

CONFLICT PROGNOSIS
Bridging the Gap from
Early Warning to Early Response
Part One

Discussion Paper

Luc van de Goor
Suzanne Verstegen

Netherlands Institute of International Relations 'Clingendael'

The Hague, November 1999

Table of contents

List of Abbreviations

I.	Introduction	1
II.	Application of Early Warning Concepts	3
III.	Research Undertaken	6
	A. Theoretic Models	6
	B. Practical Efforts of Early Warning Modeling in a Policy Setting	11
IV.	A Mid-term Conclusion	15
V.	Towards the Design of a Conflict Policy Assessment Framework	17
VI.	Conclusion and Summary: Recommendations for the Development of a Conflict Policy Assessment Framework (CPAF)	22
	References	26
	Annexes	

List of Abbreviations

BMZ	Federal Ministry for Economic Co-operation and Development
CAII	Creative Associates International, Inc.
CEWP	Conflict Early Warning Project
CIDA	Canadian International Development Agency
CODW	Causes of Conflict in the Third World
CPAF	Conflict and Policy Assessment Framework
DFAIT	(Canada) Department of Foreign Affairs and Trade
DHA	UN Department of Humanitarian Affairs
EUNET	Early Warning/Response Network
EWS	Early Warning System
FAO	Food and Agriculture Organization of the United Nations
FAST	Early Recognition of Tension and Fact Finding
FEWER	Forum on Early Warning and Early Response
GEDS	Global Event-Data System
HEWS	Humanitarian Early Warning System (UN)
KEDS	Kansas Event Data System
LIVA	Life Integrity Violations Analysis
MAR	Minorities At Risk Project
NGO	Non-Governmental Organization
OECD-DAC	Development Assistance Committee of the Organization for Economic Cooperation and Development
ORCI	Office for Research and Collection of Information (UN)
OSCE	Organization of Security and Cooperation in Europe
PANDA	Protocol for the Assessment of Nonviolent Direct Action
PIOOM	Interdisciplinary Program of Research on Root Causes of Human Rights Violations
USAID	United States Agency for International Development
WFP	World Food Programme

I. Introduction

Research Rationale

This report is part of the Conflict Policy Research Project (CPRP) as conducted by the Conflict Research Unit of the Netherlands Institute of International Relations ‘Clingendael’ on the request of the Netherlands Ministry of Foreign Affairs. The overall goal of the CPRP is to study the current situation with regard to (Dutch) conflict prevention policies and focuses on the development of an adequate policy mix to guide future interventions in conflict-ridden societies. This implies a further integration of theory and policy within the departments that primarily coordinate direct conflict-related interventions, as well as the sensitization of a broader range of policy areas for their possible impact on conflict situations in Third World countries.

This report is part I of a two-part study on conflict prognosis in the policy practice of development cooperation. Part I substantiates the theoretic rationale for the development of a conflict and policy assessment framework (CPAF) in an attempt to bridge the gap from early warning to early response. It is a follow-up on the mid-term report “Conflict Prognostication: Toward a Tentative Framework for Conflict Assessment” (February 1999) that included a first stocktaking of the international research on anticipating and preventing the outbreak of violent conflict and identified key options to decide upon the character and focal points for a newly to develop assessment framework for use in the policy practice. The objective of the stocktaking on early warning and conflict prognosis was not only to develop an insight in the issues at play when designing such a framework for the Netherlands Ministry of Foreign Affairs, but foremost to build on the existing knowledge in the field. It was explicitly expressed not to duplicate efforts, but instead to identify theoretic and practical understanding that is in line with the character of the desired framework: a relatively simple assessment on conflictive situations in Third World countries, that integrates theory and practice, and for the purpose of formulating timely, effective, and truly *preventive* (re)actions. Hence, the intent of Part I of the study on conflict prognosis is to place this effort at developing a CPAF within the wider context of on-going early warning research. Part II—the report “Conflict Prognosis: A Conflict and Policy Assessment Framework”—will include the operationalization of the (here only in general terms proposed) conflict and policy assessment framework.¹

New challenges

Due to the absence of ideological differences in the ‘New World order’, high expectations arose for policy and decision-makers to be able to prevent conflicts. Conflict prevention thus has become a high-ranking item on the current international agenda. Early warning is in this regard often appreciated as a special *tool* in strategies of preparedness and prevention. Ideally, it involves the collection and analysis of data through uniform, systematized procedures and according to a proper scientific methodology. When the data point to a high probability of impending crisis, the warnings should be transmitted to political decision-makers who then should respond adequately.² The concept of early warning, then, is not new. Early warning systems already exist in other fields, e.g. meteorology, natural disasters and refugee movement. The relative success of these models set high hopes for application of early warning in the field of conflict prevention. These early warning models, however, differ of those on conflict insofar that the phenomenon to warn upon in conflict early warning models involves—at least to a larger degree than in other fields—human decisions, thoughts and behavior. This puts additional demands and constraints on the modeling effort. Moreover, conflict early warning in itself is more controversial since it touches upon issues of state-sovereignty—which is less the case in forecasting for the sole purpose of improving emergency assistance (Schmeidl, 1999).

Hence, although policy documents often refer to the need for conflict prevention and the development of early warning systems, the concepts are not ‘trouble-free’, at the theoretic nor at the practical level. Theoreticians as well as practitioners have multiple interpretations of the central concepts ‘conflict’, ‘early warning’, ‘early response’, and ‘prevention’. Moreover, a wide variety of theoretic assumptions and methodological starting points is used, leading to the general observation in our stocktaking of early warning models that the main difference in the models and systems is a result of varying objectives, indicators, sources, and practical methodology. In fact, on both the theoretical and the practical level it is not clear what to expect from an early warning system and how to link it to preventive actions. Moreover, the observation that organizations differ in their *capacity* to respond to warnings is generally passed over. It nevertheless appears of crucial importance to realize that the various actors that (wish to) operate in the area of ‘conflict prevention’ all have their particular range of instruments to undertake preventive actions. In order

¹ This report will become available mid-2000.

² See also K. van Walraven (1998) *Early Warning and Conflict Prevention; Limitations and Possibilities*, The Hague: Kluwer Law International.

to avoid highly ambitious designs, a conflict prognostication³ framework should focus on the institution considered responsible for undertaking action.

Before elaborating on the actual design of a CPAF, the following paragraph will discuss the main issues with regard to the application of early warning concepts. Paragraph 2, then, delineates the central concepts, and shortly addresses issues of trying to find a balance between theory and practice, warning and response. Paragraph 3 will provide an overview of early warning models, which will be followed by comments on their practical use, in particular in the light of the criteria for a CPAF as described in paragraph 2. In this regard, paragraph 4 provides a mid-term conclusion on what elements of current early warning attempts are of relevance when developing a conflict and policy assessment framework. It is, hence, a first indication of the approach and design we think most appropriate for such a framework. The argument will be elaborated upon in paragraph 5, which is more precise in indicating efforts that are deemed of interest to continue the conflict prognostication research upon. Finally, paragraph 6 will give a summary and recommendations for the development of a CPAF.

II. Application of Early Warning Concepts

Delineating the central concepts

Conflict early warning models appear to comprise a continuation of research on the causes of conflict, as they aim for assessing risks of conflict escalation. The difference with this type of research, however, is the translation of the findings of such research into a standardized analytical model. By *model*, we refer to the identification of a clear set of indicators to analyze within a pre-specified *framework*.⁴ In such models, the indicators should provide an assessment of the conflict potential and the chances of escalation into violent conflict. Here *conflict* is approached in such a way as to signify only violent conflict and thus exclude those disputes that do not have a violent character. Conflicts ideal-typically involve a life cycle in which certain variables may bring a

³ In order to avoid confusion as a result of multiple use of the term early warning—sometimes referring to information sharing, in other cases to both data collection and analysis of the information, to combined efforts of information gathering, analytical capacity and the development of policy options, and, fourth, to preventive action as an integral part of early warning (Adelman 1998)—we here opt for using the term ‘conflict prognostication’ when referring to the process of anticipating a conflict escalation process.

⁴ Here we use the term model for the more limited element of ‘theoretic content’, i.e. the specific indicators to monitor. These should be adapted over time as insights into causes and dynamics of conflict enhance. The term framework is used for the broader effort that not only includes this theoretic model, but also a systematization/standardization of approach, including a matrix of policy instruments. It is the latter that we here aim for.

dispute into a violent phase or a violent conflict back to the stage of non-violent interaction.⁵ Although levels of violence may naturally oscillate, conflict is essentially defined in terms of a process involving, among others, a dispute or pre-hostilities phase, a violent phase and a post-hostilities phase. Since it is here attempted to develop a framework for timely and truly preventive interventions, the focus will be on pre-escalatory situations and low-intensity phases in protracted conflicts (hence excluding the violent peaks). The form in which conflicts manifest themselves, however, varies widely, depending on the causes and the actors involved, resulting in specific dynamics and outcomes.⁶ The fact that conflicts can differ from secession to state collapse, from violent repression to genocide, from intrastate to interstate, or from socioeconomic to political-military dimensions, makes anticipating possible conflicts not a matter of precise prediction and timing.

A Needs Assessment: juggling theory and practice, warning and response

It is frequently stated that “we already know what the causes of conflict are”, and that “we know the indicators to monitor”. This would imply that early warning is only a matter of information gathering and warning signaling to decision-makers. It should however be fully realized that causal relationships in the chain of events or decisions leading to conflict are not always clear-cut.⁷ Consequently, the development of a framework for operational conflict and policy assessment first and foremost asks for (theoretical) knowledge on the causes and dynamics of conflict. Such analysis, further, needs to include operational responses. A conflict prognostication model should therefore build upon the following keywords: understanding, anticipation and intervention. Understanding refers to the ‘root’ causes and conditions. Anticipation refers to recognizing patterns of events and actions leading to potential crisis. Both understanding and anticipation should result in indicating potential moments and fields for intervention. Ideally, such a framework should consist of operational standards. This would help structure the usual reporting from desk officers and field personnel, and enhance the capacity to identify and prioritize options for operational responses. The same standardization of the analysis approach, then, should also apply to the policy

⁵ K. van Walraven (1998: 4) *Early Warning and Conflict Prevention; Limitations and Possibilities*, The Hague: Kluwer Law International.

⁶ R. Doom and K. Vlassenroot (1997) “Early Warning and Conflict Prevention; Minerva’s Wisdom?” in *Journal of Humanitarian Assistance*, <http://www-jha.sps.cam.ac.uk/a/a008.htm>

⁷ See the findings of the Clingendael research on causes of conflict in Central America, South Asia, and West Africa. P. Douma, G. Frerks, L. van de Goor (1999) *Causes of Conflict in the Third World; Synthesis Report*, The Hague: Clingendael.

intervention instruments and combinations of instruments.⁸ ‘Having the tools’ is not enough. Preventive action is just as much about knowing how to do the right thing, as it is about garnering political will—an issue that is often ‘blamed’ for the warning-response gap. However, it is not the *lack* of political will that is here considered to be the main issue, but instead the inability to translate political will into timely and effective action.

Parameters for a CPAF

Conflict and policy assessments for the policy practice, then, should address early warnings as well as early actions. The framework should not only be reliable and valid, but should also address the main question of what to do with the alarms and how to mobilize effectively when an alarm is deemed credible. The basis then should be to create an institutional and policy framework capable and ready to react.⁹ It should do so on the basis of a better understanding of the conflict situation, and relating this information to the goals set in order to make decision-making more rational and effective. Hence, the conflict and policy assessment framework is an instrument with various applications. It is expected to

- define the mission;
- analyze and monitor the situation;
- identify options based on the policy tools available;
- identify tasks that need to be accomplished in an operation;
- function as a communication tool, as a way to formalize communication.

The crucial question, then, is which elements to include in the analysis of such a goal-oriented, practical instrument. It is first of all important to include the capacity of an organization for conflict preventive measures. Further, the analysis should suggest operationally and logistically realistic responses that are related to current priorities in conflict preventive policies. In this regard, Cockell (1997) speaks of, respectively, “strategic targeting” and a “process link”.

⁸ This is not to say that we here argue to formulate standard policy responses. Instead, each conflict asks for case-specific interventions, based on a specific set of (and combination of) instruments. The framework for analysis however can, to a certain degree, be standardized.

⁹ We have approached the concept of conflict prevention as an integrated effort at anticipating the outbreak of conflict, and acting upon a warning of high-risk conflict escalation. With regard to the latter, we however have to limit ourselves to addressing the question of what intervention is possible and preferable at what moment in time in the conflict life

III. Research Undertaken

This chapter will give a condensed overview of undertaken research on designing early warning models.¹⁰ It is not intended to judge the models on scientific criteria, to verify or falsify the methodology, the theoretic assumptions, or the indicators. Since the central research question in this report is examining the possibility for developing a ‘model’ to adequately translate warnings into policy, the key interest in this overview is the identification of leads as regards:

- how to develop dynamic conflict profiles that explain indicators of instability;
- how to relate these profiles to priorities of conflict prevention policy;
- suggestions for operationally and logistically realistic responses.

Due to the diversity in types of crises to be anticipated, the purpose of the study, and the sources and the particular analytical skills available to theoreticians and practitioners, multiple models can be identified. Hence, the models we investigated not only differ in the definition of conflict, but also in the methodology used. This is a reflection of their objective, but complicates even standard comparison between the models. As a result of this diversity and the observation that many efforts are work-in-progress, the here proposed categorization of efforts is conducted in a somewhat arbitrary way, based on the central point of reference: to what extent do they contain operational or policy-relevant components? Hence the division ‘theoretic models’ and ‘practical efforts in a policy setting’. The term theoretic models refers to principally retrospective empirical efforts, whereas the practical efforts are of a more prospective nature and concerned with operational guidelines.

A. Theoretic Models

When discussing theoretic and primarily academic efforts at early warning modeling, a typology introduced by Gurr and Harff (1994) is quite useful. Their typology focuses on the central preoccupation of modeling efforts: the methodology used to come to reliable and valid warnings.¹¹

cycle. It is another issue whether it is politically feasible and desirable for policy-makers to act upon this information. This involves policy and political decisions at various levels, and serving different goals.

¹⁰ See appendix I and II for a more extended overview of the models.

¹¹ Another interesting approach of narrowing down the different methods is by distinguishing between objectivistic and subjectivistic conflict models: first, *objectivistic conflict models* contend that conflicts arise as a result of a contrast in interests that are not actor-connected, but embodied in the social structure in which the chances of development are unequal for various population groups, generates latent conflicts. Second, *subjectivistic approaches* define conflict as the presence of two or more irreconcilable aims of actors. This approach, then, is purely actor-oriented. Whereas conflict itself comprises three components (contrasting aims, conflict attitudes and conflict behaviour), conflicts only exist when the behaviour of the actors involved is hostile. The chosen model has clear implications for the conflict prevention strategy chosen: Whereas the objectivistic approach claims that strategy must be geared towards structural

This in itself is a reflection of various underlying objectives: understanding the root causes of conflict, explaining the dynamics of conflict escalation, predicting conflict escalation, or rather apprehending the causes and dynamics of conflict in order to respond.¹² The various theoretic efforts can then be categorized as follows (see figure 1 for an overview of the theoretic models and their dimensions):

Type A: *Correlation models*¹³: A first approach focuses on structural indicators and causality, arguing that, in order to come to valid and reliable early warning, substantially more attention is needed to identify the connections among conflict phenomena. Although it has only been possible to test the strength of postulated sets of causal relations among variables with hindsight, we may start to understand *why* conflicts occur by identifying the relative weight of structural indicators. Gurr's risk assessment model for communal conflict (related to the Minorities at Risk Project) is exemplary for this causal model of conditions, as is the State Failure Project; this project, which is commissioned by the Central Intelligence Agency's Directorate of Intelligence, is an extensive statistical effort in finding correlation between conflict factors. The PIOOM manual on human rights monitoring is another example of an extensive effort to gain a better understanding of the root causes of fundamental human rights violations.

Type B: *Sequential models*: To move from these long-term risk assessments to shorter-term early warnings, a model is suggested to study in what sequences these phenomena have most commonly occurred in the past. Sequential models, then, try to track more precisely when tense and high-risk situations—as indicated by structural conditions—are likely to erupt into crisis, thus adding time-sensitivity to risk assessments. So-called accelerators visualize this time-sensitivity. Analysis of these accelerators enables tracking the flow and sequence of events that can trigger a conflict. The sequential models thus also look at the dynamics of the conflict process by making a clear distinction between background conditions, intervening conditions and accelerators. They are, therefore, suited to tracking crisis situations as they evolve over time, and assessing the likelihood that particular events will (not) lead to conflict. In the words of Gurr and Harff: "...if most of the

changes so that the causes of the contradiction are removed once and for all, the subjectivistic approach argues that efforts must be made to reconcile the conflicting aims which exist among the various actors (see e.g. Reychler 1995: 145-146; Doom and Vlassenroot 1997).

¹² See also Reychler (1995: 164-214). He comes to a division of five types of research methods: descriptive analysis (e.g. event databanks, cluster analysis), explanatory analysis (focusing on the why of conflicts, by formulating and testing hypotheses), prognostic analysis (explorative research, for which the sources and methods are found in the previous two types of analysis), prescriptive or strategic analysis (to demonstrate ways how to realize the goals set), and normative analysis (to evaluate the situation on efficiency and efficacy).

¹³ The terminology and typology comes from a special issue of *The Journal of Ethno-Development* 4(1) on Early Warning of Communal Conflicts and Humanitarian Crises, edited by Ted Robert Gurr and Barbara Harff (1994).

background and intervening conditions are present in a crisis situation, the occurrence of accelerating events are likely to worsen the situation" (Gurr and Harff, 1994: 5).

Type C: *Conjunctural models*: This type of models aims at explaining complex patterns or thresholds, and tries to specify alternative sequences or scenarios of events, based on combinations of conditions. Exemplary of this type of models is the pattern-matching approach of Brecke's 'Conflict and Early Warning Project' (CEWP), the cluster analysis of Schrodtt and Gerner, and the 'Protocol for the Assessment of Nonviolent Direct Action' (PANDA) of Bond. Here, the aim no longer is to understand the why and how of conflict escalation, but to focus specifically on the intensification of the conflict situation. These event-related data approaches are strongly dependent on media coverage.¹⁴

Type D: *Response models*: A somewhat contrasting approach to the development of explanatory-predictive models is by emphasizing how these models are put to policy use, irrespective of testing, in order to anticipate on alternative responses. This argument is for example made by Helen Fein, whose Life Integrity Violations Approach (LIVA) is based on the idea of a 'good enough model'¹⁵. The logic behind this model is that in order to demonstrate the value of the early warning system you should not test the model. Rather, one should evaluate the response to intervention, since one is dealing with an interactive system that is emerging dynamically from warning and response. Hence, "...the objective of an EWS is to disconfirm expectations by the interventions or interactions it triggers" (Fein, 1994: 32). Cause-effect relationships need to be identified to such an extent for the user to be confident that a given policy activity will likely reinforce or offset any given combination of factors. In order to intervene effectively, the importance of good analysis remains. The approach is significant in the attempt to come to policy-

¹⁴ The related problems and limitations of working with data event systems nevertheless have to be kept in mind. Lack of interest by the media and the international community in general, difficult geographical conditions, or the deliberate concealment of events are only some of the factors that will influence the findings of the approach. Moreover, as Krummenacher and Schmeidl (s.a.) observe, "while it is true that most major conflictive events draw the attention of media (human suffering sells), smaller events signaling conflict-escalation may not be reported at all. In addition, cooperative interaction, unless it is highly visible or important internationally, is also less likely to be reported."

¹⁵ This approach differs from the others by putting into perspective the necessity and value of extensive testing of the model and its methodology. As the name suggests, it is not the best model for explanation, but it is a simple model for apprehension, with the aim to specify preconditions and present responses at pressure points.

