and useful models. There are several standard criteria used to assist in making these judgments. While no variables meet all these criteria perfectly, one can identify as causal those variables for which the maximum number of these criteria fit in a given situation. These variables have different names in various fields, but the logic behind them is the same. Table 1 presents some criteria of causation from various fields.



Some criteria of causation from the field of epidemiology are explained in Box 1. For the purposes of establishing the extent of the causal relationship between variables, the criteria presented in Box 1 should be considered a checklist for practitioners.

Epidemiology <sup>15</sup>	Statistics <sup>16</sup>	Social Science Research <sup>17</sup>	Disaster and Risk Studies	Law
Temporality		Internal Validity	Duration of exposure	Opportunity
Strength of Association (Relative Rates)	Magnitude	Predictive Validity	Likelihood of Harm	Beyond Reasonable Doubt vs. Preponderance of Evidence vs. Probable Cause
Consistency	Generality	External Validity	Scope of Consequences	Means
Specificity	Articulation	Discriminant and Internal Validity		
Plausibility Coherence Analogy	Credibility	Construct Validity	Hazard measurement	Motive

**Table 1 - Criteria of causation in causal modeling**

### 3.4 Creating a Model of the Chains of Causation

#### 3.4.1 Operating within Plausible and Realistic Boundaries

Some leaps of faith are too great to be plausible or relevant. Some consequences are too remote from their purported causes to be considered important.

But how remote is too remote? The Government of Iraq claimed in the early 1990s that sanctions left it with no money to purchase essential goods, including water pumps. The UN Security Council was later harshly criticized for the delays and limitations that had been imposed on access to humanitarian goods in Iraq via the "Oil-for-Food" Programme. Critics argued, however, that the Government of Iraq did find funds to build palaces, and that pumps were employed to drain the southern marshes where opponents to the regime lived. Funds and other resources were fungible under control of Iraqis. Surely both of these factors were important, with the Government of Iraq having control over proximal use of available resources, and restrictions in the level of total resources imposed by sanctions as a contributing but more distal cause.

By identifying proximal and distal causes in a chain of events, it may be possible to define an **adequate cause** – a condition that, if changed, would fundamentally change the outcome. The most proximal adequate cause is that which is sufficient to cause, or prevent from causing, the outcome.

<sup>15</sup> Kenneth J. Rothman and S. Greenland, *Modern Epidemiology*, 2<sup>nd</sup> Edition (Philadelphia: Lipincott-Raven, 1998); Alfred S. Evans, *Causation and Disease: A Chronological Journey* (New York: Plenum, 1993).

<sup>16</sup> Robert P. Abelson, *Statistics as Principled Argument* (Hillsdale, N.J. : L. Erlbaum Associates, 1995).

<sup>17</sup> Donald T. Campbell and Julian C. Stanley, *Experimental and Quasi-Experimental Designs for Research* (Chicago: Rand McNally, 1966).



**TEMPORALITY** - *The cause always has to happen before the outcome. In Cuba, the U.S. tightened sanctions after the Comecon trade bloc disintegrated and food imports dropped; thus not all of the negative economic trends in Cuba can be blamed on sanctions alone.*

**STRENGTH OF ASSOCIATION** - *How much do the causative variable and the outcome move together? Is a drop in one associated with a similar level of drop in the other? Does the outcome return to previous levels as soon as sanctions end? For example – Northern Iraq was double-embargoed in the early 1990s as the government in Baghdad also restricted access to the limited stocks of its food rations. Consequently food availability was lower and the rise in malnutrition higher in the north than in the rest of the country.*

**CONSISTENCY** – *Is the relationship between cause and outcome found over and over, among different groups or countries? For example – While mortality rose in Iraq under sanctions, it fell in Serbia and Cuba. Sanctions alone thus are not likely to be an adequate cause of an increase in mortality.*

**SPECIFICITY** – *Does the cause lead to the same particular outcome over and over, or does it instead lead to different outcomes? For example – The impact of sanctions appear to affect women more than men in many countries. Women’s employment, income, and educational opportunities are affected more than men’s in each country where the relationship has been examined.*

**PLAUSIBILITY** – *Is there a reasonable explanation available as to how sanctions could be affecting the outcome of interest? Is there a physical model, based on an understanding of that sector? For example, how could infant mortality decline under sanctions? In Serbia and Cuba, the widespread perception of increased risk of death helped mothers and doctors mobilize to do what they still could to protect children. Immunization and breastfeeding rates went up, and treatment for common illnesses was initiated earlier. It is known that these activities reduce mortality rates under normal conditions, and there is every reason to think that they would also work under sanctions.*

**Box 1 - Elaboration of select criteria of causation from the field of epidemiology**

In other words, to define an adequate cause one must examine if the harm would have occurred in the absence of the factor in question. If the absence of sanctions alone would have prevented a rise in child deaths in Iraq, one can argue that sanctions are an adequate cause of the harm. Supporters of this position point to the falling mortality rates in Iraq with the same government in power in the years prior to sanctions. Critics can argue, however, that other countries such as Yugoslavia and Cuba had a decline in income but did not experience a rise in mortality like Iraq; they could argue that a lack of political will or crisis management ability is an adequate cause.

It is seldom possible to identify all possible links in a chain of causation. Especially in social phenomena, the number of possible factors may be too numerous to detail. It is important mainly to identify a few major potential influences only, as the effect of minor influences is likely to be too small to measure in any case. A causal outcome can be defined without understanding all the causal mechanisms involved. It is, however, not



possible to identify the causal mechanisms without first identifying what is believed to be a relevant outcome.

### 3.4.2 Building a Causal Model

A step-by-step approach to developing a causal model, and the associated actions required, is presented in Box 2.<sup>18</sup> In addition, a simple example of a causal model to identify some of the proximal causes of child malnutrition is presented in Figure 5.

The process of constructing the model in Figure 5 begins with the question: "*What causes child malnutrition?*" Here one is seeking to identify the causes of a single effect of interest (child malnutrition), an effect that can be quantified using an appropriate indicator such as malnutrition rates (% of child population).

Several variables can be associated with one another for a causal chain - for example, 'poor access to safe water', and 'incidence of preventable disease'. In this way potential, and then likely, causes of child malnutrition are identified. As the causal model is constructed, one can measure the value of each of the causal factors. In this case, there is also a relationship between the two proximal causes: inadequate dietary intake can increase the susceptibility of children to disease, while many normally-preventable diseases can in turn result in inadequate dietary intake. For each one of these proximal causes, its causes are also identified, tracing back to distal causes. The example shown in Figure 5 identifies three levels of causes.

This multi-level approach to causal analysis has also been used by UNICEF: Using a framework of basic, underlying and immediate causes (shown previously in Figure 3), UNICEF constructed causal models to identify factors influencing/constraining children's right to life and education as part of the "situation analysis" of children in Iraq during 2000-2001. UNICEF defines the three levels of causes as follows:

**Immediate causes:** such as disease and inadequate nutrition, which directly relate to life, survival and development rights;

**Underlying causes:** such as the status of household food and nutrition, as well as social services like water and sanitation, health, and education, which promote or prevent well-being and development;

**Basic causes:** which relate to issues such as control and distribution of national resources, institutional arrangements, and social organization (including the status of women);

UNICEF's application of the causal modeling approach to the case of Iraq noted:

*"The causal analysis approach is particularly helpful in the case of Iraq, where it is important to be able to distinguish those basic causes attributable to the sanctions regime from other basic causes, as well as from underlying and immediate causes. Sanctions-related basic causes can only be addressed in the context of an international political resolution of the present situation, and, as such, are not under the control of national authorities responsible, for example, for social services. However, other basic cases related, for instance, to institutional arrangements can be addressed by national authorities if a*

<sup>18</sup> The approach presented here is for causal models in general. Section 5.3.5 describes how to generate a causal model for the specific task of assessing the humanitarian implications of sanctions.





*convincing case is made that these are relevant to children's survival and development. "*<sup>19</sup>

The causal model constructed by UNICEF using the multi-level causal analysis to assess factors influencing children's right to survival in Iraq is shown in Figure 4.

**BUILDING A CAUSAL MODEL**

**1: Be clear about the problem statement before starting**

**ACTION / QUESTIONS:**

- Identify the particular actions and outcomes of interest

**2: Associate variables that MAY belong in causal chains**

**ACTION / QUESTIONS:**

- Are there variables that appear to be related to one another in a common process?
- Identify possible direct/indirect causes
- Identify potential necessary/sufficient conditions

**3: Identify potential causes**

**ACTION / QUESTIONS:**

- Do the variables satisfy many of the criteria of causation?
- Discount alternative explanations/causes
- Identify the causal mechanisms (how exactly does one factor causes another to occur?)
- Measure key variables in more detail
- Check for association by chance

**4: Identify likely causes**

**ACTION / QUESTIONS:**

- For each variable, think what could be its causes
- Are there other likely causes?
- Is there evidence of a specific chain of events?

**5: Construct the causal 'pathways' linking cause and effect**

**ACTION / QUESTIONS:**

- Identify which causal links or inputs are most important
- To what degree does a variable contribute to an effect?

[Note: As a starting point, identify the links immediately preceding/following the outcome/action, respectively]

**Box 2 - A step-by-step approach to developing a causal model**

<sup>19</sup> UNICEF-Iraq, *The Situation of Children in Iraq* (Baghdad: UNICEF, February 2002) : pp 7-8, 38.



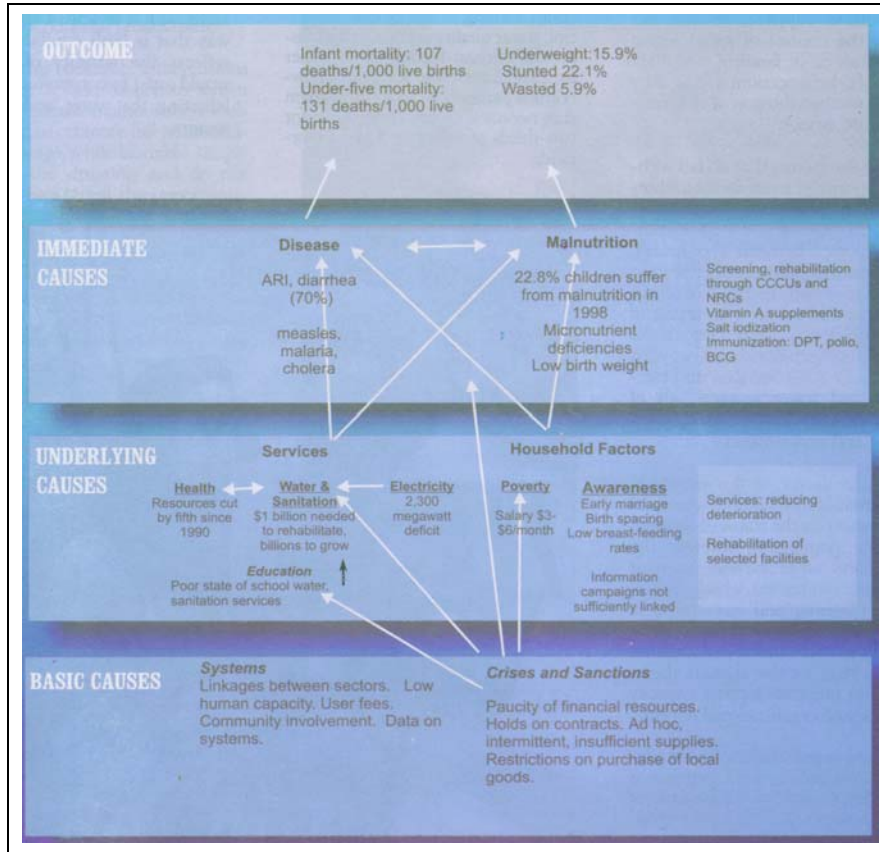


Figure 4 - UNICEF causal analysis applied to children's right to life and survival in Iraq

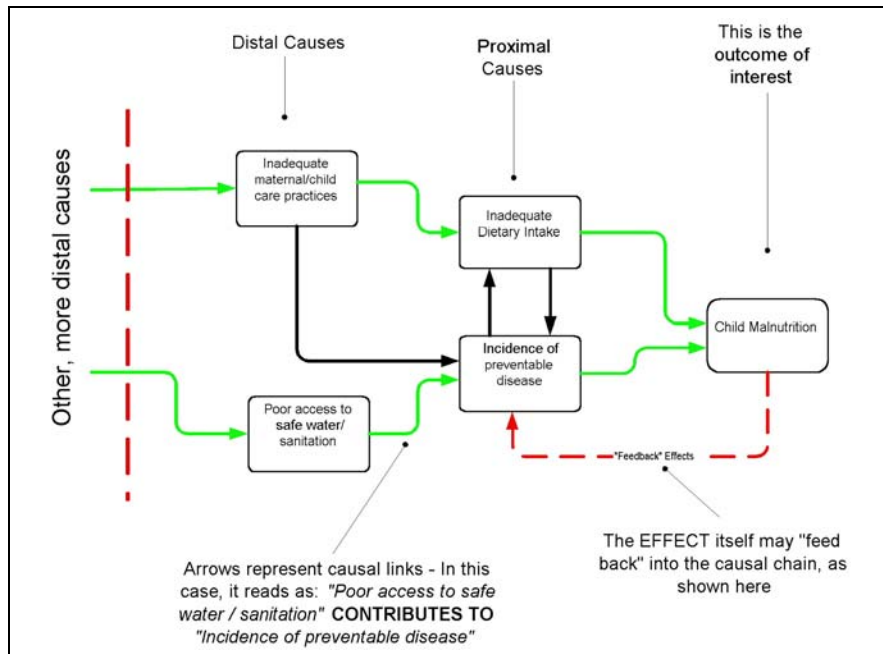


Figure 5 - Sample causal model identifying potential causes of child malnutrition



## 4 Humanitarian Indicators and Data Sources

### 4.1 Overview

Much of the data we use in assessments is in the form of indicators. An indicator is a variable that can be measured and that sheds light on another variable of interest. Humanitarian indicators measure people's conditions of life. They include both straightforward measures (such as the number of disease cases reported to a Ministry of Health in a given month) and also include sophisticated measures like the UN Development Programme's (UNDP) Human Development Index, which combines data on life expectancy, economic status, and educational attainment into a single, synthesized measure.

Humanitarian indicators may take the form of measures of PROCESS -- such as the number of children treated for malnutrition -- or measures of OUTCOME such as the percentage of children that are malnourished. The essence of the sanctions assessment methodology is to determine whether there are changes in humanitarian indicators that may be due to sanctions.

This chapter focuses on the role of indicators in causal models. It presents criteria for choosing appropriate humanitarian indicators; it points toward sources for this information; and it highlights the importance of using both quantitative and qualitative information. This chapter also examines the relevance and reliability of information gathered for humanitarian assessments, and suggests ways to improve the reporting of such information.

### 4.2 Using Indicators in Causal Models

Section 3.4 described how to construct causal models by identifying and ordering the relationships between variables in the pathways linking cause and effect. Determination of whether a variable causes an outcome requires that the investigator measure and examine if and how a change in one is associated with a change in the other. Process indicators of changes in services provided and activities undertaken, and outcome indicators of changed status of people's living conditions are used for this purpose.

Humanitarian outcomes may be influenced by many causes other than sanctions. Infant mortality, for example, is influenced by mother's education, access to health information, the distribution of resources within the family, and access to medical care in addition to the variables that may be directly influenced by sanctions. Good assessments examine the major components of a complex outcome like infant mortality. They seek to identify the major causes of mortality and morbidity and how have they changed over time. For each of these causes, what factors influence the occurrence of disease, its severity, or the timeliness or effectiveness of treatment? Only after looking into each of these issues can one make a substantive case about how sanctions or other factors might be associated with a change in infant mortality.

For both process and outcome variables, some indicators can be used as reference benchmarks with which future changes can be compared. Ideally, such a **baseline assessment** (described in more detail in Section 5.3) is undertaken prior to the imposition of sanctions. Other indicators will be more suitable to measuring change during sanctions. Examples of the different types of indicators that can be used for measurement of baseline conditions and changes in conditions include:

- **Infant mortality rates** change slowly over time in most countries. They are frequently used to characterize the overall conditions of life in a country because they are influenced by many variables. For humanitarian assessments in crisis



situations, measurement of **changes in the weight at time of birth** is usually more useful, as it changes quickly in a population as access to food during pregnancy changes.<sup>20</sup>

- **Access to or lack of access to piped (indoor) water and sanitary waste disposal** improves or deteriorates slowly; whereas, changes in the **amount of water pumped** or the bacteriologic quality of water quickly changes quickly, depending on inputs of electricity and chlorine.
- **Household assets** (wealth, land, investments) accumulate over a long period of time and also in crises change slowly, whereas **household income** responds much more quickly to changes in employment, productivity, and rates of exchange.
- **Educational levels** in a population improve or deteriorate slowly (for example, adult literacy rates); **school attendance** changes rapidly depending on the security situation, population movements, or investment in teacher salaries.

A reference list of indicators to assess humanitarian conditions is included in Annex II to this handbook (Table 7). The indicators are presented in groups according to the four subject areas in each of two clusters of human security outlined in Chapter 2. This list should be considered a resource pool from which practitioners can draw indicators relevant to the particular case/environment being assessed.

Each of the humanitarian indicators catalogued in Annex II is categorized as one of **PROCESS** or **OUTCOME**, and those indicators that are considered more appropriate for measurement of changes in the respective conditions are also identified. The application of these indicators to the assessment of the humanitarian impacts of sanctions is further described in Chapter 5. These indicators are intended to complement, and not replace, the list of indicators already in use in processes such as the UN Common Country Assessment (CCA).

### 4.3 Sources and Availability of Information

Most of the data used in determining baseline conditions and the effects of sanctions are garnered from existing sources, whereas original data is usually generated sparingly, to fill gaps.

#### 4.3.1 Existing Sources of Data

Existing sources of data – which are referred to as **secondary** data sources -- include international, national and local institutions. National governmental agencies tend to be the dominant source of information, upon which many international (UN, World Bank, etc) publications depend. Yet national sources of data are frequently biased, inaccurate or fail to comprehensively reflect the entire population.

The periodicity or frequency of updating national statistics will powerfully determine and constrain the value of datasets found. As a general rule, the more emergency-affected and poor the country, the less likely it is that reported data will be accurate. Even population statistics – the size of the population, income, vaccination rates -- may be many years out of date.

Humanitarian agencies generally collect information on the services that they provide and the number of beneficiaries served. This process data about their activities and beneficiaries is of limited value in providing a sufficient picture of a population for detailed

<sup>20</sup> Often the measure that is looked at is the percentage of newborns who fall below the threshold of weight that categorizes them as "low-birth-weight" or "very low birthweight."



monitoring. However, some non-governmental humanitarian agencies also conduct, on occasion, more-statistically rigorous surveys of the broader changes in the population. However, these surveys are usually limited in scope to a small geographical area – a district or camp - not a whole country.

Similarly, much of the data that assessments draw on are process data from governmental groups. In countries with functioning state institutions, central- and local government structures can provide a broad range of services, such as water and sanitation services, primary school education, and medical care services delivered via health centers. The number of services provided or the number of people served can provide important indicators of the production or demand for services. In Serbia for example, the health system provided a stable number of emergency consultations, but reduced well-child visits and increased the number of immunizations provided during sanctions. This was because demand for immunizations rose when families knew fewer medicines and routine visits would be available to them.

In principle, information about how conditions are changing can be gleaned from agencies intimately involved in meeting changing demands on a daily basis. Service providers usually count the number of people seen each day. Data of this type are typically the most widely available. This information is available in institutional files or annual reports, but it cannot be used to establish rates for the population as a whole. They can be used to track demand, but not need.

Thus, anytime indicators are used which are derived from the number of services provided they will likely be a poor and incomplete description of the general condition of the population. Private services are seldom included in such counts, quality is difficult to assess, and the population's need for such services cannot be determined. For example, the average number of medical visits in Cuba from conception through one year of age in 1990 was 22 – far more than could actually be useful. But since the system could not respond to some needs (such as higher quality foods and medicines) it continued to raise the number of services it could offer. Population-based surveys of prevailing conditions are the best way to get around the limitations of service-delivery data.

With this in mind, UN organizations and the World Bank, often in concert with national governments, engage in occasional large-scale surveys of economic and social conditions in many countries. Often this data is available on websites of the sponsoring organization. Prime among these organizations are the World Bank, UNICEF, The World Health Organization and the Pan American Health Organization, UN Development Programme (UNDP), UNESCO, UNHCR, the World Food Programme, the UN Environmental Program (UNEP), the United Nations Population Fund (UNFPA), and the Food and Agricultural Organization (FAO). UN sources are frequently combined and made available via the website of the UN Statistical Division or via Common Country Assessments (CCAs). Specialized websites also collate detailed data from different sectors or sub-sectors. For example the UN Administrative Coordinating Committee/SCN publishes an electronic summary four times a year that draws together malnutrition and mortality data from a range of agencies working in emergencies.

Outside the UN system, human rights organizations and civil society monitoring agencies including (among many others) Human Rights Watch, SIPRI, Transparency International, the Norwegian Refugee Council, and the International Crisis Group collect information on many countries. The number of groups and electronic databases prepared by such



organizations is growing rapidly. An Internet- or library search can quickly determine which organizations have relevant information on the country and topic of interest.

When a database is uncovered, methodologic introductions, qualifiers or footnotes should be read carefully. Were these data collected by the organization or are they reprinted from another source? The original source should provide information on the time period examined, data definitions, information collection methods, and population included.

Potentially, the best data sources come from either universal population counts (censuses) or representative sample surveys covering all groups and areas of a country. Many countries have a census to count the population or households every ten years, few do them more often and some have not had a census for more than two decades. A national census is often unavailable in detail except in the planning office of a government.

There are currently only two widely available sources of representative sample information from surveys about important health and demographic indicators in most developing countries. The first is UNICEF's Multiple Indicator Cluster Sample Survey (MICS) which measures conditions of child and maternal health and well-being in more than 60 countries. A recent round of MICS surveys, comparable to the first group of surveys in 1996, was carried out during 1998 – 2000 in 55 countries.

The second is the series of "Demographic and Health Surveys" (DHS) which are nationally representative household surveys with large sample sizes of about 5,000 households. The sample sizes are carefully calculated to be statistically significant and representative of the country as a whole. DHS surveys provide data for indicators of population, health, women's status, fertility, children's status, and nutrition. Many countries have carried out DHS surveys every five years; periodic surveys are available on-line for 30 countries and others are available off line or via government planning departments.

For most countries additional surveys from international organizations or estimates and projections are available from UN organizations, economic research groups, and newspaper or encyclopedia 'fact books'. Most of these sources are now on the Internet and can be perused in a matter of hours. Where they are not on the Internet, they are often in libraries, including UN, donor and university archives.

#### 4.3.2 Collecting Original Information

Unlike secondary data sources, in **original, or primary, data collection** it is possible to select whom to include in the study and what is to be studied. The advantages of primary data collection therefore are: (1) the timeliness of the data can be controlled; (2) the representativeness of the data can be ensured; and (3) the type of information desired can be directly determined by the design of the survey questions.

If the goal of the primary data collection is to glean information about the large population, statistical science requires that the sample (typically of people) be drawn as randomly as possible from the whole population, which means it will include dispersed people around the country. UN agencies and NGOs are increasingly making use of two-stage cluster sampling techniques that provide a reasonable degree of representativeness in circumstances where census information and lists of citizens are inaccurate or biased to systematically exclude groups of peoples. When done poorly, the conclusions from such studies have 'gone beyond their data' to make generalizations which could not be justified.





When embarking on the generation of primary data, standardization of definitions for key variables should be established with unambiguous operational definitions, in order for the data to be understood by others who might review the raw data afterwards. Supervisory efforts have to be made to assure that all participants are in fact using standard approaches and definitions in the field. In fact, almost every term or variable requires attention as even the most common terms take on different shades of meaning from culture to culture, from researcher to researcher and from respondent to respondent.

For example, many investigators take for granted that their staff all share a common understanding of what constitutes a "household", while in reality, there can be many interpretations of this. Pre-test surveys will typically reveal the range of understandings that the target population have as well as the range of options to consider in establishing a definition. Establishing a common operative definition for key variables prior to the main survey is essential to ensure the quality and comparability of the information to be gathered.

Three types of studies are frequently used to gather original data on humanitarian conditions: cross-sectional studies, panel studies, and longitudinal studies.

### Cross-Sectional Studies

The simplest type of original or primary data collection is a one-time survey. Sometimes called **cross-sectional studies**, the objective of such a study is to collect information to characterize the humanitarian situation at a specific point in time. In other words, cross-sectional studies take a snapshot of how things appear and relationships at that moment, but are not about motion, or patterns of change. In countries under sanctions, this has been the most common approach. Such a study provides potentially useful information about differences between groups but cannot elucidate trends over time or the causes of trends. A good example was a survey by an independent group of scholars, the International Study Team, in Iraq eight months after the 1991 Gulf war.<sup>21</sup> The data they collected provided the first national level indicators for child malnutrition; all subsequent studies refer back to that source.

Thus, the quality of any causal model elaborated only drawing on cross-sectional data study will be weak because by itself cross-sectional data does not reveal rates, dynamics or temporal relations.

Various sets of cross-sectional information from different time periods can reveal changes over time. At a minimum, cross-sectional surveys help to establish a baseline, to be followed using more powerful study models as sanctions progress.<sup>22</sup>

### Panel Studies

A better approach than a cross sectional study is a **panel study**, where cross sections are taken periodically using a common, systematic method. This is akin to making multiple cuts up the length of a tree and reading the rings at each cross-sectional cut. In Iraq, for example, national-level household demographic and nutrition surveys were carried out each five years from 1983 - 1993. The information gathered on sources and levels of income, family formation, and child bearing are excellent examples of sensitive, longitudinal monitoring indicators. Unfortunately, after 1993, monitoring was interrupted.

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<sup>21</sup> International Study Team, *Infant and Child Mortality and Nutritional Status of Iraqi Children after the Gulf Conflict* (Cambridge, MA: International Study Team, 1992).

<sup>22</sup> Guidelines for undertaking a baseline assessment are outlined in Section 5.3.5.



The Government of Iraq failed to carry out a subsequent survey until 2000 and survey data was not available again until 2002. Similarly, despite an apparent demographic emergency documented in 1991, the results of another demographic survey only became available (thanks to UNICEF expertise and funding) in 2000. These special surveys have provided most of the useful information available on humanitarian conditions during sanctions in Iraq.

When there are only a few panels over a period of years, or where there is little continuity in the information gathered or the approaches used to gather it, a panel study will net few benefits.

Gaps in the regular collection of data, particularly in times of crisis, reduce the ability to make sense of data later when surveys are re-started. For example, although hundreds of individuals and groups have visited Iraqi hospitals in the 1990s, only one group used a list of standard questions and observation goals to set a baseline level for comparisons. With a little coordination, others could readily have done the same, which would have contributed to far better identification of changes in conditions around the country.

Panel studies that do not follow-up with the same individuals during each panel have to examine whether the people in different panels are indeed comparable. Migration, attrition, or mortality change the composition of the communities from which samples are drawn. Therefore, the question to be examined is whether substantial peculiar changes occur due to any of these forces. Seasonal cycles for phenomena such as malnutrition need to be understood if samples are to be taken in a manner that permits valid comparisons. For example, significant changes in malnutrition rates may be seen over the course of several months but be found to replicate a regular cycle of increase and decrease that occurs each year due to rain, climatic conditions and harvests.

A study of conditions at an initial point in time, preferably prior to the imposition of sanctions -- a baseline study (see Section 5.3) -- is key in avoiding these problems. A good baseline can be prescriptive, suggesting the frequency with which future panels should be taken, the key information to collect in each panel, and the groups to include in those panels. It is almost impossible to go back and re-invent the questions or correct ambiguous definitions after this information is collected. Orientation on how to coordinate from the start cannot be substituted later.

Panel studies sometimes focus too heavily on collecting information on the outcomes of interest rather than relevant process information. As an example, we are likely to want to know whether infant mortality has gone up or down, but this will be best achieved by studying why it went up or down such as breastfeeding practices, mother's education, outbreaks of infectious diseases, and access to medical care services.

Panels are good for special studies on subgroups of the population. If, for example, it is suspected that children in one region, in a new rural settlement, or of one ethnic group are doing worse than others, the normal panel procedures for a nutrition study in the whole country can be utilized on a one time basis among the population sub-groups to learn about their status relative to national trends. Depending on the results, it will be clear if further panels of this sub-group should be undertaken when the routine cycle of periodic panels continues.





### Longitudinal Studies

Where a cross-sectional study looks only at one point in time and a panel study repeats periodic cross-sections, sometimes it is possible to do on-going monitoring in a continuous manner. This is a **longitudinal study**. When longitudinal studies are properly controlled and track the same individuals over time, they provide statistically powerful results.

The best studies follow the changes that occur to people throughout the period of sanctions. When it is not the same individuals tracked throughout, statistical validity and significance is lost. Unfortunately, most of the information available at regular intervals is institutional data from service statistics systems, which tracks a lot of people but does not track the same individuals throughout. For example, data may be available on the number of children seen in clinics for malnutrition each month. The limitation with this kind of data is that different individuals are included in each panel, so it is not a true longitudinal study.

	Cross-Sectional	Panel	Longitudinal
<b>How common?</b>	Very common	Less common	Less common
<b>Detail</b>	Often provide richness of detail	Less detail commonly	Less detail commonly
<b>Usefulness for causal modeling</b>	Less useful	More useful	Very useful
<b>How demanding?</b>	less demanding	more demanding	very demanding
<b>How representative?</b>	can be very broad	tends to be more specific	usually tracks a smaller population

**Table 2 - Summary of characteristics of three original data collection techniques**

Such a study selects a group of individuals at baseline and follows these same individuals forward and observes the effects on them from sanctions. For example, families could provide income summaries each month. Changes in buying power among those living on public salaries, compared to those in the private sector, can be recorded and compared over time if the same families are followed throughout. This approach will potentially provide the best quality of comparable information.

Institutional data usually provides information on services provided but not on the population from which users come. If, however, everyone is included in the data, and if the population is not changing, such service statistics can be used to estimate population rates. For example, if almost all health care is provided via government hospitals, then changes in the number of hospital visits more closely represents a true change in the overall national pattern of use of medical care services. This was the case in Cuba and Serbia, allowing assessment teams to draw conclusions about how medical needs changed over time.

## 4.4 Further Sources of Data

One often hears that “*There is no data!*” In reality, there is always data and the more one looks, the more one finds. What the data represents and how to interpret it is not a simple matter, but finding data can be easier than one might expect. Table 3 outlines some examples of potential information sources, and types of information.



Potential Sources of Information	Types of Information
Armed Forces	Change in health of inductees
International organizations: 'in country'	Survey on child feeding practices
International organizations: regional or central sites	Regional comparisons and national projections of social and demographic indicators. Websites include: ILO, UNICEF, UNESCO, UNHCR, Relief Web, UN Statistical Division, UNAIDS, WHO, PAHO's Disaster library in Costa Rica, UNFPA
International donors and think tanks	Funding of humanitarian assistance across various sectors; program-specific indicators and changes in those indicators; Funding levels for Overseas Development Assistance (ODA)
Individual institutions, like schools, hospitals, or work places	Service statistics and data on costs
Government finance or planning offices	Imports, contract cancellations, trade barriers, demographic surveys
The Central Bank or equivalent	Exchange rates, financial reserves
Local NGOs	Changes in need among service users
Universities	Sociologic survey on women's coping methods in light of crisis
Consulting groups	Demographics, household economy, and other surveys
Local firms	Changes in production levels, economic inputs
Western Union	Trends in fund transfers, exchange rates

**Table 3 - Potential sources and types of additional information for humanitarian assessments related to sanctions**

#### 4.5 Comparisons Across Population Groups and Time

Each country's sanction is a unique event. In many cases, sanctions are national in scope with the result that control groups (people within the country not affected by sanctions) with which to make comparisons may be lacking.<sup>23</sup> Control groups are the main way that difference outcomes can be attributed to a particular cause. For example, to test a new medicine, one group takes the pill while a comparable group does not (...or takes a placebo). Yet with sanctions, there is no external group available for such simple, straightforward comparisons. Thus other potential comparison groups need to be sought.

Comparison groups may be military versus civilians within a country, women versus men, the elderly versus adults, those receiving rationed food versus those who do not, or those employed in the public sector versus those in the private sector. The unique opportunities for elaborating sub-group analysis in each situation can only be determined locally. With creativity, comparison groups of some kind can be identified for many cases of sanctions. In Cuba, for example, the sub-group of the population with relatives who sent remittances from other countries was found to have better nutrition; their dollar incomes partially protected them in the 1990s from the accumulating stress of sanctions. Identification of vulnerable groups and the mechanisms by which they become vulnerable is key in determining what group to select for comparison. This process is explained in more detail in Section 5.3.1.

Where it is difficult to identify a control group within the country, a neighboring country or group of countries can be compared to the effected country as a control. For example, trends in infant mortality in Serbia were compared with similar data in neighboring countries. Despite claims by Serbian authorities of sanctions' harm on infants, it was found that not only did the rate of mortality decline in Serbia under sanctions, but it declined more than in any neighboring country. There is a large literature on these kinds of studies, called quasi-experimental studies.<sup>24</sup>

<sup>23</sup> In the case of Angola sanctions were imposed on a particular group (UNITA), while in Iraq sanctions were implemented differently in the three Northern Governorates, as compared to the rest of the country.

<sup>24</sup> Donald T. Campbell and Julian C. Stanley, *Experimental and Quasi-Experimental Designs for Research* (Chicago: Rand McNally, 1966).



In using neighboring states to identify comparison groups, investigators need to be aware that 'third-party' states in proximity to the target state (either geographically or linked economically) may also experience humanitarian impacts of sanctions on the target state.

In addition to comparisons between different population groups, changes in conditions experienced by the same population group over time can be used to assess the impact of sanctions. An example of the use of cross-time comparison for assessing the humanitarian implications of timber sanctions on Liberia is provided in Box 3.

**Comparison of Conditions Across Time in Liberia**

*In undertaking an assessment of possible humanitarian and socio-economic impacts of timber sanctions imposed on Liberia in July 2003, investigators identified several points in time at which to compare living conditions. Four time periods were used to assist in separating out the impacts of sanctions from those due to the fighting in Liberia.<sup>25</sup>*

*The four time periods were chosen to reflect the following combinations of political and security conditions: (i) fighting and sanctions (conditions at the time of the assessment); (ii) fighting and no sanctions (April 2003); (iii) no fighting and sanctions (this is the condition that would subsequently come into play following the peace agreement in August 2003); and (iv) no fighting and no sanctions (2001, early 2002).*

		Fighting	
		Yes	No
Sanctions	No	April 2003	2001, early-2002
	Yes	July 2003 - August 2003	Post-August 2003

*By comparing conditions at the four different time periods the investigators were better able to assess the contribution of each of these factors to changes in those conditions. For this particular approach, the population groups under consideration -- the civilian population in Liberia, and the sub-group of employees in the timber sector -- remained constant, while the impact of changed conditions was assessed.*

*The assumption in using same-group, cross-time comparisons, however, is that other factors remain constant, or at least that the factors of interest contribute much more to the changes than other possible changes. In the case of Liberia, one other time-dependent factor which had to be taken into account was the impact of seasonal meteorological variations on the timber extraction process (and hence on revenue, employment supported by the timber industry).*

**Box 3 - Comparison of Conditions Across Time in Liberia**

<sup>25</sup> The subsequent assessment was issued as a report of the UN Secretary-General: United Nations Security Council, *Report of the Secretary-General in pursuance of paragraph 19 of resolution 1478 (2003) concerning Liberia*, UN Doc. S/2003/793 (New York: United Nations, 5 August 2003).



The key principle in undertaking comparisons across time is to ensure that the analysis takes into account factors other than the variable of interest (i.e. sanctions) that may have come into play, or changed in their intensity, over the same time period.<sup>26</sup>

The longitudinal studies described in Section 4.3.2 above sometimes create the possibility of comparing the group which is affected by sanctions with the non-affected (control) group.

## 4.6 Qualitative and Quantitative Information

The term “quantitative” refers to that which can be measured in numbers. Quantitative information is gathered to summarize the experience of large groups of people, make comparisons between groups, and track changes among them over time. The number of children malnourished or immunized is quantitative data because it is expressed through numbers.

Qualitative, on the other hand, refers to conditions or information that can at most be only partially enumerated. Parental feeding practices or ideas about nutritious food for children are examples of qualitative information. Descriptions of beliefs and cultural practices are qualitative.