**Figure 1:
Overview of theoretical conflict prognostication models
and their dimensions¹⁶**

TYPE	MODEL	TIMING	TYPE OF CONFLICT	OBJECTIVE	APPROACH	COMBINATION OF EFFORTS	RELEVANCE FOR POLICY CONTEXT
A	Minorities at Risk	Risk assessment Structural model	Communal (ethno-political)	Explanation Causality	Quantitative	Linkage to accelerator approach	+ good insight in conflicts where ethnicity has become mobilizing factor + particular value in combination with accelerator approach - operating with hindsight
A	PIOOM	Risk assessment Structural model	Human rights violations	Monitoring	Quantitative & Qualitative	Integration Minorities at Risk	+ large questionnaire on various dimensions of human rights violations - too extensive for practical and regular use
A	State Failure Project	Risk assessment Structural model	State failure (generic)	Explanation Causality	Quantitative	Integration Minorities at Risk and Accelerator approach	+ good insight in correlation between conflict factors on general issues of concern to policy makers, such as level of trade openness, partial democracies. - operating with hindsight - some indicators are too broad
B	Accelerators of Genocide	Accelerators Dynamic model	Genocide and politicide	Anticipation Sequential	Quantitative	Linkage to Minorities at Risk and uses data event systems	+ pre-specified standardized accelerator monitoring - only tested retrospectively
C	CEWP	Structural and triggers Dynamic model	Generic	Anticipation Conjunctural	Quantitative	Uses data event systems	+ assessment of when conflict is to erupt - highly computerized and quantitative approach
C	Cluster Analysis	Triggers Dynamic model	Generic	Anticipation Conjunctural	Quantitative	Uses data event systems	+ focus on transition process, demonstrated that behavior is important indicator to monitor - approach is highly statistical exercise
C	PANDA	Triggers Dynamic model	Generic	Anticipation Conjunctural	Quantitative	Uses data event systems	+ includes level of conflict as well as cooperation in actual behavior, and hence gives insight in intensification - complicated quantitative and statistical approach
D	LIVA	Response Dynamic model	Genocide and politicide	Apprehension	Qualitative	Uses content analysis of Amnesty International Reports	+ good insight in patterns of violations, and goals and ideologies of states + focus on responses at pressure points - call for response-oriented warnings is not well- developed

¹⁶ The figure is composed on the basis of four key dimensions (timing, type of conflict, objective, approach) as described in the mid-term report “Conflict Prognostication: Toward a Tentative Framework for Conflict Assessment”, *Clingendael Occasional Paper*, The Hague, February 1999. Further, the figure includes a reference to the combination of efforts, as some of the models are linked or use elements of others. In the final column we have summarized what we consider to be the strengths and weaknesses of the models for use in the policy context. See also appendix 1.

useful or ‘consumer-driven’ early warning models. The response model, then, tries to identify the points in the conflict process in which strategic interventions are likely to make a difference in outcome. While built on the findings of sequential analyses that identify the sequence of causal conditions and events that lead to violations, the model then specifies responses that might deflect or mitigate effects. These models make an important methodological step in the direction of the development of a model for the policy context.¹⁷ Some efforts undertaken in this area will be discussed after some general remarks on these theoretical models and research.

Strengths, limitations, and challenges

Unquestionably, the search for and research on conflict theory, early warning, and response mechanisms has contributed enormously to our general understanding of the causes and dynamics of conflict. These efforts provide valuable insights and input for further use in a policy context. By themselves, however, they do not suffice for this objective. Since the models investigated are not (yet) operational as forecasting device, we can only to a limited extent comment on the validity of their predicting capacities. These limitations also result in modesty from the theoreticians themselves, as most models are still ‘work-in-progress’. Their efforts mainly consist of the development of a methodology and the timeliness of the warnings.

In general, we may conclude that the effort of theoretic conflict prognostication and the separate models that are currently being developed and tested have great value from a scholarly point of view. Their contribution for use in a policy context mainly lies in the fact that it has corroborated the value of standardized indicator-based monitoring. More precise risk assessments and theoretically guided monitoring can provide a greater degree of certainty about impending conflicts, and conversely, help identify those factors most successful in defusing a crisis. Yet, even if we can explain phenomena, it does not necessarily provide us with clues for solution.¹⁸ Consequently, these are only part of the requirements for practical early warning and conflict prevention policy models.

¹⁷ Although Fein’s model makes strong suggestions toward the response side of early warning, we have here included the model under the heading theoretic models. The idea of the Good Enough Model is not well developed, and cannot be seen as an operational model. Instead, the arguments are of a theoretic nature, and the main effort of Fein’s research effort is put in identifying patterns of genocide and politicide.

¹⁸ Doom, R. (1998: 113) “From Information to Political Action: Some Political Prerequisites”, in K. van Walraven (ed.) *Early Warning and Conflict Prevention; Limitations and Possibilities*, The Hague: Kluwer Law International, pp. 101-120.

B. Practical Efforts of Early Warning Modeling in a Policy Setting

Although no policy-useful model is operational yet, there are several efforts that address operational issues (see also figure 2). Most of these efforts are attempts at implementing the findings of theoretic models in policy practice. The emphasis, then, is no longer on theoretical testing. We will touch upon a few of these models.¹⁹

A first effort of putting the theoretic models into practice as early warning systems is the UN-Humanitarian Early Warning System (HEWS). The HEWS focuses on creating an international early warning capacity, and provides background reports and analyses of present and developing situations²⁰, based on an extensive database information system. The model, however, is not primarily directed towards applicability for conflict *preventive* actions, but instead for emergency preparedness.

Others tried to develop conflict anticipating capacities at the national level (e.g. BMZ-Germany, State Failure Project Phase II-United States, FAST-Switzerland) or the NGO level (e.g. FEWER). The efforts however clearly differ. Whereas the BMZ has developed a survey to quantitatively determine between the stages of conflict, the State Failure Project Phase II focuses on statistical methods to identify key variables and derive general policy recommendations. Yet another—quite ambitious—effort is undertaken by the Swiss Peace Foundation for the Swiss Agency for Development and Cooperation Department of Foreign Affairs. Whereas the approach of FAST is indeed directed toward linking warning to response, it has developed an early warning chain that includes activities as assessing background conditions, event analysis, round tables and monitoring of actions. The value of the pilot study lies in its ability to study the impact of direct access of ‘early warners’ to decision-makers. On the NGO level, FEWER has developed a manual for early warning that proposes some standardization of analysis—without however indicating the value of particular indicators—and links response options to actors at various levels of intervention.

¹⁹ See appendix 2 for a more extended overview of these models.

²⁰ In order to identify crises with humanitarian implications (Ahmed and Kassinis, 1998).

Yet others have attempted to provide general assessment guidelines for practitioners (Fund for Peace, Creative Associates International Inc.). In particular the model of the Fund for Peace appears to be manageable due to the limited number of indicators and the qualitative approach in assessing trends. Further, some suggestions are made toward the response side (clarity of mission, exit option), without however specifying policy instruments and options. Creative Associates International Inc. has developed several frameworks of issues to include in an analysis, including policy instruments. In particular the assessment of a large number of these instruments is novel and significant.

Still another effort attempts to increase the exchange of information between academics and practitioners, and for this reason Early Warning Networks have been established, such as the 'Early Warning/Response Network (EWNET) and the 'Forum on Early Warning and Early Response' (FEWER). Until now, however, these networks often remain discussion forums. FEWER however, as was just discussed, has developed a manual for early warning and response for NGOs, and supports activities in the field.

Strengths, limitations, and challenges

Again, the initiatives strongly differ in aim, coverage, extensiveness, methods, and indicators, thus resulting in various approaches. Notwithstanding the attempt at designing a framework with operational considerations as well as guidelines of how to apply the model in policy practice, the models involved still mainly focus on indicators and their weight, and address essentially questions of identifying conflict potential. These attempts at operational models, consequently, seem to confront the same problems as their theoretical counterparts. This is also a result of the variety in needs, goals, and capacities of operational agencies requiring early warnings, and in the political contexts within which the crises and responses occur. Nevertheless, they make an important contribution in standardizing and operationalizing conflict assessment issues for practitioners, but they hardly address the response capacity side, thus still discussing only one aspect of the early-warning/early-response problem.

**Figure 2:
Overview of practical efforts of early warning modeling
in a policy setting²¹**

MODEL	TARGET-USER	FOCUS	APPROACH	OPERATIONAL	RELEVANCE FOR POLICY CONTEXT
ORCI	International	Warning	Quantitative	Effort abolished	- too general, broad, and unsystematic - no clear commitment to the project
HEWS	International, UN	Assessment	Quantitative & qualitative	Provides country reports mainly for humanitarian intervention, 100+ indicators in database	+ systematic nature of country monitoring , with division in stages of intensity, to determine which are in need of extensive monitoring + contributes to preparedness but only to lesser degree to prevention - no criteria yet to determine movement of conflicts along stages
Fund for Peace	Variety of practitioners	Warning	Qualitative	Framework and guidelines used and tested in a number of workshops	+ clear statement of objective (sustainable security) and state-oriented approach - aims at wide range of practitioners, which results in a very general framework - response side is hardly addressed
BMZ-Germany	Governmental	Assessment	Quantitative & Qualitative	Framework in development, presented to OECD-DAC	+ specifically designed as analytical tool for policy field of development cooperation + gives a good picture of political culture of country -quantitative evaluation system
State Failure Project Phase II	Governmental	Warning and policy advice	Quantitative	In development, further specification needed e.g. with regard to environment, democratic transitions and state capacity. General policy recommendations.	+ refinement of role democracy in conflict development + inclusion of intensity and time aspect with regard to democracy in relation to conflict
Canada Peacekeeping Initiative	Governmental	Response capacity	Qualitative	Statement of intentions. Work on conflict assessment by John Cockell now carried in at UN Staff College	+ emphasis on importance of including strategic linking and process linking + highlights problems of models in operational context - no concrete framework or model
FAST-Switzerland	Governmental	Warning and assessment	Quantitative & Qualitative	In development, pilot study	+ aims at close cooperation between academic specialists and high level decision makers + input for discussion and decision making -high level of ambition

²¹ The figure is composed on the basis of some key characteristics that indicate who is expected to be the end-user of the model, what aspects of the warning-response cycle it aims to address, and whether the nature of the model is qualitative or quantitative. Further, some suggestions are made whether the models are operational or still in development. Finally, an assessment is made by the authors on the strengths and weaknesses of the various ‘practical efforts’. See also appendix 2.

MODEL	TARGET-USER	FOCUS	APPROACH	OPERATIONAL	RELEVANCE FOR POLICY CONTEXT
FEWER	NGOs	Warning, (response), and network	Qualitative	Manual tested by a.o. UNDP and analysts in the field. Applied by e.g. USAID	<ul style="list-style-type: none"> + presents framework for discussion, input for political decisions on conflict prevention + includes a part on response development, evaluation of policy responses, instruments and combinations of options + includes peace opportunities, stresses positive developments - not model for standardized assessment and pre-specified monitoring on indicators
Creative Associates International Inc.	Variety of practitioners	Response capacity	Qualitative	Guide for practitioners	<ul style="list-style-type: none"> + clear response orientation and framework for assessment of policy instruments + eight-step approach to intervention - general frameworks aiming at a variety of practitioners - not a well-developed framework for analysis of conflict and conflict potential

The issue of how to respond in a proactive or reactive way to these conflict-prone situations has been taken up by a number of governments and international organizations.²² These attempts explicitly address the issue of the warning-response gap, and focus on developing warning and response capacities, conflict impact assessments, proactive conflict prevention, peace-building, rapid reaction forces, stand-by agreements, et cetera. Most of these efforts are of a very general nature, do not present an analytical framework (our main focus of study), and have therefore not been included in the more extensive overview of early warning models in appendices 1 and 2. An exception is made for the Canadian Peace Initiative. The DFAIT department—and in particular John Cockell—has made explicit efforts in addressing the issue of developing conflict assessments or response-oriented warnings for use in a policy context. In his assessment of the current affairs on early warning practice, he argues that it is not so much information that is needed, but instead policy-oriented analysis that will suggest logical operational responses. He sharply pinpoints the problems by stating that “...the debate on early warning has not yet moved forward to deal with the issue of the process link between early warning analysis and effective preventive action. This may be because existing early warning praxis is not effective in producing analysis (as distinct from reporting or monitoring) that clearly presents options for effective preventive action and rapid engagement policy”.²³

IV. A Mid-term Conclusion

The analysis of theoretical and practical models has indicated that early warning models still lack direct linkage with the policy practice. As Reychler (1999: 7) observes, current early warning systems pay little attention to opportunities for constructive conflict *transformation*, which is considered to be a central objective of conflict prevention policy. He argues that “most research money is spent on the development of systems for the early warning of threats, dangerous escalation or worst case scenarios. Practically no attention is paid to the development of early warning systems identifying the points in the conflict processes in which particular interventions would enhance a constructive transformation of the conflict.” In this regard, an analysis of policy instruments is deemed appropriate.

²² See also the Clingendael report by K. van Walraven (1999) Conflict Policy in Some Western Countries: Some Explorative Notes, *Clingendael Occasional Paper*, The Hague: Clingendael Institute.

²³ J. Cockell (1997) Towards Response-Oriented Early Warning Analysis, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).

None of the above mentioned models address the core elements of understanding, anticipation, and intervention in an integrated way. Nor do they meet the criteria as mentioned in paragraph 2. Nevertheless, they contain valuable elements that may be integrated in a CPAF, in a so-called eclectic approach. As regards *understanding*, theoretic models—as well as more general theories on conflict—provide insight in the causes and dynamics of conflict processes. The methodologies and research techniques however, are too ‘complicated’ for direct use in a policy context. As regards *anticipation*, the type of framework we think offers the best opportunities to undertake this effort emanates partly from Fein's ‘good enough model’ and response-oriented warnings approach. As Lund (1998: 25) observes “...forecasting accuracy can always be improved, ... the mythical perfection in the form of the precise predictions need not drive out the ‘good enough’ of plausible probabilities”. Lastly, the CPAF should address issues of *intervention*, as for the policy context it is not as much the question of *how* to warn about conflict, but instead how to deter them.²⁴ Indeed, situation reports on impending conflicts are not enough, and with hindsight we observe that in numerous cases early warnings of impending conflict were neglected.²⁵ Based on the observation that in reality most conflictive situations only receive attention in a very late—or too late a—phase, Nicolaïdis (1996: 65) argues that “[w]e should ... strip prediction from prevention to the greatest extent possible”. He argues in favor of so-called ‘blind intervention’. Such ‘blind prevention’ may be the most cost-effective strategy, as not intervening or intervening too late may involve costs far exceeding early involvement. Yet, this does not rule out the crucial role for analysis of early warning signals and targeted action on the part of a variety of actors (*ibid.*). If prevention strategies are to have any chance of success, not only is a better understanding of the uniqueness of individual conflicts necessary, but also a deepening of the search for recurrent pattern-forming.²⁶ If, however, the intention exists to prevent conflicts, an analysis that links indicator categories with policy instruments is indispensable. Indeed, responding to the consequences of a crisis-situation may differ substantially from responding to the causes.

The argument for a response and consumer-oriented approach is not a new one,²⁷ but has not been taken up sufficiently in practice. The end-user and its responses are addressed marginally, and in a

²⁴ Rotberg (1996: 267).

²⁵ Adelman (1998) points to three barriers: In the first place, early warnings can ‘drown’ amidst signals that convey a contrary assessment. Further, warnings may be ‘crushed’, or pushed aside by signals of impending conflict in other parts of the world. And lastly, warnings may become ‘dead-ended’; whereas they have been received, they are not forwarded to the appropriate level for analysis and decision-making (in Van Walraven, 1998: 164-5).

²⁶ Doom & Vlassenroot, 1997.

²⁷ W. Spencer (1994), for example, has observed the need for “consumer” and “end-user driven” instead of “producer-driven” early warning systems (“Implications for Policy Use: Policy Uses of Early Warning Models and Data for Monitoring and Responding to Humanitarian Crises”, in *The Journal of Ethno-Development* 4(1), pp. 111-

very late stage of model-development, whereas it is here suggested to opt for an end-user approach in which the specific instruments available to an actor should be the starting-point.²⁸ In a consumer-oriented model the warnings themselves are an integral part of the framework, but they take a second place.²⁹ Hence, the suggested consumer-oriented approach does not imply an early warning or prognostication model *per se*. Instead, the aim is a conflict and policy assessment framework (CPAF) that integrates the objective, the mission, and the ‘tools’ of the end-user, in order to come to realistic policy options for intervention.³⁰ This approach consequently departs from the common practice of developing models with a global reach. It is argued that each actor in the international arena first has its own spectrum of instruments, the strengths and weaknesses of which have to be taken into account when developing a conflict policy assessment framework.

V. Towards the Design of a Conflict Policy Assessment Framework³¹

The objectives of the CPAF are to clearly define the mission, to catalogue and assess the policy and response capacity available, in order to deal more effectively with the outcomes of analyses. In the previous part theoretical models and attempts at application in policy practice were assessed according to these criteria. The analysis indicated that, although no such model exists in practice, various models and attempts contain elements that could be used for such a framework. The proposed CPAF, therefore, is not a completely new concept, but composed of parts of other models, and other research. The attempt at designing a CPAF consequently is an attempt at eclectically bringing together ‘the best of all worlds’. The criteria will be used as a guideline for drawing up the components for the CPAF. For this example, focus is on the level of a Ministry of Foreign Affairs, or a Ministry of Development Cooperation.

116). See also J. Cockell (1997) who argues for the specific targeting of organizations of governments, and in this regard points to the need of including operational mechanisms, budget restraints, policy frameworks and mandates in the development of an early warning capacity (Towards Response-Oriented Early Warning Analysis, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).

²⁸ In our case, the user is the Netherlands Ministry of Foreign Affairs.

²⁹ Wallenstein (in Walraven 1989: 12) also argues for a focus on what to do rather than how to predict, since even conflicts that experience rapid intensification are usually known beforehand to the outside world.

³⁰ Since our model goes beyond the aim of solely anticipating the escalation of conflict, we choose to use the term conflict and policy assessment. It should however be clear that we here do not refer to conflict impact assessments, which have different objectives. Instead, the conflict and policy assessment is based on an assessment of the actual situation, the issues and actors involved, possible future patterns of development, and a related assessment of the available policy instruments in the particular conflict situation and moment in the conflict life cycle. The assessment is therefore related to what Lund has called ‘prospective conflict policy analysis’.

³¹ See the report “Conflict Prevention as a Policy Strategy: A conceptual framework for conflict policy assessment and prevention” for an elaboration and specification of the framework.

The steps in the CPAF relate to the following:

1. Mission statement of the actor on the aims with regard to conflict prevention;
2. Choice of countries to focus the policies of conflict prevention on, and drawing up country profiles of the countries involved;
3. (Structured) monitoring and assessment of the (risk-)countries, and identification of the conflict trend-line (positive or negative);
4. Identification and assessment of the available policy-toolkit with regard to conflict prevention instruments, and assessment of options for cooperation in line with mission statement;
5. Planning, assessment and decision-making;
6. Implementation and application of policy-instruments toolkit in order to strengthen positive trends, or redress negative ones.

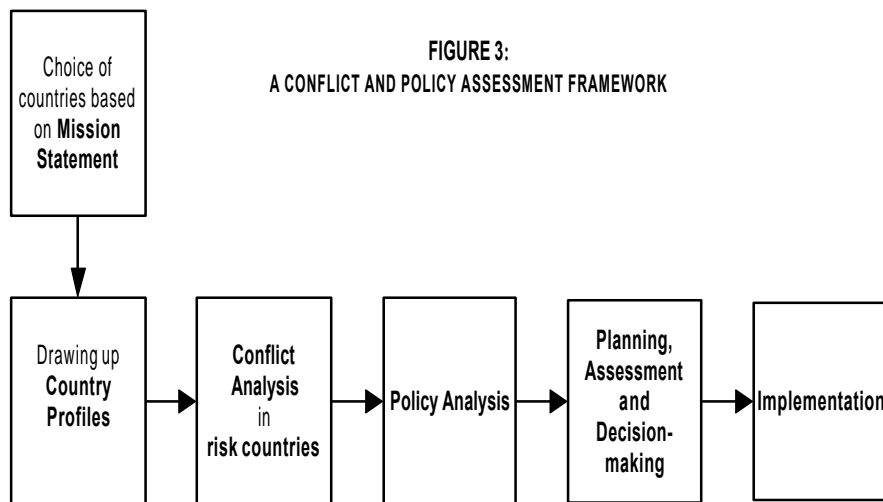


Figure 3 reflects these steps. What is essential for this model to work, however, is the aspect of timing. The toolkit of instruments, and especially the assessment of the instruments, implies that they not only need judgement with regard to their overall conflict-preventive character, but also with regard to their most effective application moment. Certain (clusters of) instruments may be more effective in certain stages of a conflict lifecycle. This particular characteristic has to be taken into account when applying the instruments or combinations thereof. The six steps, however, require further elaboration.

a. Mission Statement

For a model to be successful, the goals have to be as clear as possible. The goals should be formulated in the mission statement of the actor involved. As indicated, however, the mission statement requires some modesty. It has to be operational, in the sense of being realistic, practical,

and feasible. Failing to do this, implies that, in the absence of a useful policy toolkit, a mission statement is nothing but a paper tiger. Political will can never make up for this omission. The mission statement consequently has to be linked to the available policy toolkit. Thus *strategic targeting* as well as a *process link* are important criteria in formulating the mission statement. Strategic targeting implies taking into account the capacity of the actor involved. Hence a mission statement should include the following elements:

- Which countries and conflicts will the actor focus on?
- Which goals are aimed for when intervention takes place?
- What is the timeframe for the goals set?
- Which instruments will be available and used for reaching the goals set?

It is obvious that the mission statement also should result in making the terminology uniform. This aspect should not be underestimated, as divergent definitions can result in different interpretations of phenomena, miscommunication and redundant discussions. Clarity on this point is favorable to the swift analysis of conflict situations, and the formulation of policy interventions.

b. Conflict Analysis

A next criterion is the conflict analysis. A model for conflict analysis should be linked to the mission statement (i.e. the criteria for policy), as well as easy to use. Complex analysis models, especially those with a strong quantitative character, are less easy to apply in policy practice. The Fund for Peace (FfP) has developed an analytical model that *could* work in a policy setting. The ‘Analytical Model of International Conflict and State Collapse’ has a ‘state-centered’ approach. This is not to be confused with a statist approach. Central to a state-centered approach is the relationship between state and society, not only the hierarchical power struggle among elites. This analytical model consequently links up with the findings of various research groups, indicating that the state-society relationship is important, if not crucial, in the outbreak of conflict. A second aspect of the FfP-model is its ability to analyze trends. This implies that the model lives up to the requirement of not only indicating factors causing instability and crisis, but also providing dynamic conflict profiles. Such conflict profiles make it possible to link indicators of instability and crisis to existing focal points in the actor’s conflict prevention policy tools and mechanisms. Such profiles could be drawn up for the countries the actor involved wishes to focus upon. A third aspect with regard to the FfP-model relates to a manageable number of indicators. It contains 12 so-called ‘top indicators’ in three main sectors: social, economic and political-military. This, again, makes it easier for policy makers to link the indicators to focal points of policy and policy instruments.

c. Toolbox and Policy Analysis

The next criterion of a CPAF concerns the feedback of analysis to policy. On this aspect, the FfP-model does not live up to the requirements. Other models, however, can be helpful in creating this feedback. A first step towards feedback is already taken by linking the policy toolkit to the policy aims in formulating the mission statement. A second step is to distill suggestions for policy interventions from the findings of the conflict analyses and the country profiles. Lund's 'toolbox' approach and the CAII's overview of instruments provide important suggestions in this regard. They assess conflict-preventive instruments on their use for intervention in various stages of conflict. In practice, however, it is likely that a multitude of instruments is available on various levels for intervention. The CPAF therefore aims at *sensitizing* various policy levels for conflict prevention. In practical terms: it could very well be that there are more conflict-preventive instruments than those identified according to ideal-type assessments. This implies assessing as many policy instruments available as possible for their contribution to the goal of conflict prevention. FEWER's 'Manual for Early Warning and Early Response' contains useful suggestions for such an assessment. It suggests steps for making an inventory of instruments on various levels (international, regional/sub-regional, and local), as well as in various fields (political[-military], economic, and socio-cultural). The FEWER-manual therefore could help in systematically listing and assessing instruments of a given actor on the levels and in the fields indicated. Linking the findings of the inventory and assessment to the findings of the conflict analysis and the country profiles could enhance insight in timely and effective deployment of policy tools. Thus the CPAF lives up to the requirement of a *process link*.

d. Planning, assessment and decision-making

The step of planning, assessment and decision-making refers to the process of setting priorities on the basis of the mission statement, conflict analysis and policy analysis. The outcome of this step is the design of a specific plan of action (including an exit strategy). This may include 'regular' development cooperation interventions, but also the sending of personnel and material for peacekeeping or peace-enforcing operations. Decision-making as regards interventions here will depend on a political cost-benefit analysis on the proposed plan of action. This phase in the process thus offers the possibility of coming to *reasoned* opinions and actions by placing conflict and policy analyses alongside policy and political objectives.

e. Implementation in practice

The last step of the model is, of course, its implementation in practice. Here it is important to take into account that conflicts are dynamic. Interventions, therefore, should always be monitored and assessed on their effects. A simple conflict impact assessment before intervention is insufficient. What is required is a *constant* conflict impact assessment during a period of intervention, in which the impact of the intervention is related to the (changing) conflict situation and the strategic goals.

VI. Conclusion and Summary: Recommendations for the Development of a Conflict Policy Assessment Framework (CPAF)

Despite the high levels of ambition concerning conflict prevention, little progress has been made in practice. Efforts to sensitize the policy practice for early warnings are often reduced to the question of how to convince policy and decision makers by addressing issues of validity and reliability of the warnings and developing new policies and operational guidelines. Whereas these may be valid and important activities, here an alternative approach was proposed in order to bridge the gap between warning and response. In this paper it has been argued that the instruments currently available leave enough room for conflict preventive actions when properly understood, realized and utilized. A bottom-up approach—by focusing on the national institutional framework and the national preventive instruments—could provide more effective and visible results. Indeed, the prediction of violence and escalation, the communication and transmission of warnings, as well as the possibilities and difficulties with regard to political action are in need of a better understanding. In an attempt to address the issue, it was argued that already in the first stage of coming to warnings (finding the indicators, predicting the likely course of conflict) the response side needs to be included (who takes action, when and how). This implies a framework for conflict and policy assessment that not only provides a ‘risk assessment’ of a particular situation, but also presents options for response that fit the ‘toolbox’ of the specific end-user of the framework. Consequently, it was presumed that in order to come to a more conflict preventive policy, it is not the warnings by themselves or the prediction that one should worry about. Actually, there may even be far too many warnings, thus creating a situation of overload for policymakers. Hence, for a policy-oriented early warning/early response framework to become effective, it is imperative to improve the *analysis* of conflict situations in such a way as to derive guidelines for policy interventions. This implies sensitizing the policy environment for responding more effectively and timely to conflict-prone contexts in which it often operates. The ‘consumer oriented’ approach that was suggested focuses, therefore, on both integrated and systematic *analyses* and *policies*.

Notwithstanding their important contributions, we identified the shortcomings of the currently available models, systems and frameworks for use in a policy context to be:

- They lack a direct linkage with the policy practice
- They strongly focus on testing for validity and reliability, and work with hindsight
- They often are of a quantitative nature, using statistical techniques
- They do not offer clues for solution or response

Instead, we argued that a framework for conflict policy assessment should include the following characteristics:

- A response and end-user oriented ‘good enough’ model
- A bottom-up approach that focuses on a specific institutional framework (‘end-user’), its preventive instruments, and its strengths and weaknesses
- An adaptation of the goals to the means i.e. clarity on the needs, goals and capacities of the operational agency
- A shift of focus from the warning itself, to an indication of how to deploy available policy-instruments in a conflict-preventive way

The main objectives when developing such a framework are:

A. Clearly define the mission

Before propagating the possibility of a ‘global’ approach, it is important to have clarity of mission within a particular institutional context. This includes and asks for:

- A standardization of approach and analysis
- A clear choice on the objective of conflict preventive policy (structural or operational)
- The identification of tasks that need to be accomplished in an operation
- The formalization of communication within the institution/organization
- An improved coordination between various policy areas

B. Catalogue and assess the situation in relation to the policy and response capacity available

It is imperative to focus the analysis of conflict situations in such a way as to derive guidelines for policy interventions. It should:

- direct the analysis toward understanding, anticipation, *and* intervention
 - understanding requires analysis directed toward conflict processes in general as well as the particular contextual conditions (country profile)
 - anticipation asks for the monitoring and analysis of dynamic processes and risk evaluation criteria (trend analysis)
 - intervention refers to an inventory of the institution's toolbox, an analysis of the applicability of the policy tools to the goals and the conflict's various needs, and the identification of potential moments and fields for intervention
- a case-specific assessment of the conflict-preventive capacities of the various instruments

C. Deal more effectively with the outcomes of analysis

Preventive action is all about knowing how to do 'the right thing'. The standardized analysis then needs to be applied for the purpose of:

- helping to identify and prioritize options for operational response
- finding the right mix of short-term, medium-term, and long-term projects
- committing to sustained efforts instead of ad-hoc operations betting on instant successes
- identifying shortcomings in existing policies and instruments, adapting these, or developing new ones

The CPAF, then, should include the following steps:

1. Mission statement of the actor on the aims with regard to conflict prevention;
2. Choice of countries to focus the policies of conflict prevention on, and drawing up country profiles of the countries involved;
3. (Structured) monitoring and assessment of the (risk-)countries, and identification of the conflict trend-line (positive or negative);
4. Identification and assessment of the available policy-toolkit with regard to conflict prevention instruments, and assessment of options for cooperation in line with mission statement;
5. Planning, assessment and decision-making;
6. Implementation and application of policy-instruments toolkit in order to strengthen positive trends, or redress negative ones.

In the follow-up report “Conflict Prognosis: A Conflict and Policy Assessment Framework”, these issues will be further concretized, as more detailed suggestions will be made for the consecutive steps in the conflict policy assessment framework and examples will be provided to illustrate the use of CPAF in the policy context.

References

- Adelman, H. (1994) "Theoretical Approaches to Developing an Early Warning Model", in *The Journal of Ethno-Development* 4(1), pp. 124-131.
- Adelman, H. (1998) "Humanitarian and Conflict-Oriented Early Warning: A Historical Background Sketch", in K. van Walraven (ed.) *Early Warning and Conflict Prevention; Limitations and Possibilities*, The Hague: Kluwer Law International, pp. 45-50.
- Adelman, H. (1998) "Difficulties in Early Warning: Networking and Conflict Management", in K. van Walraven (ed.) *Early Warning and Conflict Prevention; Limitations and Possibilities*, The Hague: Kluwer Law International, pp. 51-82.
- Adelman, H., S. Schmeidl (1996) *Towards the Development of an Early Warning/Response Network (EWNET)*, <http://www.yorku.ca/research/crs/prevent/ewpro3.htm>.
- Ahmed, A., E. Kassinis (1997) "The Humanitarian Early Warning System", in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).
- Alker, H. (1994) "Early Warning Models and/or Preventative Information Systems?", in *The Journal of Ethno-Development* 4(1), pp. 117-123.
- Auvinen, J. (1997) "Political Conflict in Less Developed Countries 1981-1989", in *Journal of Peace Research* 34(2), pp. 177-196.
- Baechler, G. (1997) "Early Warning of Environmentally Caused Conflicts", in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).
- Baker, P., J. Ausink (1996) "State Collapse and Ethnic Violence: Toward a Predictive Model", in *Parameters* (Spring), pp. 19-31.
- Baker, P., A. Weller (1998) *An Analytical Model of Internal Conflict and State Collapse: Manual for Practitioners*, Washington, D.C.: The Fund for Peace.
- Benini, A., A. Minnaar, S. Pretorius (1998) "Persistent Collective Violence and Early Warning Systems: The Case of KwaZulu-Natal, South Africa", in *Armed Forces & Society* 24(4), pp. 501-518.
- Bigo, D. (1994) "Early Warning of Communal Conflict: A French Perspective", in *The Journal of Ethno-Development* 4(1), pp. 36-43.
- Bloomfield, L., A. Moulton (1997) *Managing International Conflict; From Theory to Policy*, New York: St. Martin's Press.
- BMZ [Federal Ministry for Economic Co-operation and Development], A. Spelten (1998) *Excerpt from a Study "Crisis Analysis in Development Co-operation"*, Room Document no. 2 Informal DAC Task Force on Conflict, Peace and Development Co-operation, Paris.

- Bond, D., K. Rothkin (1995) "Recovering Events from Events Data", <http://data.fas.harvard.edu/cfia/pnscs/DOCS/papers/EVENTS.html>
- Bond, D. (1997) "Timely Conflict Risk Assessments and the PANDA Project", in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).
- Bond, D. (1997) "Indications of Social Change and Emergent Conflict: Toward Explanations of Conflict Processes", position paper for *Second International Workshop on Low Intensity Conflict*, Stockholm 4-6 June 1997.
- Bond, D., J. Jenkins et. al. (1997) "Mapping Mass Political Conflict and Civil Society", in *Journal of Conflict Resolution* 41(4), pp. 553-579.
- Bond, D., S. Lee, K. Rothkin (1995) "PANDA's Early Warnings on Conflict", draft paper annual meeting *International Studies Association*, Chicago.
- Bond, D., K. Rothkin (1995) "Recovering Events from Events Data", draft paper for *Annual Meeting of the American Political Science Association*, 2 September 1995.
- Brecke, P. (1997) "A Pattern Recognition Approach to Conflict Early Warning", in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).
- Brown, M. (1997) "The Impact of Government Policies on Ethnic Relations", in M. Brown, S. Ganguly (eds.) *Government Policies and Ethnic Relations in Asia and the Pacific*, Cambridge: MIT Press, pp. 511-575.
- Brown, M.E. and R.N. Rosecrance (1999), *The Costs of Conflict. Prevention and Cure in the Global Arena*, New York: Carnegie Commission on Preventing Deadly Conflict.
- Canada Department of Foreign Affairs and International Trade (1996) "Canada and Peacebuilding: The Canadian Peacebuilding Initiative", <http://www.dfait-maeci.gc.ca/peacebuilding>.
- Carnegie Commission on Preventing Deadly Conflict (1997) *Preventing Deadly Conflict; Final Report*, Washington, D.C.: Carnegie Commission on Preventing Deadly Conflict.
- Cockell, J. (1997) "Peacebuilding and Human Security: International Responses to the Politics of Internal Conflict", draft for discussion.
- Cockell, J. (1997) "Towards Response-Oriented Early Warning Analysis", in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).
- Creative Associates International, Inc. (1998) *Preventing and Mitigating Violent Conflicts: A Revised Guide for Practitioners*, <http://www.caii-dc.com/ghai>.
- Davies, J., T. Gurr (eds.) (1997) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).

- Davies, J., B. Harff, A. Speca (1997) "Dynamic Data for Conflict Early Warning", in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).
- D. Davis, W. Moore (*s.a.*) *Intranational Political Interactions; Coding Rules*, <http://garnet.acns.fsu.edu/~whmoore/ipi>
- Dedring, J. (1992) "Socio-political Indicators for Early Warning Purposes", in K. Rupesinghe, M. Kuroda (eds.) *Early Warning and Conflict Resolution*, New York: St. Martin's Press, pp. 194-214.
- DFAIT [Department of Foreign Affairs and International Trade] (1998) "Canada and Peacebuilding; The Canadian Peacebuilding Initiative", <http://www.dfait-maeci.gc.ca>.
- Dixon, W. (1996) "Third-Party Techniques for Preventing Conflict Escalation and Promoting Peaceful Settlement", in *International Organization* 50(4), pp. 653-681.
- Dmitrichev, A. (1997) "The Role of Early Warning in the UN High Commission for Refugees", in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).
- Doom, R. (1997) *A Scientific Base for Conflict Prevention?*, <http://www-jha.sps.cam.ac.uk/a/a573.htm>
- Doom, R. (1998) "From Information to Political Action: Some Political Prerequisites", in K. van Walraven (ed.) *Early Warning and Conflict Prevention; Limitations and Possibilities*, The Hague: Kluwer Law International, pp. 101-120.
- Doom, R., P. Debakker, D. Van Maele (eds.) (1995) *Early Warning: Preventie of Pretentie?*, Antwerpen: Ipi-publicaties.
- Doom, R., K. Vlassenroot (1997) "Early Warning and Conflict Prevention; Minerva's Wisdom?" in *Journal of Humanitarian Assistance*, <http://www-jha.sps.cam.ac.uk/a/a008.htm>
- Dorn, A. (1996) "Keeping Tabs on a Troubled World; UN Information-Gathering to Preserve Peace", in *Security Dialogue* 27(3), pp. 263-276.
- Dorn, A. (1997) "An Ounce of Prevention; UN Early Warning System Needed", <http://www.pgs.ca/woc/wdsgi97.htm>
- Douma, P., L. van de Goor, K. Walraven (1998) "Research Methodologies and Practice. A Comparative Perspective on Methods for Assessing the Outbreak of Conflict and the Implementation in Practice by International Organisations", in P. Cross (ed.) *Contributing to Preventive Action, CPN Yearbook 1997/98*, Baden-Baden: Nomos Verlagsgesellschaft, pp. 79-94.
- Esty, D., J. Goldstone, T. Gurr et. al. (1995) *Working Papers State Failure Task Force Report*.
- Esty, D., J. Goldstone, T. Gurr et. al. (1997) "The State Failure Project: Early Warning Research for U.S. Foreign Policy Planning", in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).
- Esty, D., J. Goldstone, T. Gurr et. al. (1998) *State Failure Task Force Report: Phase II Findings*.

- Fein, H. (1992) "Dangerous States and Endangered Peoples: Implications of Life Integrity Violations Analysis", in K. Rupesinghe, M. Kuroda (eds.) *Early Warning and Conflict Resolution*, New York: St. Martin's Press, pp. 40-61.
- Fein, H. (1994) "Tools and Alarms: Uses of Models for Explanation and Anticipation", in *The Journal of Ethno-Development* 4(1), pp. 31-35.
- FEWER [Forum on Early Warning and Early Response] (1998) *Early Warning Resource; Manual for Early Warning and Early Response*, FEWER: London.
- George, A., J. Holl (1997) *The Warning-Response Problem and Missed Opportunities in Preventive Diplomacy*, New York: Carnegie Corporation.
- Gordenker, L. (1992) "Early Warning: Conceptual and Practical Issues", in K. Rupesinghe, M. Kuroda (eds.) *Early Warning and Conflict Resolution*, New York: St. Martin's Press, pp. 1-14.
- Gupta, A. Jongman, A. Schmid (1993) *Creating a Composite Index for Assessing Country Performance in the Field of Human Rights: Proposal for a New Methodology*, Leiden: PIOOM.
- Gurr, T. (1994) "Minorities, Nationalists, and Ethnopolitical Conflict", in C. Crocker, F. Hampson, P. Aall (eds.) *Managing Global Chaos; Sources of and Responses to International Conflict*, Washington D.C.: United States Institute of Peace Press, pp. 53-78.
- Gurr, T. (1994) "Peoples Against States: Ethnopolitical Conflict and the Changing World System", in *International Studies Quarterly* 38, pp. 347-377.
- Gurr, T. (1994) "Testing and Using a Model of Communal Conflict for Early Warning", in *The Journal of Ethno-Development* 4(1), pp. 20-24.
- Gurr, T. (1996) "Early-Warning Systems: From Surveillance to Assessment to Action", in K. Cahill (ed.) *Preventive Diplomacy; Stopping Wars Before They Start*, New York: Basic-Books, pp. 123-143.
- Gurr, T. (1997) "A Risk Assessment Model of Ethnopolitical Rebellion", in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).
- Gurr, T., B. Harff (1994) "Conceptual, Research, and Policy Issues in Early Warning Research: An Overview", in *The Journal of Ethno-Development* 4(1), pp. 3-14.
- Gurr, T., B. Harff (1994) *Ethnic Conflict in World Politics*, chapter 5 "A framework for analysis of ethnopolitical mobilization and conflict", Boulder: Westview.
- Gurr, T., B. Harff (1998) "Systematic Early Warning of Humanitarian Emergencies", in *Journal of Peace Research* 35(5), pp. 551-579.
- Gurr, T., M. Lichbach (1979) "Forecasting Domestic Political Conflict", in J. Singer, M. Wallace (eds.) *To Augur Well; Early Warning Indicators in World Politics*, Beverly Hills: Sage, pp. 153-194.
- Harff, B. (1994) "A Theoretical Model of Genocides and Politicides", in *The Journal of Ethno-Development* 4(1), pp. 25-30.