It is often the case that in standardizing measures by quantifying them, much of the richness and uniqueness of the individual’s experience is lost. For example, we can say how many children have completed the third grade, but we cannot capture the importance of writing their name or reading a book in numbers. Qualitative methods capture the contextual setting associated with information or situations affecting people’s lives. Quantitative methods are generally non-contextual, in that they attempt to abstract from the particularities of people to keep only a comparable, measurable core of information.

Qualitative information is derived mainly from:

- In-depth interviews with key individuals;
- Focus group discussions (that are semi-structured) with small groups of individuals;
- Casual meetings with communities of interest;
- Participant observation, to see what people do how, and why;
- Site visits, to see the context in which they do it and to collect observations;
- Reviews of public records, archives and official transcripts, to see what was said and how it was said; Review of other documents, such as newspapers;
- Critical incident questionnaires;
- Snow-ball interviews, where the first interview leads to a second, more focused interview with another individual.

Furthermore, qualitative information is often subjective, interpretive, or symbolic expressions of meaning in people’s lives, and thus difficult to standardize. How one interprets this information evolves through the process of collection of information. The investigator uses not only what is said, but the context and manner in which it is said and the other information one picks up from people’s behavior. The subjective nature of this process of interpretation makes it difficult to measure or control bias in the collection of information or test the accuracy of one’s interpretation. Qualitative information is essential for developing useful causal models. Key

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<sup>26</sup> This principle or assumption underlying cross-time comparisons is referred to as “*Ceteris Paribas*”, meaning: Under the assumption that other things are equal or that other variables are unchanged.



informants from the social programs or data collection agencies already have a detailed sense of which variable are related and the nature of the influence of one on another.

Because qualitative methods involve more in-depth observation, they can elicit more participation by interviewees than quantitative approaches. This is key in facilitating the identification of useful recommendations in study results and strengthening their implementation.

The use of qualitative methods, to identify the character of the relationships of one variable in the chain of causation to the next, is thus particularly relevant in sanctions-related research. Not all sanctions are implemented in the same way or with the same intensity. Quantitative data can provide information on when sanctions were implemented, and even on 'hard' statistics such as the dollar value of imported medicines. But qualitative information fills in missing links to understand humanitarian outcomes.

The best assessments combine quantitative indicators with qualitative information to better understand how available inputs lead to specific outcomes. Such a combination greatly assists in elucidating the chain of events leading to humanitarian damage, resilience, and mitigating and modifying factors (see Section 3.4). In practice there is little experience in combining information from quantitative and qualitative sources to create a more convincing, assessment of social conditions.

In this way, qualitative information proves a unique dimension for understanding the efficiency of implementation of sanctions or humanitarian protection activities. Suggested sources of quantitative information are outlined in Table 4 below.

Sources of Quantitative Information
<p><b><u>Service statistics such as:</u></b></p> <ul style="list-style-type: none"> <li>The number of services provided (patients seen, x-rays taken, or teeth filled)</li> <li>The number of providers employed (registry of teachers)</li> <li>The number of people enrolled (registered students)</li> <li>The value of registered imports and exports</li> <li>The number of people arrested or convicted of murder</li> </ul>
<p><b><u>Censuses such as:</u></b></p> <ul style="list-style-type: none"> <li>The number of people (count of all retirees)</li> <li>A census of potential enrollees (i.e. list pensioners eligible for subsidies)</li> <li>Voting (the opinions of all adults about who can best govern)</li> <li>Tax payers (in theory, the universe of those with income)</li> </ul>
<p><b><u>Market-based data</u></b> on exchange rates prices (in a sense, a continuous survey among suppliers and consumers)</p>
<p><b><u>Surveys such as:</u></b></p> <ul style="list-style-type: none"> <li>Personal income, sources, and use</li> <li>The current cost of a basket of goods</li> <li>Opinion polls</li> <li>Percent of water samples that show no contamination</li> <li>School exams</li> <li>Percent of children malnourished</li> </ul>

**Table 4 - Sources of quantitative information for assessments under sanctions**



## 4.7 Relevance and Reliability of Information

### 4.7.1 Deciding Which Information is Most Important

What set of indicators will adequately represent the humanitarian situation in a country? The characterization of these conditions depends on the investigator's ability to define a unique set of indicators that together characterizes and is sensitive to changes in each local situation. There are, however, commonalities across countries regarding the major threats to well-being and the likely places where information on these indicators will be found.

By applying the "4 + 4" human security subject area framework (Section 2.2.1) one can ensure that the status of core humanitarian needs and conditions can be captured. But the decision about which measures are key in each subject area, and plan to pursue the information available with which to characterize these measures, will require creativity and opportunism in each individual case.

Lacking confidence that one has covered all the key areas, investigators frequently collect too much information to 'cover all the bets'. This frequently results in the collection of an unwieldy amount of information, leading authors to delayed and overly complex reporting, which can seriously dilute the ability to communicate the main points. The audience must be kept foremost in mind in presenting data and analyses. Consumers of the information may suffer from information overload. There is greater efficiency and effectiveness gained by focusing information collection to the key areas identified in "4 + 4" human security subject areas.

### 4.7.2 Quality Control on Available Information

To be useful, information must be:

- **Definable** – if there is an assessment that education has deteriorated, there must be a way to specify what deterioration means. Is it fewer children going to school (as in Haiti), lack of new textbooks (as in Serbia), or deterioration of physical plant (as in Iraq) and declining literacy (also in Iraq)?
- **Comparable** – continuing this example a useful operational definition of deterioration in education would require criteria that can be used in multiple locations, or that multiple informants can respond to, or both. A standard operational definition, and examination of literacy levels around the country and over time is such an example.
- **Measurable** – there is a wide range of precision in measurement, from the more qualitative (do you think education is 'bad' or 'good') to the most quantitative (the percentage of 12 year olds scoring about 500 points on the standard exam fell from 62% to 58%)
- **Accessible** – If original data is to be collected, it should be easy to collect. If a secondary source it used, the information should be routinely available.
- **Representative** of a defined population – If measurement is precise, but one doesn't know who does and who doesn't contribute to that collected information, the information is not useful. Does the information come from children in 2001, children aged 8 in 2001, children aged 8 in three districts in March of 2001, or children aged 8 in three districts that attended school on March 3, 2001? Each





of these groups represents unique opportunities and limitations for comparing the results to other information.

The best way for investigators to know what the information represents is simply to ask!

- ⇒ Who was included when information was collected? Who was not included?
- ⇒ How was the information collected?
- ⇒ By whom and under what condition was it collected?

Information does not need to be quantitative, or be available on the entire population of interest to be useful. Indeed, it is seldom possible to include all possible informants when information is collected. Were some kinds of people more likely to be included than others? If the group included is implied to be representative of a wider population, what would that wider group be? These are the types of questions that the investigator must resolve to ensure that he/she has a good appreciation of the source, veracity and utility of the information.

#### 4.7.3 What if there is no reliable source for good information, and existing second-rate sources do not agree?

Qualitative methods can provide useful impressions of what sources information best reflect the actual situation. Moreover, a qualitative method called triangulation assists in making judgment calls where information is inadequate. Triangulation is a systematic process of taking the information that one has, to compare with information from a new source or a new informant. It is useful with both imperfect quantitative and qualitative information.

To compare information from multiple imperfect sources, the investigator must assess the potential biases from each source. This can be qualitative ("He is from the rival tribe") or quantitative ("they counted 10% fewer people from villages, where malnutrition was higher"). To do this, one must identify the original source for the information and determine how it was collected. Each independent data source should only be included once, no matter how many people refer to it, unless there is reason to believe that it is better than other available sources.

#### 4.7.4 Bias and Error in Measurement

Bias is a systematic error in the information gathered. Clinic exit surveys in Iraq, for example, consistently showed better nutrition than representative household surveys. Mothers who take young children for vaccinations are slightly healthier than the general population of young children and this was reflected in nutrition status. A measuring scale that is off-calibration may consistently under-weigh commodities. The amount of bias can be determined by seeing how off of true the scale is. For example, bias would exist if 30% of babies are born in hospitals, but their weights are assumed to represent average birth weights nationally.

The biases that affect quantitative studies can be summarized in two areas:

- ⇒ threats to **internal validity** (are we really measuring what we think we are measuring?) and
- ⇒ threats to **external validity** (do these results accurately represent the wider population of interest that we think they represent)





Methods exist to examine and reduce the influence of many of these biases. The most important is **recall bias**. There are many forms recall bias may take. As one example, in charged political situations people are likely to recall the past as being either better or worse than it actually was. They are also more likely to want to remember politically-important events in their lives and will tend to report those events even if they occurred outside the time-frame asked about in the survey. It is usually much more effective to ask for opinions about the present time than the past or future. When questions need to be about the past, it is helpful to pinpoint a hard historical milestone which is hard for the respondent to be confused about. In contrast, when asking many people about events that happened during the last two years, they will frequently make mistakes recalling whether an event happened "20 months ago" or "26 months ago" and therefore may be more prone to over-remember it as occurring more recently if it was important to them, and as being further in the past (or not think to mention it at all) if it weighed as less important.

Two important methods to reduce recall bias is to pre-test the survey questions in order to reveal the kinds of recall problems that occur, and to ask different questions about the same thing, each coming from a different angle that forces the respondent to either curtail their own bias or to provide answers that bound the true event within an interval.

In analyzing results, bias can be understood and therefore filtered out through triangulation. For example, it is possible to conduct independent checks on recall: information on wages gathered in homes can be compared to data from employers, landlords, neighbors, credit unions, central banks, or planning ministries. 'Leading questions' prejudice the responses gathered, and so differing ways to ask a question can be used to find the most effective approach. For example, good recall studies on mortality never mention the word 'death'; they ask instead about people ever born and ask where are they now.

## 4.8 Improving the Interpretation and Reporting of Data

### 4.8.1 Problems and Cautions with Interpretation of Data

#### Extrapolation Beyond the Scope of the Data Source

Generalizing beyond the data is a frequent methodological error. When a study in a narrow geographic area of time finds excess mortality or excess malnutrition, there is often a temptation to extrapolate that finding as if it were representative of a larger, surrounding population. As a rough guess, it has some value, but it should not be presented as if the information actually proves anything about the larger population. This is a very common reason why others misrepresent information in a report, claiming that "*a scientific study has proven*" such projections to be accurate and forgetting the caveats or limitations stated by the authors. It is best to say that, "*It cannot be determined with the information at hand how many children have died overall, but the evidence, in one study, suggests that the rate has increased.*"

#### Extrapolating Beyond the Timeframe

Another common mistake in analyzing humanitarian consequences of crises is to extrapolate a data point over a longer period of time. For example, where very high excess mortality is seen in emergencies, it is usually documented only for a short period of time. Very high rates are then referenced over and over and in the process are understood by the media and professionals as referring not to a narrow point in time but to the entire period of crisis. For example, in Biafra in 1998, an analyst reported 2,000



deaths in one day in a famine zone. Based on that observation, others multiplied that by 365 days and concluded that 1 million Biafrans died that year from famine. No data were available to crosscheck this estimate. Therefore it is just as reasonable to extrapolate data from the beginning or end-points of the famine as it would be to extrapolate a single, worst-case observation. A reasonable solution is to interpolate, not extrapolate. That is, to estimate that the true, average rate over a period is half way (or using other weighted measures) in between rates found at different points in time.

#### Extrapolating from Selective Populations

Much data comes from organizations working with particular groups in particular areas, for example persons who attend a particular church or children in a given orphanage. Beyond the problem of the limitations of service-delivery data already mentioned, there are limits to how much can be extrapolated from a group that is atypical to a larger population.

#### Extrapolating from Self-Selected Populations

When an NGO, for instance, reports -- as they very commonly do -- that the populations seen in its emergency-feeding programs have high malnutrition rates, that it is to be expected because a) people with malnutrition go out of their way to seek out these programs, and b) the criteria for entry into the program requires that they exhibit malnutrition. Thus, the rates seen in these self-selected sites have almost no value in revealing the rates of malnutrition in the larger population. Unfortunately, much of this kind of data gets repeated and limitations of the meaning of the data are lost along the way.

#### Evidence of Change

Often data suggests that the status of a population has changed because of a change in the use of some service. For example, in many emergencies, there is a reported increase in the number of persons seeking food and employment through public works projects that scale up when demand increases. An increase in the number of persons who come seeking work at a Food-for-Work project might or might not indicate a real increase in the price of food, the availability of food due to a failed harvest, the closing of certain markets, an increase in the size of the local population, an increase in the rate of unemployment, or all of the above. It would be inappropriate, absent other corroborating information, to conclude that any one of these factors was the sole or main cause.

#### 4.8.2 Improving Data Reporting

Where quantitative indicators are used, the information is almost always presented as a single number, e.g. "A death rate of 100/1000". This form of data presentation fails to communicate the relative level of precision available for the numbers presented. More accurate would be the inclusion of a 95% statistical confidence interval, e.g. 100/1000 plus or minus 10/1000. This requires some mathematical calculations.

Datasets should also always be recorded, maintained and presented with answers to the following four questions:

1. What was the underlying population being surveyed – the catchment population from which the sample was drawn or was intended to be drawn?



2. What was the timeframe (which months or dates) that the data referred to? Where recall or retrospective analysis is being conducted, what intervals of time were being asked?
3. What was the sampling method? If randomization was used, or stratified sampling, what was the strategy? What was the sample size (referred to as "N")?
4. What operational definitions were used by those generating the original data? If diseases are used, for example, what "case definitions" applied in that situation? If unemployment statistics are generated, what do the categories mean – full or partial unemployment, among the total adult population or among those "seeking work?"<sup>27</sup>

Researchers should also describe their impressions of the imperfections in the data drawn upon, and the biases inherent in them, in order to communicate the level of uncertainty associated with the numbers reported. Researchers should give the reader a sense of the level of precision implied by numerical estimates.

Indicators of inputs (such as food distributed or the value of medicines imported) or process (number of medical visits, the number of diarrhea or measles cases reported, or the number of children out of school) are easier and more rapid to collect and can be more timely and detailed than outcome indicators such as mortality rates. Other outcome indicators such as the percentage of children malnourished or the percentage of homes with access to clean water, while only partial expressions of the overall health situation, are relatively easy to collect in special surveys and are very useful for monitoring of humanitarian conditions. By contrast, a small increase in risk of death, which is a rare event even at relatively high rates, is far more difficult to establish with adequate statistical confidence. That is, a change, which may be important for assessment purposes, may be very important to know about even if it is a small change, but because it is small may be very hard to observe or conclusively document. This is why, for instance, there is frequently a great deal of confusion and controversy over reports on infant mortality rates.

Analysis of the data, inferences that may be drawn from it, what it is felt to demonstrate, should only be presented in a section after the data. Editorial terms should not be mixed in with the summarization or analysis of information. Data should first be presented; then any analysis or editorial comments about its meaning can be presented. In this way, the reader is permitted to make his or her own judgment about what the data says.

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<sup>27</sup> See Brent Burkholder and Leslie Boss, August 1994 *Journal of the American Medical Association*, who established these guidelines after working with UNICEF-Somalia and attempting to make sense of the cacophony of agency survey results provided to them, with potentially-valuable numbers in them but without the contextual information about what they referred to, when, and how to allow them to be analyzed together.



## 5 Sanctions Assessment Methodology

### 5.1 Overview

The preceding chapters have described the main elements of the methodology to assess the humanitarian implications of sanctions. This chapter brings it all together: the framework outlined in Chapter 2 is used here to guide construction of the methodology, while the causal modeling approach (Chapter 3), indicators, and data sources (Chapter 4) form the building blocks of the assessment technique.

This chapter identifies methodological challenges in studies on sanctions, describes specific requirements for undertaking baseline assessments, and presents five steps that constitute the assessment methodology. Differences in application of the methodology, which depend on whether it is employed in advance of, during, or following sanctions, are also explored here. This chapter concludes with guidelines on applying the methodology to assessment of four categories of targeted sanctions.

### 5.2 Methodological Challenges in Studies on Sanctions

Two key challenges exist in monitoring and assessing the humanitarian impact of sanctions. The first is to determine the current status of humanitarian conditions in the sanctioned country or region, in the midst of a complex and often rapidly-changing political and security environment. The second is to distinguish between the effects of sanctions and the effects of other factors that influence the humanitarian situation in the targeted country.<sup>28</sup>

#### 5.2.1 Determining the Current Status of Humanitarian Conditions

Situations of humanitarian crisis exhibit a complex inter-dependence of economic, political, and social conditions. Identifying humanitarian outcomes and the chain of causation that leads to them is challenging and controversial. However, some problems with measurement of relevant variables are particular to situations with sanctions.

- **First**, in some instances sanctions may spread an increase in the risk of changes in humanitarian conditions among a large group of people. This increased risk, and the actual changes that may result, may be obscured by concurrent events that independently contribute to negative humanitarian outcomes, such as war, mass migration, or economic crisis. Most sanctions in fact are accompanied by some of these other concurrent factors, as well as problems of governance.
- **Second**, in sanctioned countries or regions, reduced access to data on key indicators may obscure trends and their causes leading to further lack of clarity in the assessment. For example, in many war-torn societies or failed states, basic demographic statistics (such as a population census) and core UN data (percentage of children immunized) may not have been updated for several years or more.<sup>29</sup>
- **Third**, there exists the potential for oversimplification of the influence of sanctions, which is especially likely if investigators make only brief trips to affected areas and live detached from the ‘feel’ of everyday life experienced by the local population.

<sup>28</sup> Annex I provides a brief review of the extent to which previous assessment methodologies have addressed this second challenge.

<sup>29</sup> For example, during the sanctions in Haiti and the international intervention in Somalia, both in 1993, basic statistics about child health were unavailable. UN annual reports printed estimates based on data that was many years old.



### 5.2.2 Identifying the Unique Effects of Sanctions

In situations of sanctions, cause and effect associated with humanitarian conditions may be difficult to separate. The fluidity of the situation means that the effects of sanctions may 'feed back' into the chain of causation to further influence outcomes, indicating a spiral, rather than a linear, sequence of events (See Figure 5). The sanctioned government or group may, for example, ration essential imported goods, putting further pressure on systems for domestic production and modifying normal market mechanisms for distribution.

The economic collapse of Zimbabwe in 2000-2003, during a period of increasing number of economic and political sanctions against the country, mirrors the dynamic of similar sanctions against it between 1964-1979. The immediate results of sanctions was economic recession as industry and farming sectors lost markets, which then interacted with the trend in political instability. As a result of both, foreign direct investment fled Zimbabwe, creating massive unemployment, further reducing productivity and leading to hyperinflation. These factors in turn led to further political instability.