- Harff, B. (1997) "Early Warning of Humanitarian Crises: Sequential Models and the Role of Accelerators", in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).
- Jongman, A. (1994) "The PIOOM Program on Monitoring and Early Warning of Humanitarian Crises", in *The Journal of Ethno-Development* 4(1), pp. 65-71.
- Jongman, A. (1998) "Oorlog en Politiek Geweld", in B. Bomert, H. de Lange (eds.) *Internationale Veiligheidsvraagstukken en het Nederlands Perspectief, Jaarboek Vrede en Veiligheid 1998*: Nijmegen, pp. 33-51.
- Jongman, A., A. Schmid (1994) *Monitoring Human Rights; Manual for Assessing Country Performance*, Leiden: PIOOM.
- Kohlschütter, A. (1997) "FAST: A Pilot Study for an Early Warning System for the Swiss Foreign Ministry", in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).
- Krumm, D. (1997) "An Action Agenda for Early Warning", in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).
- Krummenacher, H., S. Schmeidl (s.a.) *FAST: An Integrated and Interactive Early Warning System*, Swiss Peace Foundation Institute for Conflict Resolution, SDC Department of Foreign Affairs.
- Levy, J. (1994) "Contending Theories of International Conflict; A levels-of analysis approach", in C. Crocker, F. Hampson, P. Aall (eds.) *Managing Global Chaos; Sources of and Responses to International Conflict*, Washington D.C.: United States Institute of Peace Press, pp. 3-24.
- Lund, M. (1994) "Early Warning and Preventive Diplomacy", in C. Crocker, F. Hampson, P. Aall (eds.) *Managing Global Chaos; Sources of and Responses to International Conflict*, Washington D.C.: United States Institute of Peace Press, pp.379-402.
- Lund, M. (1995) "Underrating Preventive Diplomacy", in *Foreign Affairs* (July/August), pp. 160-163.
- Lund, M. (1998) "Preventing Violent Conflicts: Progress and Shortfall", in P. Cross (ed.) *Contributing to Preventive Action*, CPN Yearbook 1997/98, Baden-Baden: Nomos Verlagsgesellschaft, pp. 21-63.
- MacFarquhar, E., R. Rotberg, M. Chen (1996) "Introduction", in R. Rotberg (ed.) *Vigilance and Vengeance; NGOs Preventing Ethnic Conflict in Divided Societies*, Washington, D.C.: Brookings Institution Press, pp. 3-22.
- Matthies, V. (1998) "Erfolgsgeschichten friedlicher Konfliktbearbeitung", in *Aus Politik und Zeitgeschichte* B16-17, pp. 13-22.
- McDermott, A. (1998) "The UN and NGOs: Humanitarian Interventions in Future Conflicts", in *Contemporary Security Policy* 19(3), pp. 1-26.
- Mephram, D., E. Cairns (1998) "Security, Inclusion and Defence", in Centre for Defence Studies (ed.) *Brassey's Defence Yearbook 1998*, London: Brassey's, pp. 297-309.

- Merritt, R. (1982) "Improbable Events and Expectable Behavior", in D. Frei (ed.) *Managing International Crises*, Beverly Hills: Sage Publications, pp. 77-86.
- Merritt, R. (1994) "Measuring Events for International Political Analysis", in *International Interactions* 20(1-2), pp. 3-34.
- Ministry for Foreign Affairs Sweden (1997) *Preventing Violent Conflict; A Study*, executive summary and recommendations, Stockholm: Ministry for Foreign Affairs.
- Ministry for Foreign Affairs Sweden (1999) *Preventing Violent Conflict; A Swedish Action Plan*, Stockholm: Regeringskansliet UD.
- Miskel, J., R. Norton (1997) "The Paradox of Early Warning", <http://www-jha.sps.cam.ac.uk/a/a014.htm>.
- Miskel, J., R. Norton (1998) "Humanitarian Early Warning Systems", in *Global Governance* 4, pp. 317-329.
- Nicolaïdis, K. (1996) "International Preventive Action: Developing a Strategic Framework", in R. Rotberg (ed.) *Vigilance and Vengeance; NGOs Preventing Ethnic Conflict in Divided Societies*, Washington, D.C.: Brookings Institution Press, pp. 23-69.
- OECD/DAC (1997) *DAC Guidelines on Conflict, Peace and Development Co-operation*, Paris: OECD.
- Pauwels, A. (1998) "Het Voorkomen van Conflicten: Een Nieuwe Uitdaging voor VN-Vredesoperaties. Case studie: Afrika", in B. Bomert, H. de Lange (eds.) *Internationale Veiligheidsvraagstukken en het Nederlands Perspectief*, Jaarboek Vrede en Veiligheid 1998: Nijmegen, pp. 189-216.
- Pugh, M. (1998) *Post-conflict Rehabilitation: Social and Civil Dimensions*, <http://www-jha.sps.cam.ac.uk/b/b365.htm>
- Reychler, L. (1994) "The Art of Conflict Prevention: Theory and Practice", in W. Bauwens, L. Reychler (eds.) *The Art of Conflict Prevention*, London: Brassey,s, pp. 1-21.
- Reychler, L. (1995) *Een Wereld Veilig voor Conflict; Handboek Vredesonderzoek*, Leuven: Garant, pp. 155-307.
- Reychler, L. (s.a.) "Field Diplomacy: A New Conflict Prevention Paradigm", <http://www.gmu.edu/academic/pcs/reychler.htm>
- Reychler, L. (1999) *Democratic Peace-building and Conflict Prevention; The devil is in the transition*, Leuven: Center for Peace Research and Strategic Studies, University of Leuven.
- Rotberg, R (ed.) (1996) *Vigilance and Vengeance; NGOs Preventing Ethnic Conflict in Divided Societies*, Washington, D.C.: Brookings Institution Press.
- Rummel, R. (s.a.) "Power Predicts Democide", <http://www2.hawaii.edu/~rummel/JCR.ART.HTM>
- Rummel, R. (1995) "Democracy, Power, Genocide, and Mass Murder", in *Journal of Conflict Resolution* 39(1), pp. 3-26.

- Rupesinghe, K. (1994) "Strategies for Conflict Prevention, Management, and Resolution", <http://www.wf.org/kumar.htm>
- Sahnoun, M. (1994) *Somalia; The Missed Opportunities*, Washington, D.C.: U.S. Institute of Peace Press.
- Schmeidl, S. (1999) "Report on Roundtable – Coalition for Early Warning of Violent Conflict", Congressional Hunger Center and the Center for the Study of Societies in Crisis, Washington, DC, 19 February 1999, <http://www.info.usaid.gov/regions/afr/conflictweb/reports/earlywarning.htm>.
- Schmeidl, S. (s.a.) "Selected Efforts/Research in the Area of Early Warning", <http://www.yorku.ca/research/crs/prevent/eweffort.htm>.
- Schmid, A. (1997) "Indicator Development: Issues in Forecasting Conflict Escalation", in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).
- Schmid, A. (1998) *Thesaurus and Glossary of Early Warning and Conflict Prevention Terms; Abridged Version*, edited by S. Anderlini, FEWER: London.
- Schock, K. (1996) "A Conjunctural Model of Political Conflict; The Impact of Political Opportunities on the Relationship between Economic Inequality and Violent Political Conflict", in *The Journal of Conflict Resolution* 40(1), pp.98-133.
- Schrodt, P., D. Gerner (1997) "Empirical Indicators of Crisis Phase in the Middle East, 1979-1995", in *Journal of Conflict Resolution* 41(4), pp. 529-552.
- Schrodt, P., D. Gerner (1997) Cluster Analysis as an Early Warning Technique for the Middle East, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).
- Sherman (1994) "SHERFACS: A Cross-Paradigm, Hierarchical and Contextually Sensitive Conflict Management Data Set", in *International Interactions* 20(1-2), pp. 79-100.
- Sommer, H., J. Scarritt (1999) "The Utility of Reuters for Events Analysis in Area Studies: The Case of Zambia-Zimbabwe Interactions, 1982-1993", in *International Interactions* 25(1), pp. 29-59.
- Spencer, W. (1994) "Implications for Policy Use: Policy Uses of Early Warning Models and Data for Monitoring and Responding to Humanitarian Crises", in *The Journal of Ethno-Development* 4(1), pp. 111-116.
- Staden, A. van (1997) "Het Streven naar Conflictpreventie; Mogelijkheden en beperkingen van het instrumentarium", in *Internationale Spectator* (51)4, pp. 192-195.
- Thoolen, H. (1992) "Information Aspects of Humanitarian Early Warning", in K. Rupesinghe, M. Kuroda (eds.) *Early Warning and Conflict Resolution*, New York: St. Martin's Press, pp. 166-180.
- Verstegen, S. (1999) "Conflict Prognostication: Toward a Tentative Framework for Conflict Assessment", *Clingendael Occasional Paper*, The Hague: Clingendael Institute.

Wallensteen, P. (1998) "Acting Early: Detection, Receptivity, Prevention and Sustainability. Reflecting on the First Post-Cold War Period", in K. van Walraven (ed.) *Early Warning and Conflict Prevention; Limitations and Possibilities*, The Hague: Kluwer Law International, pp. 83-100.

Walraven, K. van (1998) *Early Warning and Conflict Prevention; Limitations and Possibilities*, The Hague: Kluwer Law International.

Walraven, K. van (1999) "Conflict Policy in Some Western Countries: Some Explorative Notes", *Clingendael Occasional Paper*, The Hague: Clingendael Institute.

Appendix 1: Theoretic Conflict Prognostication Models

Structural models of conflict prognostication:

- I. Minorities At Risk
- II. State Failure Project
- III. PIOOM Human Rights Violations

Dynamic models of conflict prognostication:

- IV. Accelerators of Genocide Project
- V. Life Integrity Violations Analysis (LIVA)
- VI. Protocol for the Assessment of Nonviolent Direct Action (PANDA)
- VII. Conflict Early Warning Project – Pattern Recognition
- VIII. Cluster Analysis

I. A Risk Assessment Model for Communal Conflict Minorities At Risk¹

The risk assessment model of Gurr is based on the *Minorities At Risk Project*, and focuses on ethnic minority groups within existing states. The project in itself intends to specify the conditions under which some ethnic groups are drawn into cycles of rebellion and repression. The model aims at identifying groups at greatest risk of victimization in future episodes of ethnic warfare.²

<p style="text-align: center;"><u>Highest Risk: High Incentives, High Capacity/Opportunities</u> + East Timorese + ++ Hindus in Pakistan 0 ++ Lhotshampas in Bhutan – + Zomis (Chin) in Burma – 0 Turkmen in People's Republic of China 0 0 Papuans in Indonesia 0</p> <p style="text-align: center;"><u>Medium-High Risk High to Middling Incentives and Capacity/Opportunities</u> ++ Rohingya Muslims in Burma + ++ Bouganvillians in Papua-New Guinea + ++ Baluchi in Pakistan 0 ++ Tibetans in the People's Republic of China – ++ Hmong in Laos – + Ahmadis in Pakistan + -- Vietnamese in Cambodia 0</p> <p style="text-align: center;"><u>Medium Risk: High Incentives or Capacity/Opportunity</u> + Mohajirs in Pakistan + + Muslims in India + - Acelunese in Indonesia + - Sindhis in Pakistan + -- Malay Muslims in Thailand + 0 Montagnards in Vietnam – -- Hill Tribes in Thailand 0 -- Sikhs in India --</p> <p>Note: Groups in the highest-risk cluster have both incentives and capacity/opportunity scores higher than the average of Asian groups engaged in serious rebellions in 1995. The medium-high risk groups have either incentives or capacities/opportunities above the rebel groups' average and middling values on the other dimension. Medium risk groups have either incentives or capacities/opportunities above the rebel groups' average and low values on the other dimension. Groups are ranked within each cluster according to short-term changes in incentives (let-hand symbols) and capacities/opportunities.</p>
--

Figure 3: Risk assessments on ethnic minorities (Gurr, 1998).

The Minorities At Risk Project has developed a theoretical model in which the concepts of grievances, mobilization, rebellion and repression are hypothetically linked. Statistical analysis was used to identify the correlation between these concepts, which found a direct link between mobilization and rebellion; an indirect link between grievances and rebellion (through a positive correlation between grievances and mobilization); and a positive correlation between group coherence, repression, and grievances on rebellion. These findings, then, are used in the development of a range of indicators for the assessment of the potential risk for communal conflict, focusing on group incentives, capacity, and opportunities for collective action.

¹ Sources: Gurr, T. (1994) Peoples Against States: Ethnopolitical Conflict and the Changing World System, in *International Studies Quarterly* 38, pp. 347-377; Gurr, T. (1994) Testing and Using a Model of Communal Conflict for Early Warning, in *The Journal of Ethno-Development* 4(1), pp. 20-24; Gurr, T. (1997) A Risk Assessment Model of Ethnopolitical Rebellion, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); Gurr, T., B. Harff (1994) *Ethnic Conflict in World Politics*, chapter 5 "A framework for analysis of ethnopolitical mobilization and conflict", Boulder: Westview; Gurr, T., B. Harff (1998) Systematic Early Warning of Humanitarian Emergencies, in *Journal of Peace Research* 35(5), pp. 551-579.

² A limitation is that the empirical data on indicators are for politically-active communal groups. They do not suffice as data necessary to identify non-communal groups at risk of politicide (Gurr and Harff, 1998).

INDICATORS OF RISK FACTORS OF ETHNOPOLITICAL REBELLION	
A. Group Incentives	
1.	Lost Autonomy
2.	Economic Discrimination
3.	Political Discrimination
4.	Cultural Discrimination
B. Group Capacity	
1.	Cultural Identity
2.	Militant Mobilization
C. Group Opportunities	
1.	Recent Changes in Regime Structure
2.	Support from Kindred Groups

Figure 4: Indicators of communal conflict

On the basis of these indicators, a Risk Index can be developed that quantifies information designed to help answer the question which politically active communal groups are at greatest risk of ethno-political rebellion. Serious future rebellions are most likely among groups with high incentives and medium-to high capacity *and* opportunities.

The model has limited itself to structural conditions, but not without acknowledging that in order to come to early warnings, dynamic indicators/accelerators and trigger events need to be added. In a recent article, Gurr and Harff (1998) have indeed made the attempt to do this, and they have formulated eight accelerators of ethno-rebellion (see figure 5; see also model 4 ‘Accelerators of Genocide Project’ in this appendix).

They further explain that the theoretical framework is not likely to change, but the results of future research may lead to changes in the indicators used to operationalize its key concepts.

ACCELERATORS OF ETHNO-REBELLION ³	
1.	Violations: Attacks on or threats to core symbols of ethnic group identity
2.	Demand Escalation: Qualitative changes in demands made on behalf of an ethnic group (changes in group rhetoric)
3.	Group Militancy: Increase in the Disposition and capacity of elements within the group to use force and violence in pursuit of their objectives (changes in group actions)
4.	Domestic Support: Increase in symbolic or political support for group objectives from domestic actors
5.	External Support: Increase in symbolic, political, or military support for communal group objectives from international actors
6.	Elite instability: Disunity within the state elite, conflict and inefficiency in the conduct of routine government
7.	Elite Insecurity: Responses by state elites to perceived threats from domestic challengers short of open rebellion
8.	Occurrence of violent opposition by kindred groups in neighboring countries

Figure 5: Accelerators for Communal Conflict

Relevance of the findings for the policy context

In a conflict situation in which it is clear from the outset that conflict is ethnically motivated, or where ethnicity has become a mobilizing factor, the model provides a good insight. On the basis of the

³ See Harff and Gurr (1998).

model's risk assessment, it may be possible to identify and analyze alternative responses that may reduce those risks. In particular by adding the accelerator events, it has become possible to study how these might aggravate or moderate the impact of the general conditions. Whereas the structural conditions focus on the group level, the accelerators make a link to the state level. As a limitation of the model it should be noted that it is still operating with hindsight. In this regard, it is extensively tested for validity and reliability, to reduce the chance of 'false positives' and 'false negatives' to a minimum. Whether the model will be operational as a forecasting device, and in this regard will stimulate responses that will prevent what is predicted, has not been of major concern to the modelers.

	MINORITIES AT RISK PROJECT
	T. Gurr, University of Maryland
Methodology	Group profiles (conflict chronologies, narrative summaries, coded data on group's status, traits and political activities) Statistical and comparative methods. Correlates through study of historic cases.
Aim	Explanation, finding causality in conflict factors
Conflict-preventive focus	Structural
Type of conflict	Communal (ethno-political) conflict
Timing of warning	Longer-term risk assessment
Approach	Quantitative

Figure 6: Overview of Minorities At Risk as Conflict Prognostication Model

II. State Failure Project⁴

The *State Failure Task Force*⁵ was established in 1994 to design and carry out a data-driven study on the correlates of state failure⁶, with the ultimate objective of developing a methodology to identify key factors and critical thresholds signaling a high risk of political crisis in countries some two years in advance. Research, however, is still in an early phase, and includes partial state failure since the occurrence of complete state collapse are “too few for meaningful generalization” (Esty a.o. 1998).

KEY CONCEPTS	SIGNIFICANT VARIABLES
<i>A. Political and Leadership Issues</i>	<i>A. Political/Leadership</i>
<ol style="list-style-type: none"> 1. Regime capacity 2. Elite characteristics 3. Political and economic cleavages 4. Conflictual political culture 5. International influence 	<ol style="list-style-type: none"> 1. party legitimacy 2. party fractionalization 3. executive dependence on legislature 4. separatist activity 5. years since major regime change 6. ethnic character of ruling elite 7. religious character of ruling elite 8. political rights index 9. maximum cleavage 10. democracy
<i>B. Demographic and Societal Issues</i>	<i>B. Demographic/Societal</i>
<ol style="list-style-type: none"> 1. population pressure 2. mortality 3. education 4. militarization of society 	<ol style="list-style-type: none"> 1. calories/capita/day 2. military personnel/physicians' ratio 3. civil liberties index 4. infant mortality 5. life expectancy 6. extended longevity 7. percent of children in primary school 8. percent of teens in secondary school 9. girls/boys in secondary school 10. youth bulge 11. labor force/population
<i>C. Economic and Environmental Issues</i>	<i>C. Economic/Environmental</i>
<ol style="list-style-type: none"> 1. economic strength 2. quality of life 3. constraints on resource base 4. government and economic management 5. economic openness and trade 6. international economic aid 	<ol style="list-style-type: none"> 1. defense expenditure/total government exp. 2. government revenues/GDP 3. government expenditure/GDP 4. investment share of GDP 5. trade openness (import plus export/GDP) 6. real GDP/capita 7. cropland area 8. land burden 9. access to safe water 10. famine reports in 'The New York Times'

Figure 7: Key concepts and statistically significant indicator categories for state failure research.

⁴ Sources: Esty, D., J. Goldstone, T. Gurr et. al. (1995) *Working Papers State Failure Task Force Report*; Esty, D., J. Goldstone, T. Gurr et. al. (1997) “The State Failure Project: Early Warning Research for U.S. Foreign Policy Planning”, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); Esty, D., J. Goldstone, T. Gurr et. al. (1998) *State Failure Task Force Report: Phase II Findings*.

⁵ Consisting of academic experts, data collection and management specialists (CIESIN), and analytic methods professionals (SAIC). The research was commissioned by the Central Intelligence Agency's Directorate of Intelligence.

⁶ Label for a type of severe political crisis in which institutions of the central state are so weakened that they can no longer maintain authority or political order, usually occurring in circumstances of widespread and violent civil conflict and accompanied by severe humanitarian crises (Esty a.o. 1998).

The problem set of state failures, then, includes four categories, distinguishing for the type of crisis and extent of state failure (by scaling events by magnitude): Revolutionary wars (with Small and Singer 1992 as primary source), ethnic wars (Minorities of Risk as primary source), geno/politicides (Harff 1992 as primary source), and adverse or disruptive regime transitions (Polity III data set of Jagers and Gurr 1995).

For the time span of 1955 to 1994 113 consolidated cases of state failure were identified, and these were matched with a random sample of control cases to identify those independent (sets of) variables that discriminated most significantly and efficiently. Initially 617 measures were included in the data set, of which 31 appeared to be statistically significant in differentiating between states that had a regime crisis and control cases that did not (see figure 7). Multivariate analysis, then, identified a single best model (approaching 70 % accuracy) which includes three variables: *openness to international trade* (with high openness associated with a low risk of state failure), *infant mortality* (as indicative of the quality of life in a society, with above-international median rates associated with high risk of state failure), and *democracy* (above a middling threshold of democracy associated with low risk of state failure, because of conflict-inhibiting effects of democratic governance)⁷. Further, statistical analysis unfolded an interaction effect between democracy and the other two variables: the risk of state failure in more democratic countries is greater when infant mortality is high, and trade openness low, while in less democratic countries this is the case regardless of the level of infant mortality.

In order to extend the generic model with models of *magnitudes* and *duration* of conflict, the set of background variables needs to be expanded. Also some first steps are taken in elaborating on the generic model with additional variables, in order to enhance the explanatory power for specific *types* of state failure.⁸

Phase II of the State Failure Project (1998) has tried to refine the measure of democracy, to study in more detail the vulnerability of partial democracies⁹. Further it developed a regional variant of the global model to anticipate state failures in Sub-Saharan Africa,¹⁰ and a focus on the role of environmental factors¹¹ in state failures. Also, the Task Force comes with some policy implications (see appendix 2).

Relevance of the findings for the policy context

Although the methods and techniques of the State Failure Project are hard to copy because of the scale of the project, and the multidisciplinary knowledge brought in by the large research team of specialists, the research provides significant insights in correlation between conflict factors. These findings, e.g. with regard to the vulnerability of partial democracies, could be interesting for use in a policy context. The project has also demonstrated the validity of using indicator *categories* instead of well-defined indicators, since variables can be measured in various ways because of the inter-correlation between concepts (see also note 7).¹²

⁷ *Infant mortality* is a marker indicator that represents a basket of interdependent conditions, which could be substituted by other quality of life indicator, dependent on availability of data. *Democracy* is a summary measure of open political institutions, correlating strongly with indices of political rights, civil liberties and party legitimacy. *Trade openness* has few close correlates (Esty e.a. 1998).

⁸ For ethnic conflicts, these include youth bulge; extent of ruling elite representing one group in an ethnically divided society. For adverse or disruptive regime transitions, the length of time that the type of regime is in place appears to hold high significance.

⁹ The level of democracy was found to be a significant factor. Partial democracies were shown to be several times more vulnerable to state failure than either full democracies or autocracies.

¹⁰ The model includes: Level of trade openness, level of democracy and changes in material living standards, plus additional dimensions of urban share of population, type of colonial heritage, and presence of ethnic discrimination.

¹¹ A “mediated” model was developed, in which environmental change influences the quality of life, and which in turn affects the risk of state failure.

¹² This finding is of relevance for the conflict and policy assessment framework to be developed by Clingendael. The idea that indicator categories can be ‘measured’ in various ways, is also taken up by the Fund for Peace model.

However, although the generic model as identified by the State Failure Task Force strengthens the case for a systematic approach to risk assessment and early warning of political crises, its limitations should be recognized. For example, the model identified is generic in character, and no models have yet been identified that help account for the type or degree of state failure, or the sequential relations among them. Also a lot more needs to be learned about conditions that keep partial state failures from escalating. Further, most variables refer to structural conditions, and thus need to be complemented by the analysis of potential accelerators if they are to be used for early warning. Thus far, it remains to be demonstrated whether the model will be accurate in identifying *prospective* cases of state failure. The model's findings may nevertheless be used in a qualitative way by directing policy (see appendix 2).

	STATE FAILURE PROJECT
	Esty, Goldstone, Gurr, Surko, Unger / State Failure Task Force
Methodology	Quantitative, indicator-based macro-approach. Correlates of state failure during the last 40 years. Global reach.
Aim	Identify key factors and critical thresholds, signaling high risk of political crisis in countries some 2 years in advance.
Conflict-preventive focus	Structural
Type of conflict	Generic, state failure
Timing of warning	Long-term risk assessment
Approach	Quantitative

Figure 8: Overview of State Failure Project as Conflict Prognostication Model

III. PIOOM Monitoring Human Rights Violations¹³

Jongman and Schmid (1994) of PIOOM have developed an extensive monitoring “checklist” on human rights violations¹⁴, to be submitted regularly by two in-country monitors and one regional expert. They choose the approach of standardized and sustained monitoring as a middle-station between traditional fact-finding and future early warning, with the more than 500 indicators providing the basis of a data set which can be inserted into various models to forecast increased risks (Gupta, Jongman, Schmid, 1993). The primary objective is to gain a better understanding of the root causes of fundamental human rights violations, and discover the facilitating and inhibiting factors of abuses.¹⁵ For this purpose, past data and analyses will be stored in a documentation center, which will be the basis for trend analysis on the incidence of human right violations, and for risk assessment in particular periods and places. In a next phase, indicators need to be detected which can serve as early warning signals for impending violations (see figure 11). These focus on the political system, on transition/elections, the judiciary, media freedom, support for ‘radical’ groups, political protest, and the economy. The ultimate goal will be to develop the capacity to make policy recommendations, thereby enabling prevention or at least mitigation of the predicted outcome.

INDICATORS FOR MONITORING HUMAN RIGHTS VIOLATIONS
A. CPDQ (165 questions)
1. General country data
2. Demographic data
3. Socioeconomic data
4. Historic data
5. Legal data
6. Political data
7. Conflict data ¹⁶
B. MARQ (132 questions) (For max. 5 highly mobilized minorities at risk)
1. Group disadvantages (stress, discrimination)
2. Group demands and grievances
3. Political rights
4. Economic rights and benefits
5. Social and cultural rights
6. Group organization for political action
7. Political strategies of groups
8. Profile of anti-regime political action
C. 12 types of human rights

Figure 9: Indicators on human rights violations

¹³ Sources: Gupta, A. Jongman, A. Schmid (1993) *Creating a Composite Index for Assessing Country Performance in the Field of Human Rights: Proposal for a New Methodology*, Leiden: PIOOM; Jongman, A. (1994) The PIOOM Program on Monitoring and Early Warning of Humanitarian Crises, in *The Journal of Ethno-Development* 4(1), pp. 65-71; Jongman, A. (1998) Oorlog en Politiek Geweld, in B. Bomert, H. de Lange (eds.) *Internationale Veiligheidsvraagstukken en het Nederlands Perspectief*, Jaarboek Vrede en Veiligheid 1998: Nijmegen, pp. 33-51; Jongman, A., A. Schmid (1994) *Monitoring Human Rights; Manual for Assessing Country Performance*, Leiden: PIOOM.

¹⁴ Index of countries’ human rights violations. This index takes into account the argument of cultural relativism (Western perception on human rights), by distinguishing gross human rights violations from political rights and civil liberties, the former one being considered ‘non-negotiable’.

¹⁵ The scientific goal of monitoring being the identification of cultural, social, economic and political conditions which make the implementation of fundamental rights more likely.

¹⁶ Possible cleavages in society; possible internal challenges to governing elite, which forces to reallocate resources; response governing elite (policies of accommodation and coercion); external challenges to governing elite; inflammatory rhetoric against groups (by regime, opposition, media, religious leaders).

The checklist consists of 2 lists for possible root causes of conflict, and 12 lists for specific human rights. Here the focus is on the first two lists, the Country Profile Data Questionnaire (CPDQ) with the main focus on the behavior of government, and the Minorities at Risk Questionnaire (MARQ) on groups potentially at risk (based on Minorities at Risk Project of Gurr) as indicators with a high conflict prediction potential *when fed into an adequate model*.

The research techniques put forward by PIOOM include regression analysis on long series of data over time to provide insight in trends, and causal analysis to identify the turning points in trends, which may form the basis of forecasts.

	PIOOM
	A. Schmid, A. Jongman
Methodology	Delphi-method. Checklist to monitor conflict escalation (human rights), which are submitted regularly to different monitors (2 in-country, 1 regional expert)
Aim	Gain better understanding of root causes human rights violations. Discover facilitating and inhibiting factors.
Conflict-preventive focus	Structural and operational (direct)
Type of conflict	Human rights violations
Timing of warning	Longer-term risk assessment
Approach	Quantitative and qualitative

Figure 10: Overview of PIOOM Checklist on Human Rights Violations as Conflict Prognostication Model.

Relevance of the findings for the policy context

Human rights violations are often seen as the most clear signal to conflict potential and conflict escalation. For this reason monitoring is taken up by a large number of organizations. PIOOM has contributed in this regard by providing a more structured approach to this monitoring and information gathering exercise.

However, the manual that has been developed by PIOOM to monitor country situations with regard to human rights violations, and which should provide the input for a data information center and trend analysis, appears to be too extensive for practical and regular use. The anticipating capacities are therefore limited, even more so because it takes a considerable number of years before the data information system can be used for time series analysis.

Stages of Conflict	Characteristic Variables	Signals
1. Stable Social System	High degree of political stability and regime legitimacy	<ol style="list-style-type: none"> 1. Functioning democracy, with minority rights protection 2. Regular peaceful transitions of power between government and opposition (no coups d'etat) 3. Independent judiciary 4. Free press 5. Social-revolutionary and ethno-secessionist groups without mass support 6. No abrupt deterioration of political condition due to (para-) military activities 7. No abrupt deterioration in economic condition

2. Political Tension Situation	Growing levels of systemic frustration and increasing social and political cleavages along sectarian identities	<ol style="list-style-type: none"> 1. New political parties try to mobilize people around polarizing political or sectarian issues 2. Elections heatedly contested 3. Court rules seen as politically charged 4. Freedom of the press under stress as a result of growing polarization of opinion within society 5. Non-violent protests and violence against property and national symbols by radicals 6. Political protests by students, labor unions, sectarian groups 7. Rising unemployment, little economic growth
3. Serious dispute stage	Erosion of political legitimacy of the national government and rising acceptance of sectarian politics	<ol style="list-style-type: none"> 1. Increasing use of inflammatory rhetoric by political elites and sectarian leaders 2. Election-time violence and charges of fraud 3. Increasing use of courts for political purpose by government 4. Freedom of the press threatened by threats from militant groups and by government pressure 5. Sporadic violence against individual political figures and/or members of ideological or ethnic groups 6. Terrorist and vigilante and (para-) military groups appear on the scene 7. Economy under stress: high unemployment, high inflation
4. Lower intensity conflict	Open hostility and armed conflict among factional groups; regime repression and insurgency	<ol style="list-style-type: none"> 1. Increase of power among non-democratic forces 2. Civilian rule threatened by military role in politics 3. Rule of law seriously impaired 4. Freedom of the press seriously impaired as a result of sanctions by militant groups and emergency measures of (military) regime 5. Intermittent armed conflict between government and opposition forces and/or sectors of the population 6. State of emergency; security forces violate human rights systematically 7. Capital flight, disinvestment
5. High intensity conflict	Open warfare among rival groups	<ol style="list-style-type: none"> 1. Breakdown of civil society; disintegration of central government 2. Multiple claims of political sovereignty 3. Rule of law abolished; political justice 4. Media as propaganda instruments of regime 5. Open warfare among rival groups with military taking sides or splitting apart along group lines 6. Military or emergency rule 7. Black market economy dominant, falling production 8. Deteriorating health situation, decreasing life expectancy 9. Growing dependence on food imports

Figure 11: *The Stages of Conflict and their Signals (Jongman, 1994: 69-70)*

IV. Accelerators of Genocide Project¹⁷

The modeling effort of Harff focuses on accelerators in the conflict process. Because these accelerators are mainly context-specific, she prefers a case studies approach by looking at the basic chronology of the conflict; the theoretically specified conditions (causal variables) of communal conflicts; and an analysis of accelerators derived from event data. The approach, then, theoretically specifies the variables that accelerate geno/politicide, and then operationalizes the accelerator variables using events data.¹⁸ In this way, the accelerators are tools for theory-driven monitoring.

Although the model focuses on accelerators of geno/politicide, the same process could be used for other types of conflicts, Harff argues. Experts of specific kinds of conflicts can identify lists of potential accelerators, while others can be identified inductively. “What counts as evidence is the observation of a sharp increase in clusters, sets, or numbers of accelerators during the three months prior to the onset of an event. Expected outcomes should correspond to the basic logic of the sequential model, namely that the static model plus accelerators plus triggers should exponentially increase escalation”, Harff argues (1997). The expectation is that accelerator events should increase in relative and absolute frequency three to six months prior to the onset of a major episode, and be accompanied by a simultaneous decline in cooperative activity (decelerators).

ACCELERATORS OF GENOCIDE AND POLITICIDE ¹⁹
1. Occurrence of Violent Opposition by Kindred Groups in Neighboring Countries
2. Increase in External Support for Politically Active Groups
3. Threats of External Involvement Against Governing Elites
4. Increase in Size of, or Degree of Cohesion in, Opposition Group
5. Aggressive Posturing or Actions by Opposition Groups
6. Physical or Verbal Clashes
7. New Discriminatory or Restrictive Policies by the Regime
8. Life Integrity Violations by Government or Government-Supported Groups Against Targeted Groups

Figure 12: Accelerators of genocide

In order to test the model of accelerators, Harff compares perpetrator and non-perpetrator states. By using dynamic data on accelerators in retrospective analyses, she finds that, whereas in all cases background and intervening conditions indicated high levels of risk of genocide or humanitarian crisis, accelerators were useful in providing early warning indices of which cases were sliding toward genocide and when. The weighting of accelerator events on the basis of theory and evidence that some kinds of acceleration events are more important than others in moving conflict toward a particular outcome is being carried out as work in progress (Gurr and Harff, 1998).

¹⁷ Sources: Harff, B. (1994) A Theoretical Model of Genocides and Politicides, in *The Journal of Ethno-Development* 4(1), pp. 25-30; Harff, B. (1997) Early Warning of Humanitarian Crises: Sequential Models and the Role of Accelerators, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); Gurr, T., B. Harff (1998) Systematic Early Warning of Humanitarian Emergencies, in *Journal of Peace Research* 35(5), pp. 551-579.

¹⁸ This is in contrast to the inductive tradition of using events data to track international political conflicts and crises (Gurr and Harff, 1998).

¹⁹ This should not be interpreted as a final set of accelerators. Instead, these need to be continuously evaluated, adapted and added to.

Figure 13: Example of accelerator model (Harff, 1997)

In assessing the potential for genocide and politicide, Harff proposes daily monitoring of high-risk situations to determine whether or not escalation occurs. The key to monitoring crisis development, then, lies in tracing accelerators and decelerators. This would provide the link between the theoretical models and the early warning.

Relevance of the findings in the policy context

The model pays key attention to accelerators and monitoring on these events to assess the conflict situation and its development. Although the model has not been extensively tested yet, and only a very small number of case studies has been executed, it would provide an argument for the possibility of monitoring on pre-specified standardized indicators. This makes the model better manageable than inductive approaches to identifying accelerators and triggers, which ask for computerized processing of information. Although the model of Harff is developed as a quantitative approach (linked to a data event system and the scaling of events in approximate order of severity), the approach could also be adopted to a more qualitative interpretation. Since the model has only been tested retrospectively, the question remains whether—when operational as a forecasting device—the somewhat late warning will leave enough room to respond in time and adequately.

	ACCELERATORS OF GENOCIDE PROJECT
	B. Harff, CIDCM Univerity of Maryland
Methodology	Sequential analysis. Case study research (chronology of conflict, theoretically specified conditions of communal conflicts, analysis of accelerators). List of accelerators by experts, tested in comparative cases. Accelerator-events derived from event data system (GEDS)
Aim	Anticipation; trace development of processes leading to onset of geno/politicide
Conflict-preventive focus	Operational (direct)
Type of conflict	Geno/politicide
Timing of warning	Medium to shorter-term early warning
Approach	Quantitative

Figure 14: Overview of Accelerators of Genocide Project as Conflict Prognostication Model.

V. LIVA – “Good Enough Model” Life Integrity Violations Analysis²⁰

The focus of the work of Fein has mainly been on the specification of preconditions of geno-politicide and life integrity violations.²¹ The *LIVA project* uses methods of content analysis (Amnesty International reports) to assess whether one could discriminate states perpetrating geno-politicide from other states before these crimes were corroborated. The model is directed toward understanding as well as responding to geno/politicide. The aim, then, is to detect signs and portents of escalation of violence towards geno/politicide; to relate the levels of violation to underlying and intervening causes; and to relate life integrity violations to other kinds of rights violations. With regard to preventive action, LIVA aims at tracing the impact of government intervention and aid on the level of violation; considering the efficacy of different response strategies at different levels of violation; and tracing the impact of NGO campaigns against various classes of violators.

The response levels to life integrity violations as suggested by Fein are of a very general nature. Although she distinguishes normative responses from economic and physical sanctions, she does not go into the implications of these responses.

	Responses to Perpetrator		
	I. Normative:	II. Economic sanctions:*	III. Physical:
Level of Life Integrity Violation:	1. Appeal 2. Condemnation 3. Warning	1. Reduction 2. Cut-off 3. Embargo	1. Peace-keeping force 2. Multilateral humanitarian intervention 3. Other intervention
E. Epidemic ** Genocide...	-	Embargo	Intervention or war
D. Disaster or danger of disaster	Warning	Embargo Cut-off	All three
C. Calculated deaths	Warning	Cut-off	-
B. Bad	Condemnation Appeal	Reduction	-
A. Other violations	Appeal	-	-

* The table illustrates only negative economic sanctions (assuming the simultaneous cut-off of military aid); but assistance can serve as a positive and negative sanction.

A complementary approach (advocated at times by International Alert) is to tie the successful conclusion of negotiations and mediated solutions to aid packages, using development assistance as an incentive.

** This stage, best describing the genocides of Nazi Germany during 1941-45, was not found in the present study. Early response to anti-Jewish discrimination and violations of life integrity might well have checked Germany's use of epidemic genocide during the war.

Figure 15: Suggested response levels to life integrity violations (in Fein, 1992: 53)

²⁰ Sources: Fein, H. (1992) Dangerous States and Endangered Peoples: Implications of Life Integrity Violations Analysis, in K. Rupesinghe, M. Kuroda (eds.) *Early Warning and Conflict Resolution*, New York: St. Martin's Press, pp. 40-61; Fein, H. (1994) Tools and Alarms: Uses of Models for Explanation and Anticipation, in *The Journal of Ethno-Development* 4(1), pp. 31-35.

²¹ Contrary to the broad approach to human rights by PIOOM, the LIVA model focuses on capital punishment and discrimination.

While there is much agreement between Fein and Harff on the precipitating events leading to geno/politicide²², Fein proceeds in focusing on the responses at the pressure points. The indicators derived from the theoretical model are to apprehend, not to explain. (a Good Enough Model instead of a Causal Explanatory Model). The testing of models should thus not be the testing of indicators (as Harff does), but the testing of the effect of intervention/responses.

	LIVA – GOOD ENOUGH MODEL
	H. Fein
Methodology	Content analysis of Amnesty International country reports. Comparison of states with similar background (region, length of political experience since independence, similar colonial experience, similar degree of cultural heterogeneity, dominant religion), while one being perpetrator, and other non-perpetrator.
Aim	Apprehension; understanding as well as responding
Conflict-preventive focus	Structural and operational (direct)
Type of conflict	Geno/politicide; life integrity violations
Timing of warning	Medium to shorter term early warning, indication for response
Approach	Qualitative

Figure 16: Overview of LIVA as Conflict Prognostication Model

Relevance of the findings for the policy context

The contribution of the Good Enough Model of Fein is in particular found in the fact that it was one of the first theoretic efforts that broke with the highly quantitative and statistical approach to early warning and its focus on testing the models on scientific reliability and validity. The ideas are strongly in line with the call for response-oriented warnings and conflict impact assessments. Nevertheless, the arguments she puts forth of what is needed (i.e. focus on responses at pressure points and its effects) have been left undeveloped. The approach holds value as a qualitative study of why some states experience violent escalation into conflict while others do not, by each time comparing two states with similar background conditions. These ‘small-scale’ comparisons are much more specific than for example the State Failure Project that in a quantitative way identifies statistically significant variables by comparing conflict cases and non-conflict cases (from all over the world and over a time period of 50 years). Fein’s conclusion is that perpetrators differ from non-perpetrators by different *patterns* of life integrity violations. This implies the need for a specific focus on these patterns, and hence on ideologies and goals of states.

²² With exception of the effect of external support for targeted groups (Fein, 1994).

VI. PANDA
Protocol for the Assessment of Nonviolent Direct Action²³

PANDA seeks to identify conflict situations early in their development, before they erupt into violence, when the prospects of peaceful and constructive intervention are most promising. For this reason it tries to track interactions between state and non-state actors, to determine if and when conflicts become violent. The focus is on mass political conflict, i.e. popular mobilization for non-institutionalized collective action (Bond 1997). The approach is quantitative and statistical and makes use of the event data system KEDS to code and interpret real-time events.

First, the model determines what portion of reported events take place outside of the political system, in an attempt to answer two questions: are people (state and non-state actors) interacting within or beyond the rules set, and are these interactions of a peaceful or violent nature? The resultant combined measures (‘conflict carrying capacity’ of the system, and ‘conflict civility’ of non-state actors), then, offer an assessment of *system stress*.