Sanctions, as political and economic events, may be many steps removed from the humanitarian outcomes of interest in the chain of causation. The longer the chain of events, the greater the chance that identification and specification of steps and their inter-relationships are misunderstood. Moreover, the kind of effects on economic systems that may be caused by sanctions can be the same as those caused by other events occurring at the same time, such as war and mismanagement of the economy. Therefore, it is important that the context in which sanctions are applied be taken into account (so-called "context analysis") to assist in identifying the unique impacts of sanctions. Context analysis in Liberia in 2001, for example, highlighted that the dollar value of humanitarian assistance cuts was already greater than the income that would be lost from sanctions.

#### Accounting for Mediating Factors

The task of identifying the unique contribution of sanctions to humanitarian conditions is further complicated by the fact that the impact of sanction on a population can be mediated by a country's underlying economic and social systems. Coping mechanisms emerge in times of humanitarian crisis that may help to mitigate or shift the impact of sanctions. Governments, industry and citizens each have ways of shifting resources and activities to circumvent the restrictions that sanctions at first impose.

There are thus multiple intermediate paths to harm or protection that complicate identification of a straightforward causal model. For example, changes in the distribution of essential goods within the family and the mobilization of underutilized resources due to political/social stimuli modify the impact of resource changes that may result from sanctions.

The experience of Cuba and Serbia, where infant mortality declined (a good outcome) during sanctions, is a more relevant and a dramatic example of this phenomenon. These modifying influences are difficult to isolate and often go unrecognized or unmeasured unless qualitative research is carried out to supplement numerical indicators (See Section 4.6). Even a dramatic decline in key resources does not always or immediately lead to increases in morbidity or mortality due to the resilience of such humanitarian assets as public education, healthy behaviors, trained health workers, and infrastructure. Assets like these may deteriorate only gradually and can even be improved despite sanctions-related constraints. Similarly, a 'rally round the flag' response to sanctions can mediate how



people feel about their living conditions and may result in more effective mobilization of local resources in reaction to treats - actual or perceived - related to sanctions.

#### Time Lags in Humanitarian Implications Becoming Apparent

Resource mobilization at various levels within the sanctioned country/region contributes also to another challenge in assessing the unique impacts of sanctions, namely: that there may be a time lag between the imposition of sanctions and the humanitarian consequences becoming apparent.

Delays in implementation of sanctions by states or inter-governmental organizations, the level of commodity reserves and resource stocks available in country, and possible indirect effects of sanctions on economic activity and humanitarian assistance may all contribute to a time lag between the time sanctions are imposed and the time when humanitarian implications become apparent.

For example, the imposition of sanctions may result in additional self-imposed restrictions by third-party states that may reduce legitimate trade because they are unclear about the scope of sanctions (what is and what is not covered). Also, depending on the nature of sanctions, they may result in 'brain drain' in particular targeted sectors, or among public sector employees, over time. This drain on professional expertise and knowledge will have a delayed impact on humanitarian conditions.

#### Being Open to Seeing Unexpected and Indirect Impacts

A further difficulty is presented in attempting to identify causes of *indirect* impacts of sanctions, and possible relationships between sanctions and less tangible impacts.

Example of these indirect and less tangible impacts include:

- the threat of imposition of sanctions may cause international donors to reconsider their support for funding humanitarian operations in the sanctioned state;
- foreign corporations, unsure of their national legislation on sanctions and on the scope of the measures imposed, may curtail legitimate trade for fear of acting in breach of national laws;
- local currency exchange rates and food commodity prices may react speculatively to possible or actual imposition of sanctions.

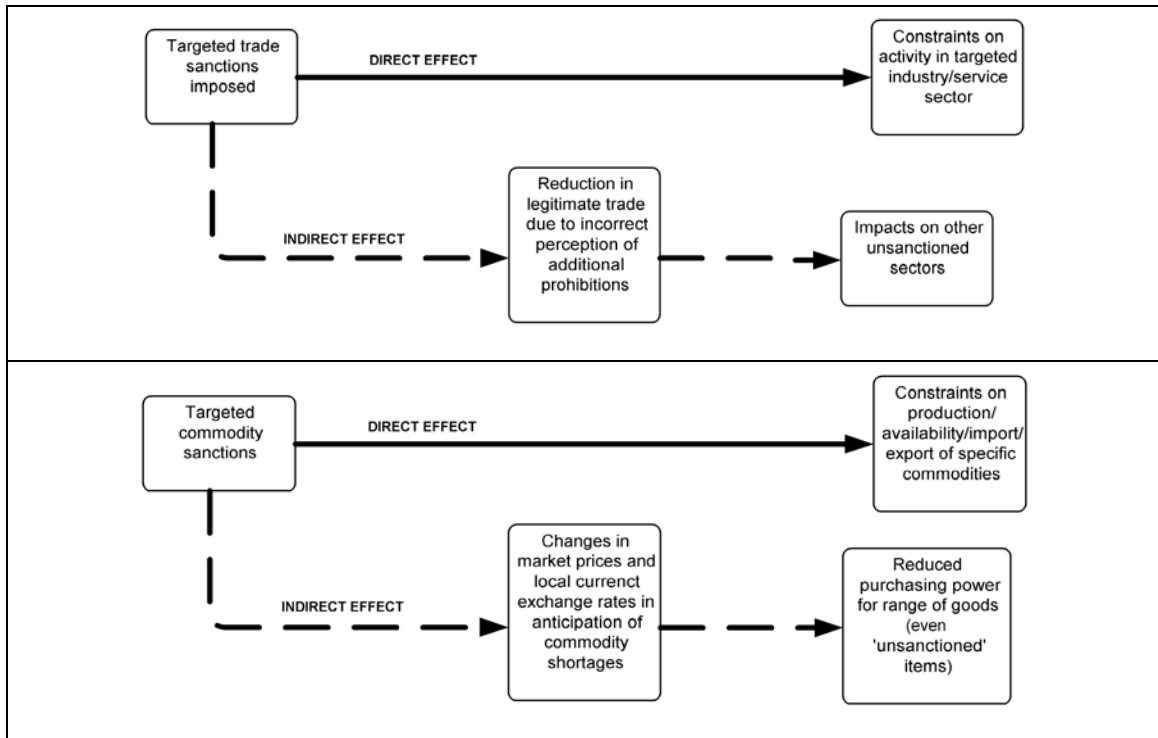
Though not related to sanctions, an example worth noting is the famine in Bengal India during 1941-43, a time of severe economic and financial re-alignments around the world because of the ongoing global conflict. During 1941 and 1942 there were fears that the Japanese army would invade and occupy India, beginning in the eastern area of Bengal. As a result, commodity markets over-reacted and the cost of food tripled, even though there was no actual physical decline in food availability (in fact the rice harvest was better than average). Because food consumption dominated household budgets, this led to a contraction in all other purchases, leading to a sharp recession during which time millions of people lost their jobs, particularly urban workers. The combination of higher food prices and dramatic collapse in income streams led an estimated two million deaths due to starvation. Japan did not invade and the food remained plentiful, but the humanitarian impact of the self-perpetuating dynamic of over-reaction was enormous.<sup>30</sup>

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<sup>30</sup> See: Amartya Sen, *Poverty and Famines* (New York: Oxford University Press, 1979).



Two examples of direct and indirect effects of sanctions that may occur in some instances are shown in Figure 6.



**Figure 6 - Notional examples of possible indirect impacts of sanctions**

Investigators undertaking humanitarian assessment under sanctions must be cognizant of these challenges to identifying the unique impact of sanctions, and must take particular care to gather and utilize qualitative information, which will assist in identifying how resources are mobilized, substituted, or modified under sanctions.

### 5.3 Undertaking a Baseline Assessment of Humanitarian Conditions

To assess potential humanitarian impacts of sanctions, a reference point must be established against which changes in humanitarian conditions can be measured. This so-called 'baseline' assessment provides such a reference point for humanitarian and socio-economic conditions around the time of the onset of sanctions.

A good baseline predicts where the focus of future assessments should be: the areas of greatest humanitarian concern will evolve over time and therefore the focus of information to be collected may also have to shift. Recent trends can only suggest future developments. Prospective, or forward-looking, collection of information is needed to determine what is happening during the period of the assessment.

The baseline assessment represents prevailing or 'unsanctioned' underlying social and humanitarian conditions. Prospective data and information can then be collected periodically during the period of sanctions. In addition to providing a pre-sanctions reference point for humanitarian conditions, a baseline study helps to:

- identify reliable informants and information sources, and identify weaknesses and gaps in existing information;



- identify problems and inconsistencies among multiple information sources and begin the process of triangulation to validate data sources;
- identify vulnerable groups in the society and anticipate how sanctions will exacerbate their pre-existing vulnerability;
- identify likely areas where sensitive indicators of change in humanitarian conditions can be found;
- identify the existing capacity for information collection and the needs and opportunities to strengthen it;
- identify the frequency with which on-going assessments should be carried out.

Baseline assessments are often undertaken as one-time ‘snapshots’. This approach fails to capture variations and trends in a country. If subsequent changes in humanitarian conditions point to deterioration in certain aspects of people’s lives, it may be that these indicators were experiencing a declining trend anyway. Sanctions may in fact have contributed little or nothing to the decline. For this reason, baseline assessments should include recent historical trends in humanitarian conditions in the country or region.

The baseline assessment may use indicators that are more suitable for evaluation of conditions at a given point in time, rather than indicators that may be more suitable for measuring *changes* in conditions (See Section 4.2). The reference table of humanitarian indicators (Table 7) included in Annex II identifies indicators best suited to measurement of baseline conditions.

### 5.3.1 Assessing Humanitarian Vulnerability as Part of Baseline Assessment

Increased exposure to risk creates vulnerability. Humanitarian vulnerability is characterized by decreased access to essential goods and services (relevant to the “4 + 4” human security subject areas) relative to the needs of the individual. Assessment of the vulnerability of population groups to changes in humanitarian conditions as a result of sanctions is critical in establishing an effective baseline and for monitoring the possible impact on these groups over time.

Women, children, disadvantaged ethnic groups, the poor, the elderly, and refugees are often more vulnerable, may be discriminated against, and have lower incomes. Thus they are also often less able to obtain the needed goods and services. Local custom or law can create vulnerabilities even if the income is not lower by denying the right to use funds, own property, or charging members of certain groups more than others for the same services or items. Even if they receive the same level of goods as others, they may be vulnerable if they need more than others.

Humanitarian vulnerability is dependent not only on the characteristics of the individual (gender; education level; economic status) and environment (political, economic environment etc.), but also on the nature of the measures imposed. Different types of sanctions will affect different groups in different ways. Targeted trade sanctions, for example, may pose a hazard for employees in certain industries whereas they may previously been considered one of the least vulnerable groups due to their income derived from employment. In short: groups that were not at risk of suffering a decline in their humanitarian status prior to sanctions, may suddenly become vulnerable under sanctions.

Vulnerability must be assessed on the basis of how sanctions can place groups within the population at increased humanitarian risk by constraining their access to certain goods and services. Therefore, *a priori* assessment of likely vulnerabilities is essential for the understanding of the potential humanitarian implications of sanctions.



### 5.3.2 Vulnerability Analysis and Mapping

Assessment of humanitarian vulnerability requires both identification of vulnerable groups and analysis and mapping of the degree of vulnerability. One technique employed to analyze and catalogue vulnerability is the Vulnerability Analysis and Mapping (VAM) approach used by the UN World Food Program (WFP) and other humanitarian agencies.

WFP has used Vulnerability Analysis and Mapping in the context of food security analysis, and in this application the VAM framework includes consideration of three components: availability, access and utilization (of food).<sup>31</sup> The technique can similarly be applied to Health, Water & Sanitation and Education, the three subject areas that together with Food and Nutrition constitute the four core human security subject areas in the sanctions assessment methodology. Analysis and mapping of vulnerability can be undertaken in four steps.

**First**, indicators are identified in each of the subject areas of interest across three dimensions: availability, access and utilization. For this purpose, indicators can be selected from the "4 + 4" human security subject areas. An example of the indicators used by WFP for vulnerability assessment in Northern Iraq is illustrated in Box 4. **Second**, the investigator must ensure that the 'direction' of all indicators is the same: that is, ensure that a high value across all indicators represents a consistently favorable or unfavorable indicator.

**Third**, weighting factors are defined to rank the relative importance of the chosen indicators to overall vulnerability (for example, how important is "wheat production" compared to "income"?). **Fourth**, an overall vulnerability index is calculated using the indicators and weighting factors.

Indicator	Related Food Security Component	Comments
1- Wheat Production	Availability	Local production
2- Animal Production (2 indicators)	Access	Local production
3- Income (salary)	Access	Regular and temporary employment
4- Expenditure (non-food items)	Access	Income
5- Stunting rate/Low height for age (Children 0-5)	Utilization	Outcome indicator
6- Body mass index for men and women (2 indicators)	Utilization	Outcome indicator

Source: WFP-Iraq North Coordination Office, *Vulnerability Analysis and Mapping (VAM), Secondary Data Analysis* (World Food Programme-Iraq, May 2002).

**Box 4 - Indicators used by WFP for Vulnerability Analysis and Mapping in N. Iraq, 2002**

In addition to these steps, the following points should be considered in identifying possible vulnerable groups:

<sup>31</sup> WFP Iraq - North Coordination Office, *Vulnerability Analysis and Mapping (VAM): Secondary Data Analysis* (WFP Iraq, May 2002).



- Women are at greater risk of malnutrition when pregnant and breastfeeding because of the increased nutritional demands that a child places on their bodies;
- Young children are at greater risk both because they are more physically vulnerable to disease and physical stress; they require nutrients for growth that can not be made up for later in time; they are less able to identify or acquire needed resources; and need more timely access to a changing set of those goods for growth and development;
- In many countries, women have lower education and very often have lower incomes than men. Child bearing leaves them less time in the labor force and they often experience discrimination in hiring. For these reasons, they are at special risk from the possible economic impacts of sanctions. As more frequent users of public services, the deterioration of these services during economic and social crises also may affect women more severely;
- Information is a key resource in the modern world. Any group with lower educational achievement is likely to be more vulnerable to sanctions due to poorer access to good and timely information. This is commonly the case among women, rural residents, and those from discriminated social groups. Radios, televisions, and social networks are key means by which information is transmitted; if access to these is constrained, knowledge of how to access, acquire or use key resources may be weakened.

Qualitative methods can assist in identifying the vulnerable groups, and the reasons for their vulnerability, in a particular context. Tracing changes over time by characteristics associated with their vulnerability – by education, sex, or site of residence can help in specifying the causal model and identifying the unique impact of sanctions.

### 5.3.3 Components of a Baseline Assessment

Characterization of humanitarian and socio-economic conditions at baseline should include:

- Levels, rates of change, and relative stability of key humanitarian indicators from Annex II, in each of the "4 + 4" human security subject areas, over recent years;
- Factors influencing these conditions in the particular context of the country;
- Regional variations in key indicators;
- Status of humanitarian conditions among vulnerable groups;
- Role of the industries likely to be affected by sanctions;
- Alternative employment options;
- Monetary- and non-monetary contributions of various industry and service sectors to the national economy, government revenue and local society.

### 5.3.4 Compatibility with Other Assessment Processes

Comparability across assessments is enhanced when the information being sought is also of interest to other users. The UN Millennium Development Goals (MDG) use a framework of common (across agency) indicators to assess progress towards achieving agreed development targets. This framework can provide a nucleus of indicators for undertaking humanitarian assessments prior to- and during sanctions. In recent years, many countries



and agencies have begun to concentrate on generating this short list of key indicators using common definitions and standards.

Box 5 lists select indicators for measuring progress toward achieving the UN Millennium Development Goals – which are also in the Common Country Assessment list of indicators -- cross-referenced with the eight human security subject areas. For sanctions assessments, therefore, many of the indicators may have already been compiled by the UN Country Team.

However, many of these CCA indicators are not collected reliably for regions within countries or for sub-groups of a given population. Moreover, some indicators are not available for all countries and every year; some reported data may come from old surveys, projections, or estimates between years for which data is collected. Such limitations can be established by carefully reviewing when, where, and how the data were collected.

Even when these data are available, they may not be sufficiently sensitive in order to identify changes due to sanctions. More sensitive indicators could be the percent of hospital-based births of children weighing less than 2500 grams, the number of children seen at clinics with diarrhea or pneumonia, or epidemics of immunization preventable diseases. For any of the Millennium Development Goal indicators, a fuller picture will be developed if one or several other indicators are used in addition to those listed in Box 5. The choice of indicators to use should depend on the criteria listed in Chapter 4 and must be chosen by the investigator once an evaluation of data availability and quality is made in the country in question.



Human Security Subject Area	OUTCOME INDICATORS	PROCESS INDICATORS
<b>Health</b>	Under-Five Deaths (UNICEF -WHO) Infant mortality rate (UNICEF - WHO) Maternal mortality ratio (UNFPA) HIV prevalence among 15-to-24-year-old pregnant women (UNAIDS-WHO-UNICEF) Prevalence, death rates associated with malaria (WHO) Prevalence and death rates associated with tuberculosis (WHO)	Proportion of 1-year-old children immunized against measles (UNICEF - WHO) Proportion of births attended by skilled health personnel (UNICEF - WHO) Condom use rate of the contraceptive prevalence rate (UNAIDS, UNICEF, UNFPA) Proportion of population with access to affordable essential drugs on a sustainable basis (WHO)
<b>Food and Nutrition</b>	Prevalence of underweight children under five years of age (UNICEF - WHO)	Proportion of population below minimum level of dietary energy consumption (FAO)
<b>Water and Sanitation</b>	Proportion of population with sustainable access to an improved water source (UNICEF - WHO) Proportion of urban population with access to improved sanitation, urban and rural (UNICEF - WHO)	--
<b>Education</b>	Proportion of pupils starting grade 1 who reach grade 5 (UNESCO) Literacy rate of 15-24-year-olds (UNESCO) Ratio of girls to boys in primary, secondary and tertiary education (UNESCO)	Net enrolment ratio in primary education (UNESCO) Personal computers in use per 100 population (ITU) and Internet users per 100 population (ITU)
<b>Governance</b>	Proportion of seats held by women in national parliament (IPU)	
<b>Economic Status</b>	Proportion of population below \$1 (PPP) per day (World Bank) Poverty gap ratio (incidence x depth of poverty) (World Bank) Share of poorest quintile in national consumption (World Bank) Unemployment rate of 15- to 24-year-olds, each sex and total (ILO)	Share of women in wage employment in the non-agricultural sector (ILO)
<b>Environment</b>	Proportion of land area covered by forest (FAO) Carbon dioxide emissions (per capita) (UNFCCC, UNSD) and consumption of ozone-depleting CFCs (ODP tons) (UNEP-Ozone Secretariat)	Proportion of population using solid fuels (WHO)
<b>Demography (&amp; Community)</b>	Proportion of households with access to secure tenure (UN-HABITAT)	--

**Box 5 - Priority humanitarian indicators in each of the eight human security subject areas, categorized as indicators of PROCESS or OUTCOME. These indicators are drawn from the UN Common Country Assessment (CCA) indicator framework to ensure maximum compatibility with the CCA process**





### 5.3.5 Checklist for Undertaking a Baseline Assessment

The preceding sections have identified the main elements of a baseline assessment and the techniques used for assessing vulnerability as part of that assessment. A summary checklist of actions required to undertake a baseline assessment is presented in Box 6.

Task	Description	Where to find more information in this Handbook
1	Gather Information on humanitarian conditions → Using primary and secondary sources, gather data/information for humanitarian indicators → Start with data already collected for other processes/assessments (CCA etc.)	Section 4.3
2	Assess current conditions and recent trends in each of the "4 + 4" human security subject areas → Using select humanitarian indicators in each of the "4 + 4" subject areas, develop an image of humanitarian conditions → Use indicators of PROCESS and OUTCOME to provide a basis for identifying factors that influence those conditions → Establish recent trends in those conditions	Section 2.2.1, Annex II and Chapter 4
3	Identify possible factors influencing those conditions → Identify proximal and more remote causes influencing the humanitarian conditions → Identify the sensitivities of particular indicators to changes in the influencing factors	Section 3.4
4	Establish a profile of vulnerability within the population → Identify vulnerable groups within the population (type, size, extent of vulnerability etc.) → Undertake a mapping of vulnerable groups	Sections 5.3.1 & 5.3.2
5	Identify 'gaps' or deficiencies in existing data/information	Section 4.3
6	Prepare to use baseline as reference for future assessment of changes in conditions → Identify those indicators best suited to measurement of change over time (see Annex II) → identify the existing capacity for information collection and the needs/opportunities to strengthen it → identify the frequency with which on-going assessments should be carried out.	

**Box 6 - Checklist for undertaking a baseline assessment**

## 5.4 Methodology for Assessing Humanitarian Implications of Sanctions

The sanctions assessment methodology is presented here in **five steps**, and is summarized in schematic form in Figure 7. The methodology can be used to assess potential humanitarian consequences in advance of-, during-, or following sanctions (See Section 5.5). The five steps can also be applied to assess potential impacts of different types of sanctions (Section 5.6).



**Step I : Clearly identify the sanction measures (types of sanctions proposed or in place) and outcome (humanitarian conditions) of interest**

Chapter 4, provides guidance on indicators and data sources (page 24)

Identify the measures covered by sanctions, the nature and scope of humanitarian exemptions (if applicable), and provisions for selective approval of exempt goods. These measures – for example, a prohibition on air travel for a particular country, or a ban on the sale and export of diamonds – constitute a starting point for the assessment.

To monitor humanitarian conditions investigators must identify potential indicators and associated data sources. Indicators of humanitarian conditions should span the "4 + 4" human security subject area. The four CORE subject areas of human security relate to: **Health, Food & Nutrition, Water & Sanitation, and Education**; while the four SYSTEMIC subject areas relate to **Governance, Economic Status, Physical Environment and Demography**.

The choice of which indicators to use is dictated by the type of sanctions, available data, capacity and ability to collect original data, previous studies, and indicators already used by humanitarian agencies in the country. Box 5 outlines some priority indicators of process and outcome in each of the human security subject areas.

**Step II : Undertake a 'baseline' assessment of conditions prior to sanctions**

Guidelines for baseline assessment, Section 5.3 and "Checklist" in Box 6

Using these indicators of humanitarian conditions, carry out a baseline assessment of conditions prior to, or at the onset of, sanctions. This should follow the guidelines outlined in Section 5.3 (and Box 6) to provide a starting point against which to track changes in conditions.

If the assessment is undertaken prior to the imposition of sanctions, current and historical conditions will serve as a baseline. If the assessment is being undertaken *during* sanctions, and a previous baseline does not exist, then a retrospective baseline drawing on historical data sources should be elaborated.

See Section 5.3.1

This baseline should include assessment of the humanitarian vulnerability of the population prior to sanctions. In addition to considerations of population groups most at risk from changes in economic and social conditions in general, this should include an analysis of how previously low-vulnerability groups *may* experience significant additional exposure to risk as a direct or indirect result of sanctions.

**Step III : For each of the "4 + 4" human security subject areas, construct causal models to identify possible linkages between sanctions measures and humanitarian conditions**

Identify possible causal pathways and intermediate variables linking the sanctions measures to the potential effects (changes to humanitarian



"Creating a Model of the Chains of Causation" Section 3.4

For indicators in each of the eight human security subject areas, see Annex II

For "Criteria of Causation", see Section 3.4

conditions as measured by indicators selected in Step I) in each subject area.

Begin with the four core subject areas (**Health, Food & Nutrition, Water & Sanitation, and Education**), as this will assist in identifying intervening variables for other subject areas. The **PROCESS** indicators in each of the subject areas in the Table of Indicators (Annex II) and Box 5 represent possible intermediate variables. Construct causal models (see Box 2) tracing forward from individual sanction measures and tracing backwards from humanitarian conditions (to identify intermediate causes). For each 'node' or junction along the pathways identify each possible significant cause. Use the criteria of causation to confirm causal relationships between variables.

For example: in the economic sector, tracing forward from sanctions on state-controlled mining operations may identify a reduction in government revenue from this source due to sanctions as the next link in the chain. A collateral link in the chain (again in this economic sector) may be the reduction of employment among miners. Each of these intermediate causes can then be traced to the next step. Reduced government revenue may reduce funding for social services and healthcare. In this way, a web-like set of linkages between the sanction measures and humanitarian conditions is constructed. Another example of a causal model is presented in Figure 5.

**Step IV : Identify potential sources of information for each of the PROCESS and OUTCOME indicators identified in the causal models, and gather the necessary information to complete the models**

Section 4.6

Step I of the methodology included the identification of indicators for determination of humanitarian conditions prior to sanctions (i.e. for 'baseline' assessment). Once the causal model associated with each human security subject area has been constructed (Step III above), identify sources of quantitative and qualitative information for each of the PROCESS indicators associated with the intermediate steps in the chain of events, and for the OUTCOME indicators that have been identified as possible areas of humanitarian impact in the causal models. Some of these OUTCOME indicators may be the same as those identified in Step I. Previously they were used for identifying conditions at baseline, and now they will be used to measure changes in those conditions.

Section 4.3.2

If this effort points to gaps in available information and data, and time and resources permit, then the investigators should consider collection of original data to address this deficiency. Collect the information and data from the identified sources using the guidelines presented in Chapter 4. When collecting the information, ensure that the resulting PROCESS and OUTCOME indicator values reflect the vulnerabilities of particular population groups to changes due to sanctions.

**Following completion of this step, the investigator should have data sources and information available for each 'node' or step in the causal models constructed under Step III.**



**Step V : In each human security subject area, identify and extract the contribution of sanctions to the observed effects, separate from effects due to other causes**

The causal models and associated indicators and data sources that have been constructed in the preceding four steps provide the basis for extracting the contribution of sanctions to changes in humanitarian conditions, which is the final step in the methodology.

To do this, repeat the following process for each of the eight causal models (one for each human security subject area):

Figure 2

- A. Starting with the sanction measure(s), **trace a path through the causal model** for a human security subject area one intermediate step at a time. Using the simple causal model shown previously in Figure 2 (page 11) as an example, this would involve tracing through the steps from "trade sanction" to "increased malnutrition".
- B. At each intermediate step: Use the quantitative and qualitative information associated with the PROCESS indicators (gathered in Step IV) to **identify how much of an influence the sanction(s) has on that particular intermediate step**. In some instances it may indeed be possible to calculate the contribution of sanctions to the intermediate effect in a quantitative manner (e.g. "Trade sanctions resulted in the elimination of 5,000 jobs in sector X, representing a Y% increase in the prevailing unemployment rate in the formal sector.") However, in many cases, the investigator must make an informed estimate about the mechanisms, and the level of importance of each, of the contribution of sanctions to the variable of interest based on available data.
- C. At each of these intermediate steps, take measures to **enhance the reliability of the assessment** by: (i) assigning a level of confidence to the assessment of the impact of sanctions at each individual step (not purely a statistical measure) (See Section 4.7); (ii) using multiple data sources to "triangulate" for accuracy; and (iii) using qualitative information to better inform your judgment of how much sanctions impact the particular step (See Section 4.6).
- D. Proceeding along the intermediate steps in each causal model, **catalogue the contribution of sanctions**, at each intermediate step in the causal model. This can be done by simply compiling a list of the assessed impact of sanctions at each intermediate step.
- E. When this process of tracing terminates at the outcomes indicators of humanitarian conditions (the final step in the causal model), **the impact of sanctions on those conditions can be expressed as the cumulative impact of sanctions at each of the intermediate steps** leading to that outcome. Box 7 presents a simple example to demonstrate this cumulative effect.
- F. Finally, **present the findings as a direct sanction-outcome relationship, and also as a linked process:** For the former, summarize the impact of sanctions on specific humanitarian conditions

Sections 4.6 and 4.7



by directly linking the sanction measure with those conditions that have been shown to be affected. For example, in the Education subject area: "Sanctions on mining activities contributed to a decline in school enrollment rates for children aged 10-16 by 20% nationwide". For the same example, reporting of the process highlights the intermediate steps: "Sanctions on mining activities resulted in the loss of 10,000 jobs each paying approximately US\$ 2 / day. Qualitative information and surveys confirm that this resulted in increased engagement of those child dependents of displaced workers in informal sector employment. This accounts for most of the 20% reduction in school enrolment."

Once these five steps have been completed the results of the assessment are compiled and explained in an assessment report (For guidelines on the key elements of the assessment report, see Section 6.6).

*If a causal model points to the following causal relationship:*

**Sanction X → Intermediate Step Y → Change in Condition Z**

*... and the contribution at each step was found to be:*

- 1. Sanction X resulted in a 40% change in PROCESS indicator at Step Y;**
- 2. Intermediate Step Y is one of the factors influencing Condition Z, and likely accounts for 50% of change on Z**

*... then it can be deduced that:*

**Sanction X is responsible for 20% change in Condition Z**  
[40% of 50% or 0.4 x 0.5 = 0.2]

**Box 7 - Simple example of cumulative or 'cascading' impact of sanctions**

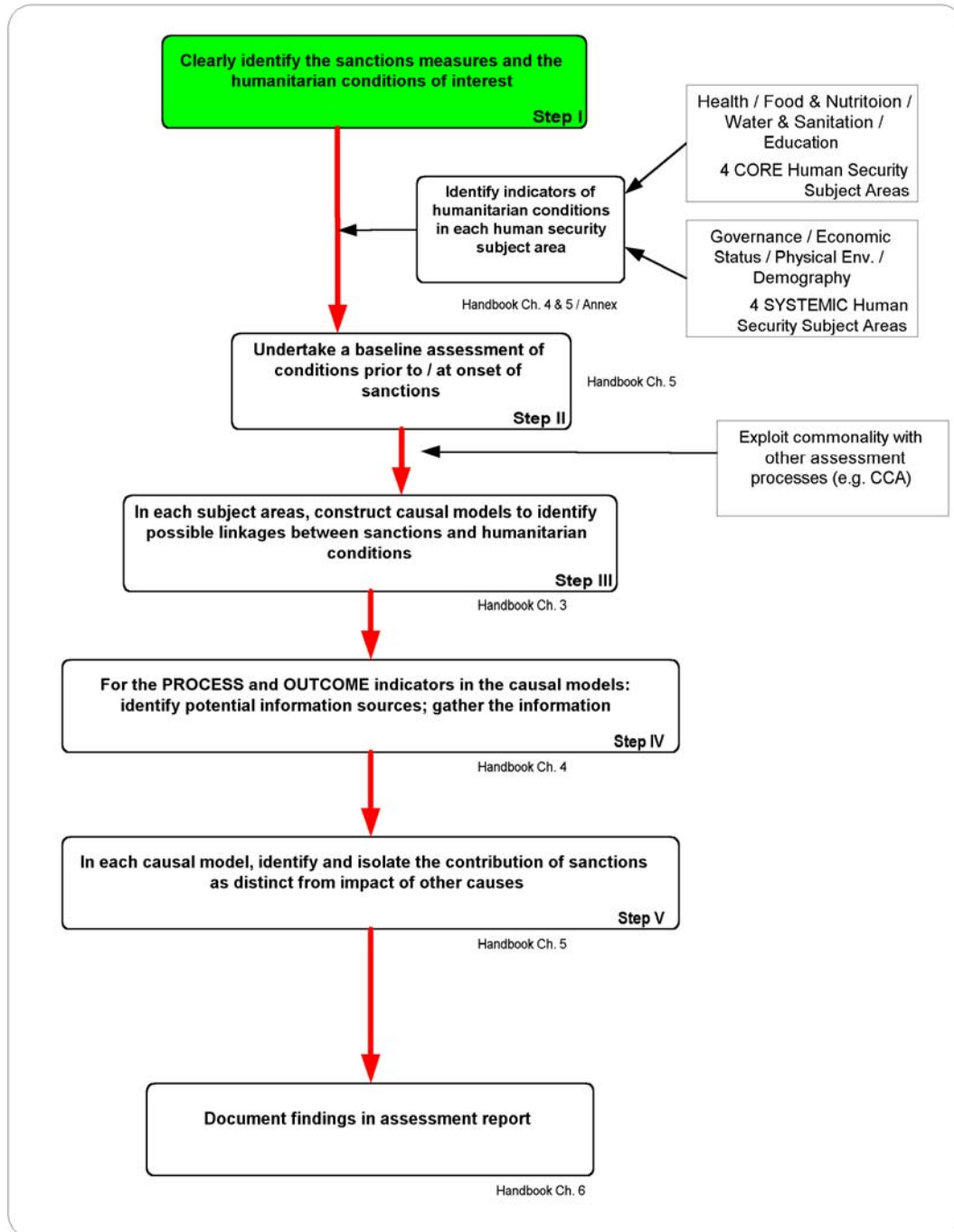
**5.4.1 Undertaking Expert Surveys to Assess Importance of Causal Factors**

One approach that can assist the investigator in parsing apart the effects of many factors on a single outcome is to undertake a survey of humanitarian practitioners in the country to get their input on the relative 'weighting' or importance of the sanction measures' contribution to a given effect.

Survey participants can be asked to rank among the multiple causes to a common effect, or can be asked to undertake a comparison between pairs of variables (referred to as pair-wise comparison). For example, experts in the field could be asked:

*"What in your view has contributed more to the raised incidence of preventable diseases among children: Inadequate maternal and child care practices **OR** poor access to safe water and sanitation?"*

The results of these surveys can then be consolidated into a table of weighting factors for the relevant causes.



**Figure 7 - Flowchart depicting the five steps in the Sanctions Assessment Methodology**

This process of pair-wise comparison and expert survey has been used effectively to reduce the subjectiveness of investigator-dominated judgments. The methodology has been formalized by scholars and practitioners in the domain of strategic decision-making





in a process known as the Analytical Hierarchy Process (AHP).<sup>32</sup> Ranking a variable based strictly on the scores given by a regular survey of experts is common in many fields and referred to as a Delphi Method. It is useful for synthesizing a great deal of qualitative information into a quantitative measure that can be tracked over time. While this does not eliminate the possibility for subjective judgments (it merely averages many individual opinions), it can highlight areas of consensus on what factors lead to what outcomes.

## 5.5 Applying the Assessment Methodology

This assessment methodology that has been described in this manual can be used prior to sanctions, during sanctions, and following the termination of sanctions. While the overall methodology remains unchanged there are subtle differences in application depending on the context. These differences are presented below.

### 5.5.1 Assessments Prior to Sanctions

Prior to the imposition of sanctions existing conditions constitute the baseline, and assessment of the impact of proposed or pending sanctions will require that causal models be constructed tracing forward from the actions of interest (proposed sanction measures) to the likely effects. This is a hypothetical exercise, with the investigator asking: "*What would be the effect of sanctions imposed on \_\_\_\_\_?*"

In pre-assessments, because the sanctions have yet to be imposed, the extent of coping strategies and the capacity of the society to mitigate the potential effects of sanction will be difficult to assess. Nevertheless, pre-assessments should identify the *likely* capacity of the sanctioned state/region to mitigate the effects of sanctions. For example, if sanctions are applied on a particular industry sector, how many people may lose their jobs and what is their potential to find employment in other areas?

### 5.5.2 Assessments during Sanctions

In assessments undertaken during sanctions, practitioners can develop causal models by tracing forward from the sanctions measures, and also by tracing backwards from the observed humanitarian conditions. During sanctions, assessments should be undertaken on a regular basis (3-6 months) so that trends in humanitarian conditions (especially for those indicators susceptible to change under sanctions), can be identified in time and, if need be, the sanctioning authority can modify these measures. For successive sanctions assessments, investigators should attempt to gather data/information on the same indicators (or an expanded set) during each assessment.

### 5.5.3 Assessments following Sanctions

For humanitarian assessments following sanctions, investigators assess the impact of the prior measures, and must construct a retrospective baseline if one is not available from previous assessments. Following sanctions, investigators may actually have increased access to quality up-to-date information, as data collected prior to the lifting of sanctions may then become available, and investigators may have increased access to the previously-sanctioned area.

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<sup>32</sup> For a more detailed description of the Analytical Hierarchy Process, see the following book by one of the pioneers of this technique: Thomas L. Saaty, *The Analytic Hierarchy Process* (New York: McGraw Hill, 1980). Publications, Pittsburgh, 1996]; and also: Ernest H. Forman and Mary Ann Selly, *Decision by Objectives* (World Scientific, 2001) [Available at <http://www.expertchoice.com> (as of September 2003)].