INDICATORS FOR MASS POLITICAL CONFLICT	
A. Outcome dimension: physical force indicators	1. violence 2. non-violence
B. Contentiousness dimension:	1. Routine action 2. Direct action
C. Coerciveness dimension: social, political, economic indicators	1. Range of sanctions 2. Costs

Figure 17: Indicator dimensions of mass political conflict

The central dimensions in the conceptual framework of the PANDA monitoring system are contentiousness and coerciveness. Contentiousness can be defined as the extent to which action is disruptive, reaching the outside bounds of routine resolution procedures (the outcome of which is a product of interests, capabilities, and wills of the antagonists). Coerciveness refers to the severity of negative sanctions or costs. A third dimension in the model is the outcome dimension, indicating the attribute of violence, and thus illustrating a conflict front where coerciveness and contentiousness are both of high intensity.

These dimensions are used to develop the key indicators of the model: conflict carrying capacity (referring to the behavior of the regime) and conflict civility (referring to the behavior of non-state actors). The conflict carrying capacity measure is an indicator of the intensity of conflict²⁴. A six-point lethality measure is used for sanctions and violence. The predictions are for quarter-year periods (in

²³ Sources: Bond, D., K. Rothkin (1995) Recovering Events from Events Data, <http://data.fas.harvard.edu/cfia/pnscs/DOCS/papers/EVENTS.html>; Bond, D. (1997) Timely Conflict Risk Assessments and the PANDA Project, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); Bond, D. (1997) Indications of Social Change and Emergent Conflict: Toward Explanations of Conflict Processes, position paper for *Second International Workshop on Low Intensity Conflict*, Stockholm 4-6 June 1997; Bond, D., J. Jenkins et. al. (1997) Mapping Mass Political Conflict and Civil Society, in *Journal of Conflict Resolution* 41(4), pp. 553-579; Bond, D., S. Lee, K. Rothkin (1995) “PANDA’s Early Warnings on Conflict”, draft paper annual meeting *International Studies Association*, Chicago; Bond, D., K. Rothkin (1995) Recovering Events from Events Data, draft paper for *Annual Meeting of the American Political Science Association*, 2 September 1995.

²⁴ It is defined as the proportion of contentious action to all action, multiplied by the proportion of violent action to all direct action, and subtracted from unity to facilitate interpretation.

future monthly or bi-weekly). The carrying capacity of a system to manage conflict beyond its routine conflict management procedures is undermined by violent action. A combination of the two indicators, which can be presented graphically, gives an indication of whether political conflict is moving towards a violent confrontation.

Figure 18: Dimensions of conflict (Bond, 1998)

Relevance of the findings for the policy context

The events that are monitored include interactions with a positive as well as a negative impact on mass political conflict. In other words: conflict-generating ('accelerator') and conflict-inhibiting ('decelerator') behavior is included in the model. Although because of its quantitative and statistical approach the model is less useful for a response-oriented qualitative policy framework, its central concepts (conflict carrying capacity and conflict civility) hold value. It implies the need for a focus on actual behavior, which can indicate an intensification of political conflict towards violent conflict. The approach could therefore contribute in identifying transition or breaking points in the phases of conflict, and indicate points of intervention. For this purpose, however, the central concepts need to be newly interpreted in a qualitative way.

	PANDA
	D. Bond, Center for International Affairs, Harvard University
Methodology	Continuous monitoring of events (KEDS); full range of actors, issues, targets, forms of political action. Mapping of conflict and tracking of evolution.
Aim	Anticipation; examination of contentious and coercive, but not yet violent, behaviors which are evident early in conflict process.
Conflict-preventive focus	Operational (direct)
Type of conflict	Generic (including non-violent actions)
Timing of warning	Shorter term early warning
Approach	Quantitative

Figure 19: Overview of PANDA as Conflict Prognostication Model.

Figure 20:

VII. CEWP – Pattern Recognition Conflict Early Warning Project²⁵

The prognostication project of Brecke at the Georgia Institute of Technology is a computerized conflict alert system, based on the assumption that harbinger configurations²⁶ exist and can be identified through a pattern-finding procedure. These could then serve as templates against which current country situations are compared. The critical design decision is what indicators should be collected that provide the best chance at finding patterns. Although background conditions as well as intervening and catalyst conditions are included, the focus is on indicators that occur early in the sequence leading to conflict. The theoretical approach selected to guide the choice of indicators is based around the concepts of mobilization, grievance and capability.

INDICATOR CATEGORIES
A. Catalyst indicators on mobilization
B. Background conditions indicators on grievances
C. Background and catalyst indicators on capabilities

Figure 21: Guide to indicator choice for pattern recognition

Key element of the approach is the combination of indicators. These combinations are made explicit for analysis by creating a grid picture for each country, for each day.²⁷ These cards are then run through pattern recognition software (Artificial Neural Network). The following issue is to discern the connection between country situation patterns and a particular type of conflict by developing conflict description patterns²⁸. It is thus assumed that each type of conflict has a unique output grid pattern. If it is indeed true (the project is still work-in-progress) that particular patterns consistently appear before conflicts of particular types occur, and if there is a match with a current country situation pattern, then it could be said that conflict of a particular type is likely to happen.

Relevance of the findings for the policy context

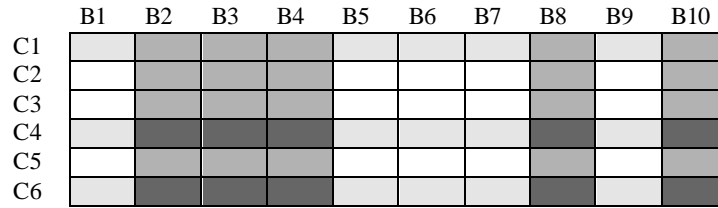
The main reason for skepticism about this type of highly computerized and quantified research is that it is evaluated as being too technical, and that policy makers are not motivated to make decisions solely on output. Brecke, for this reason, aims at developing a model that is easy to use and also provides background information about the alert and the situation, information that is needed to judge whether a conflict alert should be taken seriously. Not only should the probability assessment specify what type of conflict is evolving, and what the nature of the escalation is, but it should also provide a time-varying probability assessment as to when conflict is to erupt. As to the question of why conflicts erupt, the model cannot provide any insight, nor for the type of response needed. For the moment, the model does not have relevance for the policy context (yet) because it is too much a work-in-progress. The search for patterns, however, remains an interesting and important one, as it is not the individual indicators, but instead the *patterns* that are considered of key importance in conflict prognostication.

²⁵ Sources: Brecke, P. (1997) A Pattern Recognition Approach to Conflict Early Warning, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).

²⁶ Particular combinations of values of indicators that have consistently appeared before the outbreak of conflicts.

²⁷ Each cell in the grid can take one out of four values: (1) background and catalyst condition both exist (2) background condition exists but catalyst condition not (3) background condition does not exist, but catalyst condition does (4) background and catalyst condition both do not exist.

²⁸ Each row consists of the criteria upon which the conflict taxonomy is constructed, and each column indicates the classification value.



- B1—Has the level of malnutrition been increasing?
 B2—Has one group been in a long-term dominant position?
 B3—Is the society split along linguistic lines?
 B4—Has economic Growth relative to population growth been declining?
 B5—Are there strong regional inequalities in economic development?
 B6—Has the dominant group used police powers to repress other groups?
 B7—Did the current government come to power through force?
 B8—Is the military dominated by a particular group?
 B9—Is there a history of violent acts between the groups in the society?
 B10—Has the terms of trade index been declining for five or more years?
 C1—Are groups or individuals drawing attention to disparities in government treatment of different social groups?
 C2—Are groups or individuals drawing attention to the recent entry into the society of others?
 C3—Are groups or individuals raising the issue of the separateness of others?
 C4—Are groups or individuals mobilizing public opinion against the government?
 C5—Has an outside power declared its policy is that of non-interference?
 C6—Has the government recently cracked down on the media?

Figure 22: Example of a simplified country situation grid (Brecke, 1998).

Black: both background condition and catalyst exist
 Dark grey: background condition exists, catalyst does not
 Light grey: background condition does not exist, catalyst does
 White: neither background condition nor catalyst exist

CONFLICT EARLY WARNING PROJECT	
	P. Brecke, Georgia Institute of Technology
Methodology	Historic analogy. Make grid pictures for each country, each day and run through pattern recognition software (ANN). Time-varying probability assessment to anticipate when escalation. Conflict description patterns for each type of conflict.
Aim	Anticipation: Identify patterns of particular combinations of values of indicators that have consistently appeared before outbreak of historical cases of conflict. If patterns are found, then serve as templates against which current country situations are compared.
Conflict-preventive focus	Operational (direct)
Type of conflict	Generic
Timing of warning	Shorter term early warning
Approach	Quantitative

Figure 23: Overview of Pattern Recognition as Conflict Prognostication Model.

VIII. Cluster Analysis Transition Between Stages of Conflict²⁹

The cluster analysis of Schrodts and Gerner (1998) is not as much an early warning model, but an early warning technique that utilizes a dynamic approach to study the various stages in conflict development. The approach is based on the assumption that structural variables –although they are theoretically important– do not change at a rate sufficient for use as an early warning indicator. The use of event data without specific reference to background conditions is justified by the assumption that these will be reflected in *patterns of events* prior to a major change in the political system (i.e. lagged values of events are substitutes for structural variables).

Instead of contemporary studies that qualitatively delineate phases by emphasis on different types of behavior (e.g. the stages of conflict by Bloomfield and Moulton, 1997), Schrodts and Gerner have analyzed political behavior by monitoring the movement of a vector. A region in the vector space where points cluster over time, then, characterizes a ‘phase’. Whenever there is an extended period of time when the parties to the conflict are reacting to each other in a consistent fashion, a cluster will occur. Contrary, these clusters begin to ‘stretch’ prior to breaking apart, which is a characteristic that can be used as an early warning indicator.

Figure 24: example of clusters for various phases of conflict in Israel (Schrodts and Gerner, 1998)

Relevance of the findings for the policy context

The approach is a highly statistical exercise. As Schrodts and Gerner (1998) themselves observe, this approach “...faces the practical constraint that purely statistically-based warning systems are unlikely to be accepted in the qualitatively-oriented policy community”. The approach holds value by focusing on the transition process in the stages of conflict. It has demonstrated that most of the time these transitions are made up of gradual change and only to a lesser degree of jumps. Hence there is a change in the behavior of the system prior to the phase transition, and behavior therefore is an important indicator to monitor. What behavior exactly we should monitor, Schrodts and Gerner are not conclusive on. The most obvious one—and also used in other models—would be a dimension on cooperation and conflict. Nor does the model point out *what* is to be expected, i.e. what the change is going to be. It should therefore only be seen as a supplement to structural models. “Because political behavior is a human activity ..., human understanding and intuition are likely to be powerful tools in predicting that behavior”, Schrodts and Gerner (1998) argue.

²⁹ Sources: Schrodts, P., D. Gerner (1997) Empirical Indicators of Crisis Phase in the Middle East, 1979-1995, in *Journal of Conflict Resolution* 41(4), pp. 529-552; Schrodts, P., D. Gerner (1997) Cluster Analysis as an Early Warning Technique for the Middle East, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).

Appendix 2: Practical Efforts of Early Warning Modeling in a Policy Setting

(Attempted) Operational models:

- I. United Nations Office for Research and Collection of Information (ORCI)
- II. United Nations Humanitarian Early Warning System (HEWS)

Indicator model, framework design and guidelines for policy/practical use:

- III. Federal Ministry for Economic Co-operation and Development (BMZ) – Germany
- IV. The Fund for Peace – Analytical Model of Internal Conflict and State Collapse
- V. Forum on Early Warning and Early Response (FEWER)
- VI. Pilot study for an Early Warning System for the Swiss Foreign Ministry (FAST)
- VII. Canadian Peacebuilding Initiative Strategic Framework – Department of Foreign Affairs and Trade (DFAIT)
- VIII. Creative Associates International, Inc. – A Toolbox to Respond to Conflicts and Build Peace

Indicator model and policy implications/recommendations:

- IX. State Failure Project Phase II

I. ORCI

United Nations Office for Research and Collection of Information³⁰

The Office for Research and Collection of Information (ORCI) has been operational from 1987 until 1992. During this period the office has attempted to develop an early warning system under the mandate to assess global trends and to prepare country, regional, sub-regional and issue-related profiles. ORCI's global data base consisted mainly of country profiles, with the purpose of providing the Secretary-General with reliable and up-to-date information regarding potential conflicts and crises that might endanger international peace and security. Although the focus was on the international system, the decision was made to select many indicators on the country level as well (Dedring, 1992).³¹

ORCI has spent considerable time on the development of indicators, including those related to massive flows of refugees and the 'triggering events' that are likely to set large populations into motion. The results, however, have either not been tested on any large scale or not been made public (Thoolen, 1992). Moreover, the long list of indicators used by ORCI—which included information on the international, regional and internal situation—did not permit for comprehensive coverage, mainly because of the limited availability of data. The capacity of ORCI to detect and to forewarn, therefore was limited.

EXEMPLARY INTERNAL INDICATORS	
Socio-political indicators	
1.	oppression/persecution of social groups
2.	size internal security forces
3.	occurrence domestic hostilities/conflicts
4.	government policy toward tension
5.	existence of separatist groups
Secondary factors (standard data collection)	
6.	demonstrations, strikes, riots
7.	basic government and defense data
8.	land ownership
9.	population growth, density
10.	basic food and health statistics
11.	employment/unemployment
12.	refugees and displaced persons
13.	distribution wealth and income
14.	per capita and GDP figures, inflation

Figure 25: Indication of ORCI indicators on conflict (in Dedring, 1992).

Relevance of the model for the policy context and a conflict and policy assessment framework

Although ORCI has not been able to develop a well-functioning early warning system, we can here draw on some 'lessons' as regards practical matters in the development of such a system or a conflict and policy assessment framework. The breakdown of the ORCI early warning capacity has been attributed to the lack of systematic research, its role within the UN system and high expectations of the

³⁰ Sources: Dedring, J. (1992) Socio-political Indicators for Early Warning Purposes, in K. Rupesinghe, M. Kuroda (eds.) *Early Warning and Conflict Resolution*, New York: St. Martin's Press, pp. 194-214; Gordenker, L. (1992) Early Warning: Conceptual and Practical Issues, in K. Rupesinghe, M. Kuroda (eds.) *Early Warning and Conflict Resolution*, New York: St. Martin's Press, pp. 1-14; Adelman, H., S. Schmeidl (1996) *Towards the Development of an Early Warning/Response Network (EWNET)*, <http://www.yorku.ca/research/crs/prevent/-ewpro3.htm>; Thoolen, H. (1992) Information Aspects of Humanitarian Early Warning, in K. Rupesinghe, M. Kuroda (eds.) *Early Warning and Conflict Resolution*, New York: St. Martin's Press, pp. 166-180; Adelman, H. (1998) Humanitarian and Conflict-Oriented Early Warning: A Historical Background Sketch, in K. van Walraven (ed.) *Early Warning and Conflict Prevention: Limitations and Possibilities*, The Hague: Kluwer.

³¹ The underlying argument being that many international disturbances can arise out of strictly domestic developments or considerations.

system (Adelman and Schmeidl, 1996). Moreover, problems related to budget and personnel as well. “Consequently, at the beginning of 1991, ORCI was not even equipped with a suitable computer capacity, let alone a tested data base that was appropriate to the analysis that would lead to early warning”, Gordenker (1992) observes. Hence the experiences of ORCI imply that there is a need for a clear commitment to the project, but also a clear definition of its objective and realistic expectations. In its goals, but also in the indicator choice, ORCI was too general, broad, and unsystematic, which resulted in a quick loss of confidence in the project.

II. HEWS Humanitarian Early Warning System³²

HEWS is part of UN DHA and was established in 1993 to identify crises with humanitarian implications, to facilitate DHA's role in preventive humanitarian assistance and diplomacy. HEWS is often described as the only functioning contemporary early warning system. With an extensive database of qualitative and quantitative country information at their disposal (sources, amongst others, coming from the UN field offices), HEWS is "... a provider of background reports and analyses of present and developing situations" (Ahmed, Kassinis, 1998).

The setting up of HEWS as an early warning system was not an end unto itself, but rather, was part of a larger process to endow decision makers with the tools necessary to make better-informed decisions and to initiate actions. In the project proposal its scope of activity was defined as covering the range of social, economic, political, and ecological factors and root causes that could give rise to complex man-made emergencies, but also the building and maintaining of a sophisticated computer-assisted information gathering network to manage the large flow of information. Hence one of its tools, is an extensive database of country information, which includes reporting from various sectoral early warning systems (e.g. FAO, WFP, USAID on food availability). HEWS, then, uses a comprehensive list of indicators and tries to give as wide a description of a country or region as possible.

The monitoring of background conditions employs quantitative indicators to establish trends. Over a hundred structural indicators undergo an automated analysis, which, in combination with a more "subjective filter" (Ahmed, Kassinis, 1998), is used to short-list countries of concern. These countries of concern then will be monitored on the latest events reported on by media or field offices, and that may escalate tensions. The approach here is more dynamic, and includes qualitative analysis and country-specific indicators. Triggers of crises are hardly predictable, and it is only through scenario analysis and intensified monitoring that some lead time for contingency planning is created.

INDICATOR CATEGORIES ³³	
1.	population: changes and differences between various sections of the population
2.	general economic indicators: GNP, government expenditure, employment
3.	review of trade
4.	financial position
5.	situation regarding food and agriculture
6.	social indicators
7.	review of health and nutrition
8.	environment and natural resources
9.	review of number, origin, place of refugees
10.	human rights
11.	position of government
12.	presence of (potential for) conflicts: internal, external, regional
13.	presence of military and weapons
14.	general background information: historic, geographical, cultural etc.

Figure 26: HEWS indicator categories.

³² Sources: Ahmed, A., E. Kassinis (1997) *The Humanitarian Early Warning System*, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); R. Doom, K. Vlassenroot (1997) *Early Warning and Conflict Prevention: Minerva's Wisdom?*, <http://www-jha.sps.cam.ac.uk/a/a008.htm>; DHA-Online (s.a.) *Policy and Analysis: Humanitarian Early Warning System (HEWS)*, http://www.reliefweb.int/ocha_ol/programs/pad/hews.html.

³³ In R. Doom, K. Vlassenroot (1997) "Early Warning and Conflict Prevention: Minerva's Wisdom?", <http://www-jha.sps.cam.ac.uk/a/a008.htm>

Hence three stages can be identified in the monitoring process:

- I. *Background conditions*: the analysis is intended to be quick but global, and for this reason quantitative indicators and methods are used, as well as automated analysis. The list contains more than 100 structural indicators for twenty-five years. Analysts have the ability to graphically compare indicators over time and between countries, and they can rank countries based on various criteria.
- II. *Accelerating factors*: identifying and monitoring factors that may escalate tensions. This requires a dynamic approach, because factors are less structured and demonstrate quicker movements. The unit of analysis for time therefore is shorter. An important element is the monitoring of the latest events reported by news wires, field offices, and NGOs. *Country-specific indicators* are developed in cooperation with field offices, which also require qualitative analysis. Concurrently, periodic, interdepartmental consultations are held to give the analysis a broader, multi-disciplinary perspective. A further narrowing down of countries takes place, to those that are on the threshold of crisis.
- III. *Trigger incidents*: Possible trigger incidents may be determined through scenario analysis, others spotted by intensified monitoring.

Relevance of the model for the policy context and a conflict and policy assessment framework

With regard to practical relevance of the model, DHA argues that its approach "...falls somewhere between the academic and the practical—it keeps abreast of the latest developments in the academic fields related to early warning but recognizes that as part of the UN it must feed into a decision-making process driven by practical (and often political) considerations" (Ahmed and Kassinis, 1998).

Key is the *systematic* nature of country monitoring. The analysis is based on quantitative and qualitative information and accommodates both indicator-based and case-based approaches. Stages of intensity of conflict are used, in order to decide which countries need extensive monitoring. Criteria, however, are still needed to determine the *movement* of countries among these phases. In principle, HEWS is a provider of information to feed into the consultation process, in order to determine what actions need to be taken towards preventing crises, but also to prepare for their impact. In practice, HEWS is often applied in a context for coming to responses to humanitarian disasters. In this way it may contribute to preparedness, but only to a lesser degree to prevention.³⁴

³⁴ Cockell (1997) attributes this to the vigorous opposition from the G-77 to political early warning systems. Conflict analysis for early warning purposes in the UN therefore remains "decentralized", "ad hoc", and a "desk-level exercise". The orienting purpose of HEWS, then, remains humanitarian intervention rather than a focused and standardized tracking of political instability.

III. Federal Ministry for Economic Co-operation and Development (BMZ) - Analytical Model for Violent Conflict³⁵

The research of Angelika Spelten for the Federal Ministry for Economic Co-operation and Development had as its aim the development of an indicator model for use as an “... additional instrument for planning and analysis in development co-operation” (BMZ, 1998). The model distinguishes four stages of conflict³⁶, and implies that in each stage of the conflict it is possible to assess the probability of the social situation moving on to the next stage of escalation using certain developments as indicators. These indicators provide information that can be divided into structural issues, medium-term and short-term changes in the structural framework conditions, and political behavior in accordance with the main driving forces behind the dynamics of escalation. Hence the focus of the models is on stages and thresholds.

CENTRAL CONCEPTS IN HYPOTHESES OF THE BMZ MODEL	
1.	group identity and grievances
2.	low level of legitimacy and effectiveness of the state
3.	economic, political and social status changes
4.	current constellations in conformation with the historical situation
5.	diminishing number of fora for peaceful solutions
6.	external support for group
7.	increase in aggressiveness of putting demands, leading to a diminishing chance on negotiated solution

Figure 27: Indication of central concepts of BMZ model.

A questionnaire is developed that includes indicator questions based on hypotheses regarding causality between phenomena to be observed and probability of further escalation. The so-called catalogue of indicators comprises of three sections: The first section focuses on structural factors and the potential for escalation. The second one identifies foreseeable pressure for change and modernization, and the last one enables the monitoring of the potential for violence and *de facto* escalation.

The model, hence, focuses on three threshold values: a stable potential for conflict, a potential crisis escalation, and a high potential for crisis or violence. The first category refers to countries in which socio-political conflicts exist, but where these divergences have not yet led to social disputes and therefore do not currently require any further escalation analysis. The second category is for countries whose long-term structural disparities have already led to conflicts at the political level, and although these are not always pursued by violent means, state legitimacy and effectiveness has been jeopardized. It is in particular in this stage that conflict impact assessments need to be carried out in order to place the planning and implementation of development projects within the framework of a concept for conflict management and prevention. The threshold to the third category has been crossed, when there are strong indications that (one of the) conflicting parties is less interested in basic consensus, but instead pushes through particular interests. In this case BMZ advises a thorough redirection of development co-operation, concentrating it on strategies aimed at preserving the peace and preventing violence.

Determining intensity and stages of conflict

The analytical system that is used in the catalogue of indicators is divided into two sections. The first section covers questions under (A) and (B) (see figure 29) and enable an initial categorization between

³⁵ Sources: BMZ [Federal Ministry for Economic Co-operation and Development], A. Spelten (1998) *Excerpt from a Study “Crisis Analysis in Development Co-operation”*, Room Document no. 2 Informal DAC Task Force on Conflict, Peace and Development Co-operation, Paris.

³⁶ Stage 1: relatively stable, violence-free with latent potential for conflict. Stage 2: manifest tensions, various structural factors and change coincide. Stage 3: dispute is translated into concrete collective action. Stage 4: extensive use of violence.

countries with a “stable potential for conflict” and “potential crisis escalation”. If the latter is the case, then a more detailed analysis is needed, which takes place in section II. This section is to evaluate the potential for violence, to differentiate between countries with “potential crisis escalation” and “high potential for crisis or violence”.

LIST OF TOPICS COVERED BY THE INDICATOR QUESTIONS	
A. Structural conflict factors and potential conflict	
1. Determining disparities in society in terms of economics, ecology, and political power:	<ul style="list-style-type: none"> • What social groups can be identified in a society? • What impact does the socio-cultural structure of society have on existing economic, ecological and political disparities?
2. Determining the social competence for dealing with conflict peacefully:	<ul style="list-style-type: none"> • How are social conflicts perceived and communicated? • Are state institutions willing and able to negotiate social conflicts and bring about solutions? • Do they have sufficient legitimacy to carry out this function?
3. International and regional conflict factors:	<ul style="list-style-type: none"> • Is there a danger that armed disputes will be imported from neighboring countries?
B. Medium or short-term changes in structural framework conditions	
4. Future changes in structural framework conditions and perceived threats born out of historical experiences:	<ul style="list-style-type: none"> • What political strategies by international actors will lead to comprehensive political or economic reform in the country to be analyzed? • What are the forecasts for changes in the general ecological situation? • What violent disputes have taken place in the past between the social groups? • What role did various groups play in the colonial past, in founding of nation, in any earlier wars? • How have relations between the various social groups developed in recent past?
5. Recording social clichés:	
C. Political behavior in accordance with main driving forces behind dynamics of escalation	
6. Evaluating the social climate:	<ul style="list-style-type: none"> • In what fora is social life played out and who normally has access to these fora? • What is the traditional pattern of organization for the rural population?
7. Changes in manner in which conflict is played out:	<ul style="list-style-type: none"> • What images are being developed in media, public speeches, songs, etc., or covertly by political opponents or by specific social groups? • What images of ‘the enemy’ exist? What style of political debate is used in the media? • What strategies do various parties in the conflict use to strengthen their powers of persuasion or their political influence?

Figure 28: Indication of topics covered in the BMZ conflict assessment framework (questionnaire).

Scaling on the intensity of conflict

The answers to the various questions in the questionnaire each have a value in points (1 or 2), with some having an additional “accelerator point” (which is illustrated by a plus sign). The total number of points and accelerators is added up at the end of each box (i.e. A.1., A.2. etc.), and is then compared with a pre-specified range of points given as indication of each of the three categories to establish a trend (e.g. “slight trend towards crisis: 4-5 points; “medium trend towards crisis: 6-8 points; “high trend towards crisis: 9-12 points).

At the end of the sections A, B, and C the trends from the sectoral analyses are summarized and entered into a *quantitative* evaluation system. Then it is possible to allocate the country to one of the

categories “stable potential for conflict”, “potential crisis escalation” or “high potential for crisis or violence”.³⁷

Relevance of the model for the policy context and a conflict and policy assessment framework

The model is specifically designed for the policy field of development co-operation, as an instrument to plan and analyze development cooperation policy in the light of strategies aimed at preserving peace and preventing violence. It is, hence, not a forecasting device, but an analytical tool. Although mention is made of the need for conflict impact assessments, no further suggestions are made with regard to responses. Moreover, since the model is designed for the field of development co-operation, these responses are above all expected to be at the structural conflict prevention level. Spelten (1998) mentions that for the future it is planned to integrate the sections of analysis into the existing range of instruments of BMZ.

The model has strong similarity to the theoretical approach of Gurr’s Minority at Risk. The main emphasis is put on social groups, discrimination and disparities, and relative deprivation. The state and its behavior, actions, and policies are included in the model in a far less substantive way, and the focus is on the state and state institutions are perceived by the various groups. Although the model includes elements that are expected to give a good picture of the political culture in a country, the way in which it is presented (i.e. the framework) is less satisfying. For assigning clear-cut weights to the answers (1 or 2), the questions seem to be too general in nature. In this regard a scaling system from 1 to 10 or a continuum would have enabled a specification of the answer, but indeed would have complicated the workings of the quantitative evaluation system. Hence, it is in particular this quantitative evaluation that is considered to be the short-coming of the BMZ model for conflict potential assessment.

Second classification of the country: How many sectors indicate a “slight”, “medium” or “high” tendency toward crisis? Transfer the tendency figures from the sectoral analyses:		
“slight”	“medium”	“high”
Multiply the figure by 1	multiply by 2	multiply by 4
Indicator value:		
Overall classification of the country: Transfer the above indicator value:		
<ul style="list-style-type: none"> - An indicator value of 3-8 corresponds to the classification potential crisis escalation - An indicator value of 8-12 corresponds to the classification high potential for crisis or violence. <p>This still includes countries for which the criterion of a “de-escalation phase” (see above) applies</p>		
Qualified amended assessment: Would you, based on concrete information about developments not covered by this catalogue of indicators, classify the tendency of the country towards crisis differently?		
<ul style="list-style-type: none"> a. No b. Yes <p>Reasons:</p>		
New classification of the country:		
Stable Potential for conflict	potential crisis escalation	high potential for crisis or violence

Figure 29: Example of the format of the BMZ quantitative evaluation system

³⁷ With regard to this method, Spelten (1998: 7) remarks: “In principle, it should be emphasised that the determining of threshold values for the evaluation of conflict potential is primarily a political task, which will also be guided by political priorities and the room for manoeuvre which the policies being pursued allow. Such analytical methods are only able at best to offer guidelines and describe trends, they do not have the precision of mathematical formulae.”

IV. The Fund for Peace – Pauline Baker Analytical Model of Internal Conflict and State Collapse³⁸

In an effort to provide practitioners with a systematic methodology for early warning and assessment of divided societies at risk of violent upheaval, The Fund for Peace has developed an analytical model of internal conflict (by which is meant ethnic or identity conflict)³⁹ and state collapse⁴⁰. It is designed for practical application in order to measure and monitor the likelihood of intergroup violence and state collapse, and to evaluate whether, and in what ways, the international community may contribute toward promoting peace. The aim of the model is also set at enhancing clarity of mission, unity of effort, inter-agency coordination, and implementation of transition strategies for sustainable security.

The model is based on the assumption that state failure is a primary cause of internal or ethnic conflict, not the reverse. It posits state building as the basis of a potential strategy for resolving or managing such conflict. The model therefore focuses on sustainable security⁴¹ instead of the ending of violence or signing of peace agreement as a measure to determine when to wind down external peace operations. On the policy side, then, the model stresses the importance of building the core state institutions of police, military, civil service and system of justice. The model consists of a framework which tracks a conflict through five stages. Twelve indicators on ethnic conflict and state collapse are used, which may be evaluated with various data.

KEY INDICATOR CATEGORIES	
A. Social indicators	
1.	Mounting demographic pressures
2.	Massive movement of refugees or internally displaced persons creating complex humanitarian emergencies
3.	legacy of vengeance-seeking group grievance or group paranoia
4.	chronic and sustained human flight
B. Economic indicators	
5.	uneven economic development along group lines
6.	sharp and/or severe economic decline
C. Political/military indicators	
7.	criminalization and/or delegitimization of the state
8.	progressive deterioration of public services
9.	suspension or arbitrary application of the rule of law and widespread violation of human rights
10.	security apparatus operates as a state within a state
11.	rise of fractionalized elites
12.	intervention of other states or external political actors

Figure 30: Key indicator categories of Fund for Peace conflict model.

³⁸ Sources: Baker, P., J. Ausink (1996) *State Collapse and Ethnic Violence: Toward a Predictive Model*, in *Parameters* (Spring), pp. 19-31; Baker, P., A. Weller (1998) *An Analytical Model of Internal Conflict and State Collapse: Manual for Practitioners*, Washington, D.C.: The Fund for Peace.

³⁹ Internal conflict is defined in the model of Baker (1998: 9) as “any conflict or dispute based on communal or social group identity, including language, race, religion, sect, ethnicity, caste, class, clan, or some combination of these”.

⁴⁰ A collapsing state in Bakers model (1998: 10) is “one that is losing physical control of its territory, forfeiting the authority to make collective decisions for the national population, lacks a monopoly on the legitimate use of force and cannot interact in formal relations with other states as a fully functioning member of the international community”.

⁴¹ Sustainable security may not be achieved by relying on an acceptable political framework that will mitigate conflict among internal conflicting factions. If state structures have collapsed or have been politically compromised by coming under the control of competing factions, then it will be necessary to combine the political framework with a strategy to rebuild the core state institutions.

Baker (1998) points out the methodological limits of her model. It should not be construed as a paradigm for all conflicts, nor should it be seen as a prescription for specific policies, a formula for predicting responses, or a mechanism for addressing questions of political will or national interest. She compares the methodological approach of her model to medical science, since it can be no more than making a diagnosis on the basis of "...the appearance of clusters of known symptoms, some of which are verifiable through testing, some merely observable by expert assessment" (1998: 14). The model therefore postulates clusters of leading societal indicators of state decay.

Determining intensity and stages of conflict

The conceptual framework identifies five stages and one major 'decision point' (whether the conflict will remain non-violent or become violent) between the stages two and three. In particular with regard to this decision-point, it is important to pay special attention to concepts of leadership, velocity of failure and the quality of peace. For the first two stages, the indicators may serve as early warnings. The stages three through five can be of assistance in policy assessments.

STAGES OF THE CONCEPTUAL FRAMEWORK	
Stage 1: Analysis of <i>root causes</i>	e.g. historical background, socioeconomic composition, environment that predisposes a society <i>towards fragmentation</i> .
Stage 2: Identification of <i>precipitating events</i>	e.g. discriminatory policies, collapsed empires, coups d'état or political assassinations that lead a state <i>from fragmentation to friction</i> .
Stage 3: <i>State transition</i>	State is in transition <i>toward becoming a new entity</i> . Transition may be violent (full scale conflict, secession, ethnic cleansing, disintegration) or non-violent (negotiations, reforms, power-sharing).
Stage 4: <i>State transformation</i>	A violent transformation may result in military victory, ethnic domination, warlordism, unresolved conflict. A non-violent transformation may result in elections, peaceful partition, conflict resolution, new state structures.
Stage 5: Outcome	Continuum between chaos and constitutionalism.

Figure 31: Five stages of conflict in the Fund for Peace conceptual framework.

Scaling on the intensity of conflict

Indicators should not be applied in a mechanistic way that ignores individual characteristics of a society. The intensity-assessment is rated on a scale from 1 to 10. For some indicators, this can be quantitatively measured, otherwise it could be an informed judgement.

Indicators Niwanda	Application 1 1973	Application 2 1992
1	0	1
2	0	1
3	5	6
4	0	1
5	5	6
6	0	5
7	0	5
8	0	5
9	0	1
10	0	5
11	0	5
12	0	1
TOTAL	10	42

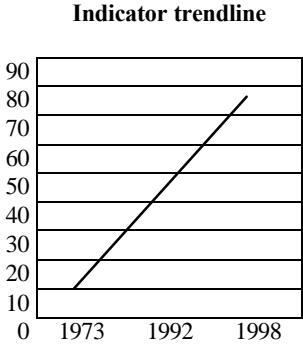


Figure 32: Trendline indicators of the Fund for Peace model (Baker, 1998: 42).

To establish the extent of danger, one must look at trend lines, by evaluating the frequency and intensity of the indicators over time. If these intensify, then the state is on the road to violence or collapse. In case of a diminishment, the state is on its way to recovery, which however does not necessarily mean that the root causes of conflict have been resolved. Collectively, the indicators provide a 'snapshot' of the condition of a state at one moment in time. Succeeding ones can be used to assess trends. Baker emphasizes the importance of constant monitoring on all twelve indicators, because a change in any one may affect the others.

Relevance of the model for the policy context and a conflict and policy assessment framework

The model is of specific significance by demonstrating the importance of a clear objective. For Baker, the target is establishing sustainable security (including the four core institutions, instead of only the political framework). The model has adopted a state-oriented approach, which is reflected in the choice on key indicator categories. In this regard, the model is clearly in line with the research findings of the Causes of Conflict in the Third World (CODW) research of Clingendael, that has demonstrated the central role of political institutions and state capacity in explaining conflict.

The Fund for Peace, however, remains too general in approach. One of main reasons for this is that it aims at providing a framework for broad application (diplomats, mediators, humanitarian workers, military commanders, representatives of governmental and international organizations, policy-makers). This complicates the effort to focus on particular response options. The reference that is made to responses and policy tools, consequently, remains very general.

Figure 33: Conceptual framework Fund for Peace (Baker, 1998: 16).

**V. Forum on Early Warning and Early Response (FEWER)
Analytical Model for Early Warning and Response⁴²**

The FEWER consortium had as its purpose to set up an independent early warning system with the participation of various UN agencies, NGO’s and other players and to elaborate strategic policy alternatives for decision makers. The rationale behind the establishment of the consortium was that no early warning models existed to collect information from various sources and at the same time present clear cut alternatives for action. The FEWER model therefore should allow for structured studies of complex disasters and violent conflicts.

FEWER has recently (December 1998) developed a manual for early warning and early response, which it considers to be a “...provisional framework for understanding trends in areas of potential and actual conflict, as well as identifying approaches for conflict prevention” (page 3). Yet, the manual may also be used as a tool to identify common ground and common strategies for peace among protagonists in a conflict situation.

The analytical model consists of two parts, the first one focusing on early warning and the second one on responses. According to the FEWER manual both parts of the model need to be used and get equal attention. It is also stressed that attention to the emergence of conflict and its management is not sufficient, Instead, the focus needs to be on conflict *and* peace, in order to be able to identify when opportunities for peace emerge, as well as how initiatives for peace can be supported.

Steps for *early warning* include, first of all, understanding the context by addressing issues as *what* factors contribute to conflict and peace, *where* is the conflict located, and *when* has the conflict or peace process started (all in terms of political, economic, socio-cultural and institutional terms). Key actors and their motivations should also be identified. Together, these factors establish the framework for analysis. The second step is the identification of conflict indicators to monitor the conflict dynamics and its development (see the list of indicators at the end of this description). A third step analyses the situation by categorizing the indicators as structural factors, triggers, or accelerators, and assessing the relative importance of the different indicators and their interrelationships. In a final step, opportunities for peace need to be identified. This means that the windows of opportunity for peacemaking need to be clarified, i.e. the events that could allow for peace initiative. Potential mediators and facilitators should be identified, as well as possible options and agenda items.

EXAMPLARY INDICATORS	
A. Political indicators	
1.	human rights violations
2.	internally-displaced peoples and refugees
3.	military intervention in political affairs
B. Socio-cultural indicators	
4.	lack of access to mass media
5.	discrimination on racial or ethnic grounds
C. Institutional indicators	
6.	failure of rule of law
7.	weakness of state institutions
8.	repression of civil society organizations

Figure 34: Some indicators suggested by FEWER.

The second part of the model focuses on steps for *response development*. First of all, instruments for conflict prevention need to be identified, and potential responses should be seen as an assimilation of

⁴² Sources: FEWER (1998) *Early Warning Resource; Manual for Early Warning and Early Response*, FEWER: London.

multi-level policy options. Responses need to be listed internationally, regionally and locally, as well as located within three operational spheres (political, economic, and socio-cultural). In this way, response options should be identified that are unique to the situation, actors and the region. A second step in the analysis of responses is to identify potential peace actors and institutions (internationally, (sub-)regionally and locally). Then, in step 3, the responses need to be placed in a time frame, in order to transform the situation by stages. In a final step all possible response options are evaluated to understand the feasibility and sustainability of the responses proposed. This evaluation should take the following issues into consideration:

1. *What are the response consequences?*
Better understanding of the potential impact on relevant parties, those directly and indirectly involved. Prediction on the type, size, timing and intensity of the effects.
2. *Who is for/against or neutral in relation to the response (power and priority)?*
Analysis of the position of key actors, to predict the relative strength of support and opposition, and hence the viability of the response.
3. *What are the alliance configurations?*
Mapping of direction and strength of influence among groups and organizations, in order to identify common agendas.
4. *What are the organizational/political changes likely to occur?*
Analysis of opportunities to influence change, in an attempt to identify changing dynamics of the situation (e.g. change of leadership in an organization).
5. *What are the opportunities and possible approaches to effect changes?*
Identify actions that may improve or reinforce the feasibility of responses (e.g. alteration of public perception, mobilization of institutional support and ways of responding to opposing factions).

Relevance of the model for the policy context and a conflict and policy assessment framework

Rather than being a model for standardized assessment and pre-specified monitoring on indicators of conflict situations, FEWER presents a framework for discussion. This follows from the objective of the model to provide an input for political decisions on conflict prevention. For this purpose, quantitative crisis indicators alone do not suffice. Hence, FEWER does not provide a generic model for conflict assessment, but a case-specific approach.

Although the model does not suffice as a framework for generic and standardized conflict assessment and prediction, it gives relevant suggestions as to what should be taken into consideration when developing a framework. In particular the part on response development contains interesting elements with regard to the evaluation of policy responses, instruments, and combinations of options.