An additional dimension of humanitarian assessments in the wake of sanctions is the humanitarian 'legacy' of sanctions, which may have both positive and negative aspects.

## 5.6 Humanitarian Assessments for Particular Types of Sanctions

The methodology presented here is intended to be sufficiently flexible to facilitate assessment of potential impacts associated with different types of sanctions, and to be applied to assessments associated with different types of economic and social systems. The shift towards more targeted sanctions in the mid- to late-1990s has highlighted four categories of sanctions that will most likely be applied in the future (rather than comprehensive economic sanctions): (1) arms embargoes; (2) financial sanctions; (3) travel-related sanctions; and (4) targeted trade sanctions. These categories are consistent with those identified in the *Final Report of the Stockholm Process on the Implementation of Targeted Sanctions*. (See Section 1.3).<sup>33</sup>

This section outlines attributes of each of these four types of sanctions that may be relevant to undertaking a humanitarian assessment under the respective category of sanctions. In addition, category-specific indicators and data sources are identified to provide investigators with a starting point to gathering information on the particular type of sanctions. Table 5 summarizes areas of interest, indicators and data sources for these four categories of targeted sanctions.

### 5.6.1 Arms Embargoes

Arms embargoes are unlikely to have direct negative humanitarian impacts. They may result in some reduced employment by soldiers or those working in defense production industries, thus resulting in reduced purchasing power for these individuals and their families. The indirect effects may be greater. Governments may devote larger amounts of scarce foreign exchange and administrative effort to acquire banned weapons. This would reduce resources available for other governmental functions such as education, health services, and the maintenance of sanitary infrastructure. It may also contribute to a downward spiral of worsening conditions for producers, declining GDP or increasing indebtedness, declining employment, and inflation. Alternatively, decreased spending on weapons could contribute to either improved governance and increased social spending, or overthrow of a regime.

In situations where an arms embargo may reduce the ability of one or more parties to a conflict to sustain their fighting, or reduce the ability of an oppressive regime to harm civilians, there may also be significant positive humanitarian impacts of the arms embargo.

### 5.6.2 Financial Sanctions

Financial sanctions may have a chilling effect on capital markets, make credit scarce, increase inflation, and decrease trade. Any of these results would have a negative impact on employment and increase the cost of goods, especially but not limited to the economic sectors or businesses of those individuals targeted by sanctions.

Financial sanctions may indirectly constrain trade by nature of the impact on currencies used in particular trade sectors. For example, U.S. sanctions imposed on Burma in 2003 included a ban on American financial transactions with the country. The sanctions sharply impacted Burma's trade, both directly and because companies involved in trade depended

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<sup>33</sup> Peter Wallensteen et al. Ed., *Making Targeted Sanctions Effective: Guidelines for the Implementation of UN Policy Options* [Final Report on the Stockholm Process on the Implementation of Targeted Sanctions] (Uppsala: Department of Peace and Conflict Research, Uppsala University, 2003).



on letters of credit that are denominated in U.S. dollars for imports and exports. Some of these more indirect impacts, however, may be short lived, as companies explore options to switch to other trading currencies.

### 5.6.3 Travel-related Sanctions

Travel-related sanctions are likely to have few impacts on the general population. Since foreign travel bans affect few individuals in most cases. Only if such bans interrupt trade or create a more unfavorable environment for investment or trade would they reduce employment, decrease the importation of key goods, or stimulate inflation.

One possible, and limited, area where aviation or shipping bans can have humanitarian implications is in situations where these modes of transportation are used to delivery medical goods/supplies or provide access to medical care inside or outside the targeted region and where other modes of transport cannot be used. Aviation bans can avoid these potential impacts by building in appropriate humanitarian exemptions.

### 5.6.4 Targeted Trade Sanctions

Of the various forms of sanctions, targeted trade sanctions are the most likely to have an impact on humanitarian conditions. By reducing or eliminating activity in a particular economic sector, a trade sanction is likely to greatly reduce employment in that sector, thus reducing the buying power of those employees and their dependents, which creates a multiplier effect on other economic sectors that provide goods and services.

Many firms with international trade in poor countries may be the major employer in a region. Constraining trade in that industry could reduce local funds for municipal governmental functions, including the provision of security, health, and social services. Furthermore, some industries provide direct support for health and education of employees or their dependents, investments in roads, communications, sanitation in communities where they live, or pension payments for former employees.

If trade for such an industry is halted, funds for most of these activities may disappear. The indirect effects can thus affect a population far larger than those who lose employment in that sector.

Where trade blocks the import of fuel (such as petroleum), as was the case specifically in Haiti and Burundi, the economic effects are pervasive since every industry is influenced by the availability and cost of energy, whether for transport or production.

An additional indirect effect could be the impact on the general business environment of the country. Commercial funds may become inaccessible, insurance and transport costs of other industries may go up, and inflation can rise. If these things occur, the purchasing power and availability of employment throughout the country will likely decline, further contributing to worsening conditions of life for many people not directly related to the industry in question. This type of general economic decline and stagnation has been observed in many countries under trade sanctions, including North Korea, Burma, Haiti and Libya. Where the economy was large, complex and largely self-reliant, as in South Africa, the economic ramifications of sanctions were harder to prove, even if they may have been substantial.



Type of Sanctions	Characteristics, and what to look for ...	Indicators	Data Sources
<b>Arms Embargoes</b>	<ul style="list-style-type: none"> <li>→ Generally have minimal humanitarian impact</li> <li>→ may result in reduced employment in domestic defense industries</li> <li>→ Governments may divert more resources to procure banned weapons</li> <li>→ may reduce potential for one/more parties to conflict to sustain hostilities, thereby resulting in improvements in humanitarian conditions</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Number of employees in domestic arms industry</li> <li>&gt; Export value of conventional weapons</li> <li>&gt; Contribution of arms industry to state revenue</li> <li>&gt; Contribution of arms trade to sustaining conflict</li> <li>&gt; Impact on trade in protective equipment for humanitarian operations</li> </ul>	<ul style="list-style-type: none"> <li>Databases on arms transfers (US Dept. of State; SIPRI Yearbook; IISS "Military Balance" publication)</li> <li>National statistics</li> <li>Arms industry journals / databases (e.g. Jane's Information Group)</li> <li>Small Arms Survey project</li> </ul>
<b>Financial Sanctions</b>	<ul style="list-style-type: none"> <li>→ May increase inflation and reduce trade, depending on the extend of prohibitions</li> <li>→ May impact sharply on local currency exchange rates, and hence on commodity prices</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Revenue flows to/from targeted group/state</li> <li>&gt; Revenue flows to targeted individuals</li> <li>&gt; Financial assets held outside the targeted country</li> <li>&gt; Reliance of targeted entity on sanctioned funds</li> <li>&gt; Impact of financial sanctions on trade</li> <li>&gt; Income distribution across sectors of society</li> <li>&gt; Changes in government revenues</li> <li>&gt; Local current exchange rates</li> <li>&gt; Foreign remittances</li> </ul>	<ul style="list-style-type: none"> <li>International Monetary Fund (IMF)</li> <li>Economist Intelligence Unit</li> <li>The World Bank</li> <li>National financial institutions</li> <li>Institutions dealing with foreign remittances (e.g. Western Union)</li> <li>Local currency exchange rates</li> </ul>
<b>Travel-related Sanctions</b>	<ul style="list-style-type: none"> <li>→ If targeted to specific individuals / groups travel-related sanctions will likely have minimal humanitarian impacts</li> <li>→ If targeted against a particular 'mode' of transport (e.g. ban on all air traffic), access to critical medical supplies and urgent medical care outside the country may be impacted</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Reliance of particular modes of transport for importing critical medical supplies</li> <li>&gt; Number of medical patients transported per month/year (different modes: air/sea etc.)</li> <li>&gt; Impact of air/sea cargo on key industry sectors</li> <li>&gt; Number of tourists arriving by air/sea</li> </ul>	<ul style="list-style-type: none"> <li>National trade statistics</li> <li>IMF, World Bank, Economist Intelligence Unit</li> <li>International travel/aviation organizations</li> <li>International Maritime Organization</li> <li>American Bureau of Shipping</li> <li>Lloyd's Registry of Shipping</li> </ul>
<b>Targeted Trade Sanctions</b>	<ul style="list-style-type: none"> <li>→ most likely to have impact on humanitarian conditions, depending on sectors targeted</li> <li>→ May result in reduced employment in the targeted sector</li> <li>→ Secondary employment and service industries may be affected</li> <li>→ Attempt to identify alternative employment opportunities</li> <li>→ Assess impact on Govt. revenues</li> </ul>	<ul style="list-style-type: none"> <li>&gt; % of government revenue derived from trade and service sectors</li> <li>&gt; Number of employees supported directly and indirectly by particular sector(s)</li> <li>&gt; Number of dependents of industry sector workers</li> <li>&gt; Foreign Direct Investment (FDI) inwards in sector</li> <li>&gt; Salaries/wages in targeted sector</li> <li>&gt; Household income (households with workers in targeted sector)</li> <li>&gt; Distribution of income (national/local)</li> <li>&gt; Access to services that may be supported (directly or indirectly) by targeted sector</li> </ul>	<ul style="list-style-type: none"> <li>International trade organizations (sector specific)</li> <li>IMF, Economist Intelligence Unit</li> <li>ILO</li> <li>Commodity import/export databases (e.g. Global Trade Atlas, <a href="http://www.gtis.com">www.gtis.com</a>)</li> <li>International auditing firms</li> </ul>

**Table 5 - Summary of "areas of interest", indicators and data sources for four categories of targeted sanctions**



## 6 Standards for Humanitarian Assessments

### 6.1 Overview

The methodology presented in the preceding chapter was developed in response to the need arising from the *ad hoc* approach to undertaking sanctions assessments used in the past, by which assessments were often performed without the use of a clearly defined, routine, and validated methodology based on a well thought-through Terms of Reference (ToR).

This *ad hoc* approach contributed to the lack of clarity - especially on the part of political actors - on how the findings from such assessments were arrived at, and about the basis for investigators' judgments on humanitarian implications. This lack of clarity can lead to a sanctions assessment rapidly becoming contentious or politicized. For example, an assessment undertaken for the UN in Liberia during 2001 was then paraphrased in part by the Government of Liberia, leading to charges that the humanitarian assessment played into the hands of the regime which was the target of sanctions. This example highlights how sanctions assessments can at times be misused to advance the political agendas of key stakeholders, whether by the sanctioned state, corporate entities, or members of the sanctioning body. While this potential will always exist, the use of a clear methodology and associated objective judgments will reduce the possibility for misrepresentation of the assessment findings.

This chapter recommends standards for the planning and undertaking of reliable and credible sanctions assessments and presents draft resolution/directive text for consideration by those mandating sanctions assessments.

### 6.2 Requests for Assessments by the Sanctioning Authority

The point of origin for many previous humanitarian assessments under sanctions has been a request in one of the resolutions / directives of the sanctioning authority for an assessment of the humanitarian and/or socio-economic implications of the imposed measures.

In the case of UN sanctions, such requests are frequently included in the text of relevant UN Security Council resolutions, although the UN Secretariat has in the past also undertaken assessments of third-party sanctions. For example, the UN Department of Humanitarian Affairs undertook an assessment of the humanitarian impact of regional (i.e. non-UN imposed) sanctions on Burundi in 1997.<sup>34</sup>

The text of the relevant resolution or directive by the sanctioning authority can lay out the scope and focus of such assessments. In the case of UN Security Council-mandated assessments, the Council has chosen varying degrees of 'scope' for humanitarian assessments (e.g. 'humanitarian'; 'humanitarian and socio-economic'); has mandated different entities to undertake humanitarian assessments (e.g., UN Secretariat; a Panel of Experts); and has requested a variety of reporting procedures (e.g., direct to the Council; through the Sanctions Committee).

By being more precise about the scope and focus of assessments under sanctions, the sanctioning authority can assist those tasked with undertaking the assessments in identifying possible unintended consequences of the sanctions.

Acknowledging the need to identify monitoring agencies for sanctions and to specify the duties of these agencies, the report of the Interlaken Process on targeted financial sanctions

<sup>34</sup> Claude Bruderlein, *DHA Report on Regional Sanctions Against Burundi* (New York: United Nations Department of Humanitarian Affairs, December 1997).



suggested the following draft text about the monitoring of sanctions that might be included in UN Security Council resolutions:<sup>35</sup>

*"(—) to review the humanitarian [economic,] [social,] [political,] [and] [security] implications of the measures imposed by this resolution and to report back to the Council within [amount of time] of the adoption of this resolution with an assessment and recommendations, to report at regular intervals thereafter on any humanitarian [economic,] [social,] [political,] [and] [security] implications [and to present a comprehensive report on [this/these] issue(s) and any recommendations no later than [amount of time] prior to the expiration of these measures];"*

Other inter-governmental groups or national governments might also adopt this language in their resolutions or directives.

### 6.3 Agencies and Investigators Tasked With Undertaking Assessments

There has been considerable debate on who, and what agencies, should undertake assessments of the humanitarian implications of sanctions, especially when the sanctions are imposed by the UN. The report of the Interlaken Process (from which the draft text in Section 6.2 above is drawn) cites past experience of the UN Security Council in requesting assessments from both the UN Secretariat and from Expert Panels.

The Report of the Stockholm Process on the Implementation of Targeted Sanctions identifies the UN Office for the Coordination of Humanitarian Affairs (OCHA) and Expert Panels / Monitoring Mechanisms as entities capable of conducting assessments of humanitarian implications of sanctions.<sup>36</sup>

The choice of agency for undertaking such assessments should be guided by two criteria. First, the assessing entity should possess the expertise and knowledge to undertake an objective, impartial, and rigorous assessment (see below). Second, the role of policing or monitoring sanctions compliance should be kept separate from the role of assessing humanitarian impact of the sanctions. The two tasks should be undertaken by different entities, as clearly they require different skill sets and expertise.

Reliable assessments require not only a clear and traceable methodology, but skilled and experienced investigators. The following attributes represent desirable skills and qualifications of investigators for humanitarian assessments. The investigators should:

- Have experience and knowledge of sanctions assessment techniques and the recent developments in the sanctions debate, especially within the United Nations;
- Have experience in undertaking or contributing to humanitarian assessments;
- Be versant in the concepts and methods of epidemiology and public health, statistics, risk analysis and economics;
- Possess country-specific or regional expertise;

<sup>35</sup> The Thomas J. Watson Jr. Institute for International Studies, *Targeted Financial Sanctions: A Manual for Design and Implementation - Contributions from the Interlaken Process* (Providence: The Thomas J. Watson Jr. Institute for International Studies, October 2001) : p 34.

<sup>36</sup> Peter Wallensteen et al. Ed., *Making Targeted Sanctions Effective: Guidelines for the Implementation of UN Policy Options* [Final Report on the Stockholm Process on the Implementation of Targeted Sanctions] (Uppsala: Department of Peace and Conflict Research, Uppsala University, 2003) : p 22.





- Be aware of the potential for political manipulation in their interactions with key actors;
- Maintain an effective and ongoing liaison with the commissioning entity (e.g. UN Secretariat / Office for the Coordination of Humanitarian Affairs);
- Be capable of communicating clearly the methodology and objectives of the assessment to those contributing to the study;
- Be sensitive to cultural differences, institutional hierarchies and the existence of networks and special relationships when undertaking the assessment.

In addition to the core assessment team members, additional research expertise can be drawn from various fields when necessary. National participants in sanctions assessments who have worked in local government bring special knowledge of data sources and can make more informed inferences about what the collected information means. In some cases, local participants can access confidential sources that are very useful in verifying 'official' data.

National and local university academics are frequently well informed and have many key skills. Wherever possible, sanctions assessments should use contacts with these national counterparts to strengthen their independent analytical capacity. These local counterparts can play a critical role in on-going or repeated assessments.

#### 6.4 Clear Definition of the Task

The scope and approach to assessing humanitarian impacts under sanctions must be clearly defined in a Terms of Reference (ToR) developed for the assessment team. This task statement should include:

- Brief background to the sanctions regime (actual or proposed) including reference to the relevant legal text(s) (UN Security Council resolution; resolution of other inter-governmental organization; national legislation) imposing the sanctions;
- An overview of the context of the current assessment, including a reference to the paragraph(s) of the sanctioning authority's resolution(s)/directive(s) mandating or requesting the assessment;
- Clear definition of the scope of the proposed assessment - identifying the types of sanction measures to be covered by the assessment;
- Statement of the methodology to be used by the investigators in undertaking the assessment, including the constituent steps in that methodology;
- A catalogue of subject areas of humanitarian conditions that should be covered by the assessment;
- Specification of the nature and scope of interviews to be undertaken at the headquarters level, and while on mission in the sanctioned state;
- Identification of the timeframe within which the assessment must be completed;
- Identification of a reporting chain to the commissioning entity / sanctioning authority;
- Requirements for undertaking the assessment, including human resources and financial requirements;
- Requirements for the assessment report.



## 6.5 Key Elements of a Humanitarian Assessment

A sanctions assessment *must* present some determination of the degree to which sanctions are affecting humanitarian conditions, separate from the effects caused by other factors. In some circumstances it may only be possible to provide a qualitative assessment of the degree to which sanctions influence humanitarian conditions, or indeed it may be impossible to separate out the discrete effects of sanctions at all. In such cases, the investigator should make clear the difficulties and must highlight the indeterminacy of the situation.

A credible assessment of the humanitarian implications of sanctions must include the following elements:

1. Characterization of the humanitarian conditions prior to the initiation of sanction -- 'baseline' conditions -- in a way that shows trends in recent years and the current situation at the time sanctions were instituted (See Section 5.3).
2. Specification of the sources of information used, the quality and limitations of those sources, and the consistency or variations among these sources (See Section 4.3).
3. Identification of major strengths and vulnerabilities of groups of people at the time sanctions were to be instituted.
4. Specification of the components of the sanctions regulations that could affect humanitarian conditions.
5. Identification of the indicators likely to be most sensitive to changes in humanitarian conditions; Identification of factors other than sanctions that are likely to have an important influence on those indicators.
6. Specification with as much detail as possible of the pathways by which sanctions or other factors would influence humanitarian conditions.
7. Examination of process and outcome information, both quantitative and qualitative, on actual changes brought by sanctions and other factors through time and the changes in humanitarian conditions that may follow.
8. Examination of the relative influence of sanctions and other factors in influencing changes in those conditions. This should take advantage of any regional differences in the intensity or type of sanctions or other factors implemented, and variations in population groups in impact and protections;
9. Recommendations for ongoing monitoring of sanction's impact, and on how to minimize any unintended humanitarian/socio-economic impacts of sanctions;
10. Recommendations at the end of sanctions for development activities to address weaknesses and vulnerabilities exacerbated during sanctions.

## 6.6 Writing a Humanitarian Assessment Report

In some cases, the findings and determinations that are brought to the surface during a sanctions assessment do not make it into the written report of the endeavor, often as a result of document editing and time constraints. Therefore, any written assessment of the humanitarian implications of sanctions should include, at a minimum, the sections outlined below. This section listing can be used as a template by those tasked with undertaking such assessments:



**Introduction:** Background to current study | Decisions by the sanctioning authority (e.g. UN Security Council) relevant to current assessment | Brief description of timing of assessment mission to sanctioned region;

**Procedure & Methodology:** Actual sequential procedure followed by investigators (e.g. literature review, interviews, field mission) | Overview of methodology used along with the strengths and weaknesses of the methodology in the particular context | Main challenges in implementing methodology in the context of the current assessment;

**Baseline and Prior Assessments:** Assessment of humanitarian conditions (using indicators across multiple sectors) prior to sanctions | Results of prior assessments | Trends in humanitarian conditions at baseline;

**Assessment of Current Conditions:** Assessment of current conditions (point values and trends) across multiple sectors using humanitarian indicators | Description of data / information sources | Overview of techniques for original data collection (if applicable);

**Results of Causal Modeling:** How causal models were constructed to identify causes of humanitarian conditions | Identification of causal pathways;

**Humanitarian Implications of Sanctions:** The impact of sanctions on humanitarian conditions (separate from other causes) | Identification of other factors influencing humanitarian conditions (and their relative importance compared to sanctions);

**Findings:** Summary of main findings including concise statement of the humanitarian impacts of the sanctions measures on discrete humanitarian conditions.

## 6.7 Ensuring Transparency and Accountability

Transparency and accountability on the part of investigators and participants are critical to the integrity of the resulting assessment. To ensure transparency, investigators must be diligent in citing references for all data and information used in the assessment. In the case of key interviews where interviewee anonymity must be preserved, the investigator must, at a minimum, identify the 'category' of interlocuter and the date and location of the interview. Moreover, the methodology used by the investigator must be clearly stated such that those using the assessment as a basis for political decisions can see clearly how the investigators arrived at their conclusions.

To ensure frank and disclosure of information by interviewees, they should be reassured that the information they provide will not be ascribed specifically to them.

Generalizing beyond the data is a frequent methodological error. When a small study finds excess mortality or malnutrition among children, there can be a desire to extrapolate the narrow findings to the larger population and to liberally estimate the total number of children thus affected in the country. This is a convenient way for others to misrepresent information in the report, claiming that "a scientific study has proven" such projections to be accurate and forgetting the caveats or limitations stated by the authors. It is best to say that, *"It cannot be determined with the information at hand how many children have died, but the evidence, in one study, suggests that the rate has increased."* This is the single most important way to reduce misrepresentation.



## 7 Applications Other Than Sanctions

Separate from the task of assessing the humanitarian implications of sanctions, the methodology presented in this handbook should be viewed as a generic basis for application to humanitarian assessments in situations other than sanctions. Examples of such applications include the following:

- The methodology could be adapted to identify the **particular effects of conflict** on humanitarian condition, or the **effects of HIV infection rates on the broader humanitarian conditions**.
- Assessments undertaken using this methodology can **provide a foundation which practitioners in the field of human rights can use** as a precursor to their assessments of the duties and obligations of states and other actors which are central to human rights assessments.
- The methodology can provide the basis for developing a **standardized humanitarian needs assessment methodology** -- to assist in parsing out the causal influences shaping humanitarian needs.
- The methodology can be used to **complement existing processes such as the United Nations Common Country Assessment (CCA) process**. The causal modeling approach underpinning the sanctions assessment methodology can be used to analyze the root causes of development challenges, using the CCA indicators. The possible cross-connectivity between the CCA process and the application of the current methodology was described in Chapters 3 and 5.
- By identifying the contributing factors to observed humanitarian conditions in a dynamic manner, the **methodology can facilitate more effective targeting of resources** to address demonstrated humanitarian needs.
- The causal analysis component of the methodology can assist in identifying the recent achievements/benefits of humanitarian assistance, and also the unintended consequences of humanitarian aid.



## Annex I - Previous Approaches and Projects Related to Assessment of Humanitarian Impacts of Sanctions

There have been several attempts since the early 1990s to develop a methodology to assess the humanitarian impact of sanctions. There have also been attempts to develop techniques for determining the political effectiveness of sanctions and their economic impact on target- and third-party states.<sup>37</sup> The following review focuses on recent attempts to develop or apply a methodology to assess the humanitarian implications of sanctions.

### Study Commissioned by DHA and IASC in 1995

In 1995 the UN Department of Humanitarian Affairs (DHA), in conjunction with the Inter-Agency Standing Committee (IASC), commissioned COMIT, a Berlin-based consulting firm, to undertake a study on the social and humanitarian concerns associated with sanctions, and the impact of UN sanctions on humanitarian assistance activities.<sup>38</sup> The authors asserted that it would be:

*"...futile to seek precise determination of the factor of sanctions among a multitude of factors conspiring towards a situation difficult to reconcile with humanitarian principles."*<sup>39</sup>

Essentially the authors took the position that in identifying the particular impact of sanctions (separate from impact due to other causes), *"...one does not know and from a humanitarian point one does not need to know [the particular impact of sanctions]."* The report went on to make recommendations on various aspects of UN sanctions policy, but essentially did not deal with the issue of assessing the unique humanitarian impacts of sanctions.

### Studies Commissioned by UNICEF and OCHA in 1998

In 1998 the United Nations Children's Fund (UNICEF) engaged Dr. Eric Hoskins as a consultant to examine how sanctions could be made more child friendly.<sup>40</sup> One of the main objectives of the study was to develop a methodology to anticipate, assess and monitor the humanitarian impact of sanctions on civilians.

Hoskins proposed a sanctions assessment methodology consisting of three main elements: (i) a list of sanctions indicators (based on a human rights framework); (ii) context analysis (analysis of the impacts of sanctions in light of the prevailing societal and economic conditions); and (iii) trend analysis. These efforts did go some way to distinguishing the effects of sanctions from effects due to other causes. However, among its shortcomings, the methodology did not explain how to apply the analytical framework

<sup>37</sup> For effectiveness of sanctions as political tools see: Gary C. Hufbauer, Jeffery J. Schott, and Kimberly Ann Elliott, *Economic Sanctions Reconsidered: History and Current Policy*, 2nd Edition (Washington, D.C.: Institute for International Economics, 1990); and, Robert A. Pape, "Why Economic Sanctions Do Not Work," *International Security* 22, No. 2 (Fall 1997) : pp. 90-136. For economic impact of sanctions on target states, see: Kimberly Ann Elliott, *Methodology and Criteria for Assessing the Impact of Economic Sanctions on Target States* (Washington: Institute for International Economics, June 1997).

<sup>38</sup> Claudia Von Braunmühl and Manfred Kulesa, *The Impact of UN Sanctions on Humanitarian Assistance Activities. Report of a Study Commissioned by the United Nations Department of Humanitarian Affairs* (Berlin: Gesellschaft für Communication Management Interkultur Training mbH - COMIT, December 1995).

<sup>39</sup> *Ibid.* 38.

<sup>40</sup> Hoskins, *The Impact of Sanctions: A Study of UNICEF's Perspective*.



proposed under context analysis. Hoskins also provided recommendations to protect civilians in sanctioned states.

The same year, an OCHA-sponsored study undertaken by Larry Minear et al. included a sanctions assessment methodology.<sup>41</sup> At the outset, the authors asserted that:

*"it is not possible to separate the impacts of sanctions from the effects of other causes of hardship. The best that can be attempted is a modified form of 'process tracing' in which the specific impacts of the type of sanctions imposed are assessed ... in the context of the other factors."*<sup>42</sup>

The authors proposed a multi-step methodology for assessing humanitarian impacts of sanctions, at the core of which was a set of indicators -- presented in five sectors -- for measurement of baseline conditions or changes in those conditions. The methodology includes the following steps: (i) establishing baseline data; (ii) anticipating vulnerabilities and likely impacts on various social groups; (iii) monitoring change indicators to determine actual impacts; (iv) taking necessary ameliorative action; and (v) monitoring results of action taken and ongoing impacts.

This approach shares some components with the 'trend analysis' approach proposed by Hoskins. However, it fails to provide a sufficient basis for parsing out the various factors responsible for the changes in humanitarian conditions.

### Approaches Used in Recent Sanctions Assessments

In addition to these studies on developing a sanctions assessment methodology, recent country-specific reports – most of which were requested by the UN Security Council – employed a variety of techniques to assess the humanitarian impact of sanctions.

- **Afghanistan, 2000:** A study published in December 2000 drew on the methodology of Minear et al. to assess vulnerability and direct/indirect effects of sanctions. The subsequent assessment report reflected the constraints in the methodology vis-à-vis separating out the unique effects of sanctions.<sup>43</sup>
- **Afghanistan, 2001:** UN Security Council resolution 1333 (19 December 2000) included provisions that the UN Secretary-General report to the Council on the humanitarian implications of sanctions on a regular basis. Two assessment reports - using a methodology similar to that used in Afghanistan in 2000 (combining vulnerability assessment, causal analysis) - were produced in March and July 2001.<sup>44</sup>
- **Iraq, 2000:** In its resolution 1302 (8 June 2000), the UN Security Council included provisions for a *"comprehensive report and analysis of the humanitarian situation"* in Iraq, to be undertaken by independent experts. The resolution did not explicitly request an assessment of the humanitarian implications of sanctions, and in any event the assessment was never carried out due primarily to non-cooperation on the part of the Government of Iraq.

<sup>41</sup> Minear et al. *Towards More Humane and Effective Sanctions Management*, 23-54.

<sup>42</sup> *Ibid.* 23.

<sup>43</sup> Office of the UN Coordinator for Afghanistan, *Vulnerability and Humanitarian Implications of UN Security Council Sanctions in Afghanistan* (Islamabad: Office of the UN Coordinator for Afghanistan, December 2000).

<sup>44</sup> United Nations Security Council, *Report of the Secretary-General on the Humanitarian Implications of the Measures Imposed by Security Council Resolutions 1267 (1999) and 1333 (2000) on Afghanistan*, UN Doc. S/2001/241 (New York: United Nations, 20 March 2001); United Nations Security Council, *Report of the Secretary-General on the Humanitarian Implications of the Measures Imposed by Security Council Resolutions 1267 (1999) and 1333 (2000) on Afghanistan*, UN Doc. S/2001/695 (New York: United Nations, 13 July 2001).





- **Liberia, 2001:** UN Security Council resolution 1343 (7 March 2001) requested, "a preliminary assessment of the potential economic, humanitarian and social impact ... of possible follow-up [sanction measures]" by the Council. The resulting "pre-assessment" report assessed baseline living conditions against which to measure future changes. It pursued a sector-specific approach to identifying potential direct and indirect impacts of sanctions on timber, rubber, and merchant shipping sectors.<sup>45</sup>
- **Liberia, 2003:** In resolution 1478 (6 May 2003) the Security Council renewed existing sanctions on Liberia, imposed an additional time-limited ban on importation of all round logs and timber products originating in Liberia, and requested the UN Secretariat to undertake an assessment of the potential humanitarian and socio-economic impacts of the newly-imposed timber sanctions. The resulting assessment used a number of the elements described in this handbook including causal analysis, and indicators of process and outcome in several sectors. In addition, the assessment used a scenario-testing approach.<sup>46</sup>

**Reference Documents on Humanitarian Implications of UN Sanctions**

In addition to the projects and assessments mentioned above, the following table provides a listing of UN documents and statements relating to the humanitarian implications of UN sanctions. This listing is updated regularly by the UN Department of Political Affairs.

DATE	SYMBOL	AGENDA ITEM/ISSUE	REFERENCE /COMMENTS
5 August 2003	<a href="#">S/2003/793</a>	<b>Liberia (sanctions):</b> Report of the Secretary-General in pursuance of paragraph 19 of SC resolution 1478 (2003) concerning Liberia	On the possible humanitarian or socio-economic impact of the measures imposed by paragraph 17 of resolution 1478 (2003)
7 August 2003	<a href="#">S/2003/779</a>	<b>Liberia (sanctions):</b> Report of the Panel of Experts pursuant to paragraph 25 of SC resolution 1478 (2003) concerning Liberia	On the possible humanitarian or socio-economic impact of the measures imposed by paragraph 17 of resolution 1478 (2003)
6 May 2003	<a href="#">S/RES/1478 (2003)</a>	Sanctions against Liberia	Paragraph 18 "Decides to consider by 7 September 2003 how best to minimize any humanitarian or socio-economic impact of the measures imposed by paragraph 17 above"
18 Dec. 2001	<a href="#">S/2001/1215</a>	<b>SG's fourth report on the humanitarian implications of the measures imposed by Security Council resolutions 1267 (1999) and 1333 (2000) on the territory of Afghanistan under Taliban control</b>	"The sanctions imposed...are limited in scope and targeted at specific individuals, entities and activities. The sanctions measures had only limited adverse effects on the humanitarian situation. The main causes of human suffering in Afghanistan were and still are the armed conflict...drought and widespread human rights abuses. The sanctions regime...did have a generalized impact on aspects of the economy and therefore indirectly also on the humanitarian conditions."
20 Nov. 2001	<a href="#">S/RES/1379 (2001)</a>	Resolution n <b>Children and armed conflict</b>	Paragraph 7: " (...) Undertakes to consider, as appropriate when imposing measures under Article 41 of the Charter of the United Nations, <b>the economic and social impact of sanctions on children</b> , with a view to providing appropriate humanitarian exemptions that take account of their specific needs and their vulnerability and to minimize such impact (...)"
19 Nov. 2001	<a href="#">S/2001/1086</a>	SG's third report on the <b>humanitarian implications of the measures imposed by Security Council resolutions 1267 (1999) and 1333 (2000) on the territory of Afghanistan under Taliban control</b>	.

<sup>45</sup> United Nations Security Council, *Report of the Secretary-General in pursuance of paragraph 13 (a) of resolution 1343 (2001) concerning Liberia*, UN Doc. S/2001/939 (New York: United Nations, 5 October 2001).

<sup>46</sup> United Nations Security Council, *Report of the Secretary-General in pursuance of paragraph 19 of resolution 1478 (2003) concerning Liberia*, UN Doc. S/2003/793 (New York: United Nations, 5 August 2003).



DATE	SYMBOL	AGENDA ITEM/ISSUE	REFERENCE /COMMENTS
11 Oct. 2001	<a href="#">GA/L/3184</a>	Press release " <b>Delegates call for review of efforts to minimize unintended effects in imposition of United Nations sanctions</b> "	In the course of the 7th meeting of the Sixth Committee (Legal) held on 11 October to continue its review of the Report of the Special Committee on the Charter of the United Nations and on the Strengthening of the Role of the Organization [165] (A/56/33, A/56/303 and A/56/330), some UN representatives called for the establishment of criteria and procedures to minimize unintended negative effects of sanctions on third States
5 Oct. 2001	<a href="#">S/2001/939</a>	<b>SG's report in pursuance of paragraph 13 (a) of resolution 1343 (2001) concerning Liberia</b>	Paragraph 1: "In operative paragraph <b>13 (a) of its resolution 1343 (2001)</b> of 7 March 2001, the Security Council requested the Secretary-General to provide, six months from the date of the adoption of the resolution, a preliminary assessment of the potential economic, <b>humanitarian and social impact on the Liberian population</b> of possible follow-up action by the Security Council in the areas of investigation indicated in paragraph 19 (c) of the resolution"
13 July 2001	<a href="#">S/2001/695</a>	SG's report on <b>the humanitarian implications of the measures imposed by SC resolutions 1267 (1999) and 1333 (2000) on Afghanistan [mid-term review]</b>	
20 March 2001	<a href="#">S/2001/241</a>	SG's report on <b>the humanitarian implications of the measures imposed by SC resolutions 1267 (1999) and 1333 (2000) on Afghanistan [first report]</b>	Focuses primarily on the reporting methodology, and an examination of the immediate implications for the humanitarian situation in the first 60 days of the sanctions regime.
7 March 2001	<a href="#">S/RES/1343 (2001)</a>	<b>Resolution imposing a range of sanctions against Liberia</b>	<b>Paragraph 13</b> : "(...) Requests the Secretary-General to provide to the Council six months from the date of the adoption of this resolution: (a) a preliminary assessment of the potential economic, <b>humanitarian and social impact</b> on the Liberian population of possible follow-up action by the Council in the areas of investigation indicated in paragraph 19 (c) below (...)"
19 Dec. 2000	<a href="#">S/RES/1333 (2000)</a>	<b>Resolution imposing further sanctions against the Taliban (Afghanistan)</b>	<b>Paragraph 15 (d)</b> : "(...)To review the <b>humanitarian implications</b> of the measures imposed by this resolution and resolution 1267 (1999), and to report back to the Council within 90 days of the adoption of this resolution with an assessment and recommendations, to report at regular intervals thereafter on any <b>humanitarian implications</b> and to present a comprehensive report on this issue and any recommendations no later than 30 days prior to the expiration of these measures (...)"
19 July 2000	<a href="#">A/55/163–S/2000/712</a>	SG's report on <b>Children and armed conflict</b>	<b>Paragraph 26</b> : "(...) The Security Council has repeatedly signalled its willingness to consider <b>the humanitarian impact of sanctions</b> on vulnerable groups, including children, in a systematic and consistent manner. A number of studies have been undertaken recently by the United Nations system, Governments and private research centers aimed at designing more targeted, "smarter" sanctions (...)" <b>Paragraph 27</b> : "(...) While important, these studies have not directly focused on <b>the impact of sanctions regimes on children</b> . The Office for the Coordination of Humanitarian Affairs has recently reconvened the Inter-Agency Standing Committee reference group on <b>humanitarian consequences of sanctions</b> . This group will undertake and/or coordinate field assessments to monitor and evaluate the <b>humanitarian</b>



DATE	SYMBOL	AGENDA ITEM/ISSUE	REFERENCE /COMMENTS
			<b>implications of sanctions</b> and to make available timely and comprehensive information on the <b>impact of these coercive measures</b> . I will encourage the active participation of UNICEF and the Office of the Special Representative for Children and Armed Conflict in these assessment missions. This will enable the Secretariat to provide the Security Council with better information on child-relevant aspects of sanctions and with more informed recommendations on humanitarian exemptions (...)" <b>Recommendations 19, 50</b>
17 April 2000	<a href="#">SC/6845</a>	Press Statement : " <b>Speakers call for clearer definition, tighter targeting of UN sanctions as Council draws on 'lessons learned' to refine sancitons regimes</b> "	.
17 April 2000	<a href="#">SG/SM/7360</a>	Press Statement : " <b>Secretary-General reviews lessons learned during 'sanctions decade' in remarks to international peace academy seminar</b> "	.
7 April 2000	<a href="#">S/PRST/2000/12</a>	Statement by the President of the SC on the situation in Afghanistan	" (...) The Security Council stresses the need for prompt and effective implementation by all Member States of the measures imposed by its resolution 1267 (1999), and reminds Member States of their obligations under this resolution, including assisting in the identification of Taliban assets and aircraft. It underlines that sanctions are not aimed at the Afghan people, but are imposed against the Taliban because of its non-compliance with that resolution. The Council reaffirms its decision to assess <b>the impact, including the humanitarian implications</b> , of the measures imposed by that resolution. It encourages the Committee established pursuant to its resolution 1267 (1999) to report in this respect as soon as practicable (...)"
15 Oct. 1999	<a href="#">S/RES/1267 (1999)</a>	<b>Resolution imposing sanctions against the Taliban (Afghanistan)</b>	<b>Paragraph. 6 (c)</b> "To make periodic reports to the Council on the impact, including the humanitarian implications, of the measures imposed by paragraph 4 above;"
29 jan. 1999	<a href="#">S/1999/92</a>	Note by the President of the SC (On the work of Sanctions Comittee)	.
23 Feb.1998	<a href="#">S/1998/147</a>	Letter from the SG addressed to the President of the SC attaching <b>statement of the Inter-Agency Standing Committee on the humanitarian impact of sanctions</b>	OP 14 of the annexed part of the resolution (texts on coordination and the question of sanctions imposed by the United Nations): "Sanctions often have a serious negative impact on the development capacity and activity of targeted countries. Efforts should continue to be made to minimize unintended side effects of sanctions, especially with regard to the humanitarian situation and the development capacity that has a bearing on the humanitarian situation. In some instances the application of sanctions may not be compatible, however, with bilateral and multilateral development programmes"
15 Sept. 1997	<a href="#">A/RES/51/242</a>	Resolution of the GA	.
13 April 1995	<a href="#">S/1995/300</a>	Letter Dated 13 April 1995 from the Permanent Five members of the Security Council addressed to the President of the Security Council , transmitting a non-paper <b>on the humanitarian impact of sanctions</b>	.

**Table 6 - UN documents and statements pertaining to humanitarian implications of UN sanctions**



## Annex II - Table of Humanitarian Indicators

This annex presents a reference list of Humanitarian Indicators for use in assessing the humanitarian impacts of sanctions. The following points relate to the format and use of the indicators outlined in Table 7.

- The table of indicators represents an expanded compilation of indicators drawn from studies by Hoskins, Minear et al., and Garfield.<sup>47</sup>
- Indicators are presented in each of the "**4 + 4**" **human security subject areas** (See Section 2.2.1, "Core" and "Systemic" Human Security Clusters).
- The **core cluster** of human security comprises three pillars of basic physiological needs: Health, Food & Nutrition, Water & Sanitation ... and also includes Education. This cluster relates primarily to conditions at the individual and household level.
- The second cluster deals with the structural context in which people seek to secure these core human needs. The subject areas of this cluster include Governance, Economic Status, the physical Environment, and Demography. This **systemic (or structural) cluster** relates to national, societal, or community level conditions.
- Each subject area contains a number of humanitarian indicators relevant to that particular theme. Some indicators measure conditions at an initial point in time, which are referred to as **BASELINE indicators**, while others monitor changes that may occur, for example during and after sanctions, referred to as **CHANGE indicators**.
- Indicators of change include **PROCESS** indicators of changes in services provided / activities undertaken, and **OUTCOME** indicators of changed status of people's lives.
- **OUTCOME** indicators should be considered the most desirable metrics for monitoring the status of humanitarian conditions (e.g. malnutrition rates etc.); **PROCESS** indicators are used to quantify intermediate and proximate causes of changes in humanitarian conditions.
- It should be noted that indicators may be categorized differently depending on the human security subject area in which they appear. Indicators which are designated as measures of **OUTCOME** in particular subject areas, may indeed constitute indicators of **PROCESS** in different subject areas.
- While many humanitarian indicators will facilitate measurement of both baseline and change values of a particular metric, certain indicators will be better able to capture and reflect values at either the baseline level, or as the value changes over time. One of the columns in Table 7 identifies those indicators which are considered more appropriate for measurement of either baseline or change values.
- Many of the indicators presented here may need to be disaggregated to take into account important variations changes in a society, for example according to

<sup>47</sup> Eric Hoskins, *The Impact of Sanctions: A Study of UNICEF's Perspective* (New York: UNICEF Office of Emergency Programmes, February 1998); Larry Minear, et al., *Towards More Humane and Effective Sanctions Management: Enhancing the Capacity of the United Nations System*, Occasional Paper No. 31 of the Thomas Watson Jr. Institute for International Studies (Providence, RI: Brown University, 1998); Richard Garfield, *The Impact of Economic Sanctions on Health and Well-being*. Network Paper 31 of the Relief and Rehabilitation Network (RRN) (London: Overseas Development Institute, November 1999).



geographic (region of country; environment), gender, age and economic (income groups) factors.



**Table 7 - Humanitarian indicators for assessing the impact of sanctions**

Human Security Subject Area	ID	Humanitarian Indicators (with sub-indicators if appropriate)	Units of Measurement	Suitability for Baseline / Change <sup>48</sup>	Notes / Type of Indicator	
Health	1.1	Adult mortality rates	/1000 live births	Baseline	OUTCOME	
	1.2	Infant & U-5 mortality rates	/1000 live births		OUTCOME	
	1.3	Life expectancy	Years from birth	Baseline	OUTCOME	
	1.4		Morbidity rates (segregated according to cause e.g. WATSAN-related illnesses)			OUTCOME
			→ Incidence [I] rate	new cases / time	Change	
			→ Prevalence [P] rate	number of cases at one time	Baseline	
			→ Attack [A] rate	New cases / time per epidemic	Change	
	1.5		HIV Infection rate	Number of cases / changes in infection rate (%)		OUTCOME
			→ Number of AIDS orphans			
	1.6		Low birth weight	% newborns weighing < 2.5 kg	Change	OUTCOME
	1.7		Mental health status	% population requiring mental health services, or percent with PTSD or depression, or percent who cannot work because of psychosocial incapacity		OUTCOME
			→ Capacity of mental health services	Ratio: demand/supply (inpatient & outpatient)		
	1.8		Maternal health			PROCESS
			→ Maternal Mortality Ratio	Annual no. deaths of women from pregnancy-related causes / 100,000 live births.	Baseline	
			→ Births attended by trained professionals	% births attended by healthcare professionals or those trained in midwifery skills		
			→ Antenatal care coverage	% expectant women with access to antenatal care services		
			→ Existence of reproductive health services			
→ Contraceptive Prevalence Rate			% of married women (including women in union) aged 15-49 who are using, or whose partners are using, any form of contraception, whether modern or traditional			
1.9		Birth rates	Annual number births / 1000 pop.		PROCESS	
1.10		Prevalence (& Incidence) of infectious diseases	% population		PROCESS	
		→ Immunity against the six vaccine-preventable diseases	% coverage (pop)	Change		
1.11		Adequacy / accessibility of medical services:	% population serviced		PROCESS	
		→ Availability of preventive services;				
		→ Number of doctors/nurses per population;				
		→ Medical visits per population;				

<sup>48</sup> A blank entry in this column signals that the indicator is equally suitable for measurement of baseline and change.





Human Security Subject Area	ID	Humanitarian Indicators (with sub-indicators if appropriate)	Units of Measurement	Suitability for Baseline / Change <sup>48</sup>	Notes / Type of Indicator
		→ Expenditure on health services;			
		→ Availability of medical goods / pharmaceuticals;			
		→ Hospitals and health centers in operation;			
		→ Hospitalisations, lab exams, x-rays and operations performed per population;			
	1.12	Reported cases of previously-eradicated diseases	Number of cases by age/region	Change	PROCESS
1.13	Cases of G-I disease or acute respiratory illnesses diagnosed and treated	Number diagnosed (% of diagnosed cases treated)		PROCESS	
1.14	Capacity of health information, surveillance sys.	Administrative, financial, personnel and technological capacity		PROCESS	
<b>Food &amp; Nutrition</b>	2.1	Percentage U-5 malnourished	%		OUTCOME
	2.2	Nutritional status: (3 sub-categories):			OUTCOME
		→ weight for height (wasting);	%	Change	
		→ weight for age (underweight) ;	%	Change	
		→ height for age (stunting);	%	Baseline	
	2.3	Percentage of adolescents, adults or elderly with low body mass index (BMI)	%		OUTCOME
	2.4	Low weight gain in pregnant women	%	Change	OUTCOME
	2.5	Prevalence of: vitamin A deficiency; Iron deficiency; Iodine deficiency	% population by age		PROCESS
	2.6	Household income and expenditure	local currency per period of time	Change	PROCESS
	2.7	Daily / household calorific intake	% WHO recommended	Change	PROCESS
	2.8	Cost of basic food items / basket	% daily income		PROCESS
	2.9	Household coping strategies	YES / NO (% contribution)		PROCESS
	2.10	Public rationing / Shortages of foodstuffs:	YES / NO (% supplement)	Change	PROCESS
		→ Average duration of rationed food in HH per month;	Days/month	Change	
2.11	Average number of times meat eaten per month	--		PROCESS	
2.12	Percent infants exclusively breastfed (< 6 months)	%		PROCESS	
	→ Percent breastfed (complementary) under 2 yrs.	%			
2.13	Percentage of disposable income spent on food	%		PROCESS	
<b>Water &amp; Sanitation</b>	3.1	Access to safe water (Urban / Rural):	% of population		OUTCOME
		→ Number of households with piped water access;	Households		
		→ Water quality;	% water samples contaminated		
		→ Clean water treatment facilities without chlorine;	%		
		→ Individual access to potable water;	Litres per capita per day		
		→ Capacity of clean water treatment;			
	→ Status of water pumping system;				
	3.2	Garbage collection	Kg per capita per day		OUTCOME
3.3	Access to adequate sanitation (Urban / Rural):	% of population		OUTCOME	
	→ Capacity of waste water treatment;	% of raw sewage untreated			
<b>Education</b>	4.1	Adult literacy rates	% persons > 15 (can read & write)	Baseline	OUTCOME
	4.2	Primary school enrollment ratio, drop-out rates (should also include actual attendance rates)	Ratio: children enrolled / all children in that age group	Change	OUTCOME



Human Security Subject Area	ID	Humanitarian Indicators (with sub-indicators if appropriate)	Units of Measurement	Suitability for Baseline / Change <sup>48</sup>	Notes / Type of Indicator
	4.3	Secondary school attendance rate	Ratio: children enrolled / all children in that age group		OUTCOME
	4.4	Primary school children reaching grade 5	%		OUTCOME
	4.5	Percentage of students passing critical exams	% (exams will be country specific)		OUTCOME
	4.6	Student/teacher ratio:	Ratio	Change	PROCESS
		→ Teacher drop-out rate	Teachers per 1000 population	Change	
	4.7	Computer literacy	% persons (disaggregated by age) with basic computing skills		PROCESS
	4.8	Tertiary education enrolment ratios	% of post-secondary education population OR % of adult population		PROCESS
		→ Tertiary students in science	% of total tertiary		
	4.9	Female participation in education:			PROCESS
		→ Female primary age group enrolment	% of primary school age girls		
→ Female secondary age group enrolment		% of secondary school age girls			
→ female tertiary students		Per 100,000 women OR % males			
4.10	Expenditure on education:	% of GNP		PROCESS	
	→ Condition / capacity of schools, inc. available materials;				
<b>Governance</b>	5.1	Measurement of violence and imprisonment:	Incarceration rate (per 100,000)	Baseline	OUTCOME
		→ Frequency of murders / assaults;	Number of fatal attacks /population	Change	
	5.2	Degree of internal restrictions on movement (specifically as it relates to humanitarian conditions - e.g. travel to clinics)		Change	OUTCOME
	5.3	Ability of independent civic organizations (engaged in humanitarian activities) to function			OUTCOME
	5.4	Existence and implementation of instruments of public order (specifically as it relates to humanitarian conditions)			OUTCOME
	5.5	Government budgetary allocations	% GNP by sector		PROCESS
	5.6	Access to asylum for displaced persons			PROCESS
5.7	Capacity of governing bodies to function:	[e.g. Govt. expenditure as % GDP]		PROCESS	
	→ Financial resources;				
	→ Personnel resources;				
<b>Economic Status</b>	6.1	Measurement of wealth, poverty	National GDP		OUTCOME
	6.2	GNP/capita	US\$ or local currency	Baseline	OUTCOME
	6.3	Purchasing power (commodity) of average daily salary	Measured in local commodity (rice etc.)	Change	OUTCOME
	6.4	Official Development Assistance (ODA) received	US\$ per capita OR as % of GNP		OUTCOME
	6.5	Unemployment	%		PROCESS
	6.6	Household assets and loans	As % annual household income		PROCESS
	6.7	Income distribution (national / subnational)	Income groups: % < \$XX phpa		PROCESS
	6.8	Public/private sector employment (ratio):	Ratio		PROCESS
		→ Dependency on State-sponsored employment	% of those employed in formal sector		
	6.9	Presence/absence of black market			PROCESS
	6.10	Trends in market prices, currency and inflation:	Avg annual/monthly inflation rate	Change	PROCESS
	6.11	Foreign Direct Investment (FDI) (INWARDS)	US\$	Baseline	PROCESS
6.12	Dependency on key industry/service sectors [ESP. SECTORS THAT MAY BE AFFECTED BY SANCTIONS]	Contribution of sector as % GDP		PROCESS	



Human Security Subject Area	ID	Humanitarian Indicators (with sub-indicators if appropriate)	Units of Measurement	Suitability for Baseline / Change <sup>48</sup>	Notes / Type of Indicator
		→ Contribution of key industry/service sectors to Government revenue	Contribution of sector as % Government revenue		
<b>Environment</b>	7.1	Land use:		Baseline	<b>OUTCOME</b>
		→ Deforestation rate	% reduction		
		→ Agricultural production	Production as % demand		
	7.2	Access to safe housing:	% population	Baseline	<b>OUTCOME</b>
		→ Supply v. demand of housing	Ratio		
		→ Population in temporary, improvised shelters;	% population		
	7.3	Environmental pollutants	Carbon dioxide emissions etc.		<b>OUTCOME</b>
	7.4	Capacity of transport infrastructure	Km of usable road/rail networks	Baseline	<b>PROCESS</b>
7.5	Energy generating capacity	Ratio: supply / demand		<b>PROCESS</b>	
	→ Number/duration of power cuts	Hours OR 'brown outs' per day	Change		
7.6	Capacity of communications system	[e.g. Data transfer capacity; number of telephones per 1000 population]		<b>PROCESS</b>	
7.7	Fuel sources	Dependency by type of fuel		<b>PROCESS</b>	
<b>Demography (&amp; Community)</b>	8.1	Adequacy of support and assistance to major social groups (e.g. destitute, displaced, persons with disabilities, older persons)			<b>OUTCOME</b>
	8.2	Migration trends / population flows:		Change	<b>OUTCOME</b>
		→ Involuntary migration;	000s (+ direction)		
		→ Presence/growth of refugee camps/IDPs	Number IDPs		
	8.3	Household composition:			<b>OUTCOME</b>
		→ Persons per household;	Persons		
		→ Changes in household composition;	Frequency of changes	Change	
		→ Head of Household dependency ratio;	Ratio		
	8.4	Child protection:			<b>OUTCOME</b>
		→ Number of minors incarcerated;	Per 100,000		
→ Prevalence of girl prostitution;		Number per community / urban area	Change		
→ Number of minors working according to national labor laws; number of children below legal working age; children working in hazardous conditions		% of age group			
→ Existence of drug prevention programmes and child-specific counselling services					
→ Adequacy of services for violence against children		Number, capacity of service centers and professionals per 100000 population			
8.5	Population profile / dependency ratio	Population over 65 years compared to working (or total other) population [as % or ratio]		<b>PROCESS</b>	
	8.6	Urban/rural population mix	%	<b>PROCESS</b>	
8.7	Measurement of social cohesion, community integration	Number of active community groups in urban/rural environment; level of voluntary services provided by community groups		<b>PROCESS</b>	



## Annex III - Glossary of Key Terms

<b>causal model</b>	A theory that specifies which factors effect in part or determine in full changes in other factors
<b>chain of causation</b>	A description of how several layers apply in determining how underlying factors lead to effects which in turn lead to other effects.
<b>criteria of causation</b>	Tests for judging the strength of the argument that one factor causes another
<b>context Analysis</b>	Identification of underlying or preexisting conditions that may influence the outcomes of interest
<b>distal cause</b>	A factor in a chain of causation that is removed from the final effect
<b>human security cluster</b>	Key dimensions of life in a society that are the focus of assessment, such education, water, nutrition and health.
<b>necessary condition</b>	Where a condition must occur for another condition to result
<b>outcome indicator</b>	A measure, direct or indirect, of a fundamental human, social, or biological condition
<b>precision</b>	The quality of being sharply defined or stated, tested by the standard error of measurement. Precision does not imply accuracy.
<b>process indicator</b>	A measure, direct or indirect, of an institutional or social process that leads to an outcome
<b>proximal cause</b>	A factor, in a chain of causation, that is closely associated with the final effect, either in time or in how the effect is achieved
<b>sufficient condition</b>	When a factor is enough to drive an outcome by itself
<b>reliability</b>	The degree of stability exhibited when a measurement is repeated under identical conditions. the degree to which the results obtained by a measurement or procedure can be replicated.
<b>representativeness</b>	The extent to which a sample is similar to the larger population in question, without bias or error
<b>statistical power</b>	Condition where the size of the sample, or the extent of the evidence observed, is sufficient to allow for conclusions to be drawn about the overall population or society