Possible Indicators¹

Structural Factors	Accelerators	Triggers
<p>Political</p> <p><u>Military and security</u></p> <ul style="list-style-type: none"> • Security expenditure • Growing illicit arms trade • Number of private security firms <p><u>Unstable social structure</u></p> <ul style="list-style-type: none"> • Changing elites <p><u>Unwillingness to effectively govern</u></p> <ul style="list-style-type: none"> • Human rights abuses • Constitutional abuses • Abuses of power <p><u>Inability to effectively govern</u></p> <ul style="list-style-type: none"> • Systemic instability • Unconsolidated power • Illegitimacy • Incomplete territorial control <p>Economic</p> <p><u>Internal Economic Stability</u></p> <ul style="list-style-type: none"> • Prevalence of poverty • Degree of unemployment • Inflation/price stability • Access to social security/welfare • Pronounced social stratification • Income disparities • Land distribution <p><u>Environmental</u></p> <ul style="list-style-type: none"> • Agricultural failure • Pollution • Environmental disaster <p><u>Mismanagement</u></p> <ul style="list-style-type: none"> • Disparity and inequality • Corruption <p><u>Instability</u></p> <ul style="list-style-type: none"> • Macro-economic instability <p>Socio-cultural</p> <p><u>Media and propaganda</u></p> <ul style="list-style-type: none"> • Inflammatory statements • Exploitation of divisions/tensions <p>Institutions and events</p> <p><u>Religious institutions</u></p> <ul style="list-style-type: none"> • Antagonistic behaviour • Propaganda <p><u>Police and judiciary</u></p> <ul style="list-style-type: none"> • Institutional bias <p><u>Institutional</u></p> <ul style="list-style-type: none"> • Lack of civil institutions • Link between populous-government 	<p>Political</p> <p><u>Domestic insecurity</u></p> <ul style="list-style-type: none"> • Inability, on the part of the state, to deliver security and stability • Security forces on the streets • Inability to maintain territorial control • Imposition of curfews <p><u>Population movements</u></p> <ul style="list-style-type: none"> • Civilian movement across border • Restriction of movement into and out of the state • IDP's and refugees <p><u>Political opposition/Government oppression</u></p> <ul style="list-style-type: none"> • Proliferation of opposition groups • Frequency of political arrests • Miniaturisation of dissent • Problems processing dissent • Disillusionment with security apparatus • Dissatisfaction with the management of state affairs • Unfulfilled expectations • General despair (linked to justice, economic welfare, personal/family security) <p><u>Consolidation of opposition</u></p> <ul style="list-style-type: none"> • Increased opposition activity • Increase in size and cohesion of opposition groups <p>Economic</p> <p><u>International confidence</u></p> <ul style="list-style-type: none"> • Capital flight • Foreign debt • Currency stability • Foreign exchange reserves <p><u>Economic decline</u></p> <ul style="list-style-type: none"> • Increasing poverty/ec. Disparity • Food shortages <p>Socio-cultural</p> <p><u>Ethnicity</u></p> <ul style="list-style-type: none"> • Ethnic tension/violence • Historical rivalries • Territorial disputes • Antagonistic behaviour • Institutionalised persecution • Language laws 	<p>Political</p> <p><u>Human rights</u></p> <ul style="list-style-type: none"> • Freedom of expression • Freedom of movement • Freedom of religion • Freedom of assembly <p><u>Integrity of elections</u></p> <ul style="list-style-type: none"> • Electoral fraud • Voter intimidation <p><u>Internal political instability</u></p> <ul style="list-style-type: none"> • Changing alliances • Purging of persons of doubtful loyalty • Politically motivated arrests • Dominant political positions/ideologies and their impact of peace and stability <p><u>Government policy</u></p> <ul style="list-style-type: none"> • New discriminatory policies • Increased tension between regime supporters and opposition groups • Mass human rights abuses <p><u>External intervention</u></p> <ul style="list-style-type: none"> • External support for opposition groups • Threat of intervention <p><u>Cross-border activity</u></p> <ul style="list-style-type: none"> • Military build-ups • Cross-border shootings <p><u>Levels of violence</u></p> <ul style="list-style-type: none"> • Political assassinations • Political violence • Ethnic violence

¹ Drawn from the Africa Peace Forum, PIOOM Foundation, Russian Academy of Sciences/Institute of Ethnology, United Nations High Commissioner for Refugees/Center for Documentation and Research, and the University of Maryland

Figure 35: Potential indicators, included in the FEWER manual.

VI. FAST – Swiss Foreign Ministry Pilot Study for an Early Warning System⁴³

FAST [Early Recognition of Tension and Fact Finding] is a pilot study for an out-of-government early warning center, functioning in close collaboration with the Ministry of Foreign Affairs of Switzerland. The early warning system should be in the interest of various departments of the Swiss Foreign Ministry: the General Secretariat, the section Peace Policies and OSCE, and the section Development Cooperation. The effort, undertaken by the Swiss Peace Foundation and funded by the Swiss Agency for Development and Cooperation, is described as "...an early warning chain-system going all the way from monitoring, collection and dissemination of information up to analysis, evaluation, risk assessment and finally presentation of policy options and scenarios credible enough to convince policy-makers about the need for early action" (Kohlschütter, 1998). As an applied early warning project it should make the warning-response link an integral part of its activities. Hence a system with several component parts was created "...that links the collection of information to analysis and analysis to policy recommendations" (Krummenacher and Schmeidl, *s.a.*). The key element of the system is said to be the fact that it is embedded into the political decision making process due to institutionalized access to high level decision makers, which should increase the likelihood of early action and conflict prevention.

OBJECTIVE OF 'FAST'
1. Instrument for facilitating effective preventive diplomacy
2. Enabling the Swiss administration to recognize and act upon a crisis as early as possible
3. Enhancing the "institutionalized pressure" for such early decision-making

Figure 36: Objectives of FAST.

The project is highly ambitious, as it describes the system to be

- Functional and operational on a rather short term basis, but also based on (computerized) early warning models and indicator clusters which lend themselves to constant refinement, scientific testing, and adjustments as needed by political practitioners;
- Multi-departmental, multi-purpose and multi-directional;⁴⁴
- Structured and equipped so as to monitor and collect different levels and types of data;

The components of FAST, then, consist of: a time frame of early warning, with a focus on proximate or short-term conditions (3-6 months); an holistic approach to early warning, including pre-crisis, in-crisis, and post-crisis stages of conflict; armed conflict as a flexible dependant variable; and a multimethod approach to supplement quantitative with qualitative approaches.

⁴³ Sources: Kohlschütter, A. (1997) FAST: A Pilot Study for an Early Warning System for the Swiss Foreign Ministry, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); Krummenacher, H., S. Schmeidl (*s.a.*) *FAST: An Integrated and Interactive Early Warning System*, Swiss Peace Foundation Institute for Conflict Resolution, SDC Department of Foreign Affairs.

⁴⁴ Kohlschütter (1998): "...the data and information to be monitored and the geographical areas to be covered satisfying the early warning requirements of different agencies in the Swiss MFA. On the one hand there is the more globally oriented political department, looking after Swiss interests worldwide (trade, investments, migration, terrorism, proliferation, etc.) and concentrating on the 53 OSCE states, especially those in transition from communism to democratic civil societies; on the other hand, the more narrow and third-world-focused development cooperation agency which concentrates on some 16 focal countries with major foreign aid projects.

FAST EARLY WARNING CHAIN						
ACTIVITY	Assessing country background conditions	Choosing relevant conflict indicators	Monitoring flow of events (event analysis)	Risk assessment based on quantitative or qualitative research	Round table with policy makers	Monitoring of actions taken
PHASE	1	2	3	4	5	6
PRODUCT	Country risk profiles	Factsheets	Tension barometers	Risk assessment	Presenting policy options	Evaluation paper

Figure 37: FAST early warning chain, taken from H. Krummenacher and S. Schmeidl (s.a.).

Relevance of the model for the policy context and a conflict and policy assessment framework

The system's objectives and fields of operation are very extensive, and its operationalization appears highly complex. Moreover, since the system is supposed to function outside the structures of the Ministry (the end-user), the presentation of the warnings are of significance, and should be able to convince the policy makers. This differs from a conflict and policy assessment framework that is used within an organization, and provides 'in-house' (political) warnings. This however is described by Krummenacher and Schmeidl (s.a.) as the main relevance of FAST: it is a "one-of a kind" project and learning experience on the impact of direct access to policy makers on actual response to other early warning systems.

FAST includes a large number of methodologies and techniques to provide policy makers with early warnings. With the various objectives, different users, wide variety in policy fields, and global coverage in mind, we are afraid that the system cannot be more than very general in its assessments and response recommendations. Although direct access may exist between academics and policy makers, this appears to be the case in a 'producer'-type relationship, in which the results are presented to the policy makers. Whereas it may provide an important learning experiment on how access to policy makers impacts on early responses, we think the high level of ambition provides an argument as well for the necessity to be very specific on the objective, the user and the policy instruments, in order for the framework to hold operational value.

VII. Canadian Peacebuilding Initiative Strategic Framework⁴⁵

The Canadian Peacebuilding Initiative dates back to October 1996, and was initiated by the Department of Foreign Affairs and Trade (DFAIT) and the Canadian International Development Agency (CIDA). The emphasis is put on peacebuilding⁴⁶ and human security. Whereas the overarching goal of peacebuilding is to enhance the indigenous capacity of a society to manage conflict without violence, it ultimately aims at building human security,⁴⁷ a concept which includes democratic governance, human rights, the rule of law, sustainable development, equitable access to resources, and environmental security. Hence, the focus is on the political and socioeconomic context of conflict, rather than the military or humanitarian one, and has as its aim to institutionalize peaceful resolution of conflict. In this regard, it should be noted that the effort is very general in nature, directed at a broad policy framework and structural conflict prevention.⁴⁸

The Initiative has selected four specific topics for further policy development: small arms proliferation, gender dimensions of peacebuilding, free media development, and the impact of armed conflict on children. In the area of preparedness, the Initiative focuses on “identifying and assessing Canadian peacebuilding capacity and training skills”, “enhancing and promoting peacebuilding knowledge in Canadian academic and research facilities”, “developing a stand-by Canadian peacebuilding capacity, ready for deployment”, and “conducting ongoing analysis of conflict situations to allow Canada to define priorities and pinpoint interventions on a proactive basis” (DFAIT, 1998).

For some years, John Cockell has been involved in the work at DFAIT, and he has focused his attention on conflict assessments for use in the policy context, in a call for more response-oriented warnings and an action-oriented approach. In this approach, the focus should be on how and why there is a potential for escalation, as a first step to identifying priority areas for preventive engagement. In short, response-oriented analysis should address issues of strategic targeting and the process link, in order to have an interactive relationship between the analytical framework and the operational response policy-making mechanism.

However, the work has mainly been done on a personal title. Cockell is currently involved in early warning policy development and training for the UN department of Political Affairs, and the UN Staff College, in a project called “Early Warning and Preventive Measures: Building UN Capacity”. It is based on an applied policy planning approach to linking early warning analysis with UN capacity for preventive measures.

⁴⁵ Sources: Cockell, J. (1997) *Peacebuilding and Human Security: International Responses to the Politics of Internal Conflict*, draft for discussion; Cockell, J. (1997) *Towards Response-Oriented Early Warning Analysis*, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); DFAIT [Department of Foreign Affairs and International Trade] (1998) *Canada and Peacebuilding; The Canadian Peacebuilding Initiative*, <http://www.dfait-maeci.gc.ca>.

⁴⁶ Peacebuilding may involve conflict *prevention*, conflict *resolution*, and *post-conflict activities*.

⁴⁷ The Fund for Peace is even more specific by focusing on *sustainable security*, clearly directed at the state and the core institutions.

⁴⁸ See also K. van Walraven (1999) *Conflict Policy in Some Western Countries: Some Explorative Notes*, *Clingendael Occasional Paper*, The Hague: Clingendael Institute.

SUGGESTIONS FOR AN EARLY WARNING ANALYTICAL FRAMEWORK	
SUGGESTIONS ON CHARACTER OF FRAMEWORK:	<ul style="list-style-type: none"> • Find a balance between a general model and detailed case specificity
	<ul style="list-style-type: none"> • Region-specific analytical frameworks in concert with regional capacity-building for preventive action
	<ul style="list-style-type: none"> • Focus on near-term trigger, rather than broader background factors
	<ul style="list-style-type: none"> • Information sharing in order to use field proximity of specific organizations to full advantage
SUGGESTIONS ON INDICATOR CATEGORIES (WITH A FOCUS ON THE OVERLAP AND DYNAMIC INTERACTION):	<ul style="list-style-type: none"> • status of governance/political process • polarization/potential for conflict • structural/societal tension • human rights violations • military/arms supply • external support • other context-specific factors

Figure 38: Source: Suggestions put forward by Cockell (1997) for an analytical framework for early warning.

**VII. Creative Associates International, Inc.
A Toolbox to Respond to Conflicts and Build Peace⁴⁹**

The work of Creative Associates International, Inc. (CAII) is strongly directed toward the response side of conflict prevention, as is suggested by use of the term ‘toolbox’. The ‘Guide to Practitioners’ and its revised version is developed at the request of the Greater Horn of Africa Initiative, and executed by a multi-disciplinary team of regional experts, and specialists in conflict prevention, policy analysis, economics, democracy-building, civic society and development. The revised version furthermore has benefited from feedback from policy-makers and practitioners.

The most interesting part of the guide is indeed the one that focuses specifically on the toolbox. A broad array of policy interventions and instruments to prevent or mitigate conflict is analyzed, in particular in the context of the Greater Horn of Africa. Further, the guide examines the development of conflict prevention strategies and “...offers guidelines on how to build on an understanding of policy tools to develop coherent multi-tooled strategies to prevent or mitigate conflict, including the goals, tasks and issues in planning and implementing conflict prevention strategies”, as the guide indicates.

The toolbox is developed as an attempt to address present shortcomings in established programs, which inhibit conflict preventive capabilities. This first of all is caused by often insufficient budgetary, staff and other resources. More importantly to address here, are the shortcomings in analysis of and approach to the conflict. These include for example: a dominant crisis—instead of prevention—orientation, a state-to-state focus, a focus on armed conflict as the cause of conflict, an inadequate link between general development assistance and conflict prevention, and detection without enforcement. The work on early warning indicators and preventive mechanisms is criticized for its gaps in the response structure, its fragmented coverage, inadequate knowledge and feedback, and the neglect of existing prevention mechanisms.

CAII offers a systematic approach that specifies objectives, policy tools and timeframes for action, and offers an eight-step approach:

CAII EIGHT-STEP APPROACH	
1. Track national transitions	Understanding of the sources and nature of local conflicts
2. Set goals	Choose strategic priorities and establish goals and objectives
3. Assess national needs and tasks	Policy-makers must pinpoint key policy sectors, and tasks to reach the specified goals
4. Choose tools	Determine the mix of policy options each goal requires, assess the effects, and determine where new initiatives must fill gaps
5. Identify implementing partners	Determine which internal and external partners may best implement policy interventions
6. Time interventions	Policy options vary according to stages of conflict, and some must be sequenced
7. Coordinate responses	Spell out actors’ responsibilities and mandates
8. Plan the exit strategy	Define criteria for disengagement

Figure 39: The CAII eight-step approach to conflict preventive interventions.

The analysis is organized by the stage of conflict (stable peace, unstable peace, crisis, war, post-conflict crisis, post-conflict unstable peace, and reconciliation), and for each stage a separate framework is developed that includes illustrative issues as regards the environment for interventions, the timeframe for action, the primary objectives, and policy tools.

⁴⁹ Sources: Creative Associates International, Inc. (1998) *Preventing and Mitigating Conflicts: A Revised Guide for Practitioners*, <http://www.caii-dc.com/ghai>

The tools, as indicated in figure 40 are then assessed, following the format of a *description* of the tool (objectives, expected outcome or impact, and relationship to conflict prevention), a discussion of the tool’s *implementation* (organizers, participants, activities, cost considerations, set-up time and timeframe), a summary of the *conflict context* in which to apply the tool (stage and type of conflict, cause of conflict, prerequisites for effective implementation), an in-depth illustration of *past practice*, and an *evaluation* of the tool (strengths, weaknesses and lessons learned).

POLICY TOOLS INCLUDED IN THE ASSESSMENT BY CAII	
a. Official Diplomacy	Special envoys
b. Non-Official Conflict Management	Non-official facilitation Peace commissions Indigenous conflict management
c. Military Measures	Confidence and security-building measures Military professionalization and reform Military restructuring and integration Military demobilization Preventive deployment
d. Economic and Social Measures	Conditionality Sanctions and embargoes Economic and resource cooperation Humanitarian assistance Development assistance Power-sharing arrangements National conferences Political institution-building Electoral assistance Civic society-building
e. Political Development and Governance	Decentralization of power Judicial/legal reform Police reform War crimes tribunals/truth commissions
f. Communication and Education	Peace media Media professionalization

Figure 40: Tools that are assessed by CAII (1998).

Relevance of the model for the policy context and a conflict and policy assessment framework

The Guide holds a lot of interesting information for the development of a conflict and policy assessment framework, in particular as a result of its response orientation. The extensive assessment of policy tools may even be said to be novel. However, due to the general nature of the guide, which is said to be for “practitioners”, it cannot come to specific suggestions of a framework and therefore remains largely illustrative. The Guide further provides a larger framework that includes 8 ‘steps’ to take before coming to actual intervention. The inclusion of setting goals and defining tasks enables the framework to become more specific and realistic. Since the focus of this ‘model’ is on policy tools, the actual conflict potential assessment—as was the main focus of the major part of the here included prognostication models—is developed to a lesser extent. Indeed, the emphasis is on how to respond effectively (whether proactive or reactive) instead of how to anticipate.

IX. State Failure Project Phase II Policy Recommendations⁵⁰

Whereas the first phase of the State Failure Project, as described in the previous chapter was a search for viable generic indicators for state failure, the second phase of the project was directed towards refining and specifying the generic model. This was done by testing the importance of the indicators, and applying the model to the Sub-Saharan African context. Whereas the generic model held its value, it was agreed that further refinement could be made by including additional dimensions⁵¹.

Also a closer examination was undertaken on the democracy dimension. As the task force (1998: viii) reports, “[a]mong the most interesting results from this model was that partial democracies were on average 11 times as likely to suffer severe political crises than autocracies, and that, even in Sub-Saharan Africa, having a more urban population increases the risk of state failure only in poorer states”.

From the findings, the Task Force infers some policy implications, that ask for a mix of context-specific policy responses:

- Involvement in international trade is associated with a lower risk of state failure in virtually all states and all contexts.⁵²
- Partial democracies—particularly in lower-income countries where the quality of life remains poor—are associated with elevated risks of failure.
- Material living standards have an undeniable effect on the risks of state failure.
- Despite the prevalence of ethnic conflicts—especially in Sub-Saharan Africa—ethnic discrimination or domination is not the sole, or even the most important, correlate of state failure.
- Environmental stress, vulnerability, and capacity form an interdependent triad that affects quality of life, and, indirectly, the risk of state failure.
- Newer democracies, especially in countries where quality of life is relatively low, are more likely to fail than long-lived ones.

For future research, the task force indicates:

- Forming a better understanding of the conditions of successful democratic transitions.
- Further developing the concept that the impact of environmental degradation on state failure is mediated by vulnerability and capacity⁵³, and more thorough testing of the model.
- Developing a more detailed concept of ‘state capacity’ to test as a mediating factor in general and regional models.
- Investigating the usefulness of pilot studies of event data for bridging the gap between model-based risk assessments and early warnings.
- Investigating the impact of international support on the risk of state failure.

⁵⁰ Sources: Esty, D., J. Goldstone, T. Gurr et. al. (1995) *Working Papers State Failure Task Force Report*; Esty, D., J. Goldstone, T. Gurr et. al. (1997) *The State Failure Project: Early Warning Research for U.S. Foreign Policy Planning*, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); Esty, D., J. Goldstone, T. Gurr et. al. (1998) *State Failure Task Force Report: Phase II Findings*.

⁵¹ For the regional model, this included indicators on urban share of the population; type of colonial heritage; and the presence of ethnic discrimination.

⁵² However, it is not the eventual prosperity that trade provides, but the involvement in international trade itself that is the key to this effect. This is a result of the observation that free trade helps bring together coalitions of elite actors that support the rule of law and stable property relationships (Solingen in State Failure Project, 1998: 29).

⁵³ Task Force (1998: 23): “Vulnerability is the degree to which crop yields might be expected to fall in the absence of effective intervention. It might be measured through extent of irrigation or sensitivity of crops to rainfall. Capacity is the degree to which the government and social actors are able to lower the actual impact, and might be measured as the size of the government budget, number of scientifically trained experts, or extent of communications infrastructure.

Relevance of the model for the policy context and a conflict and policy assessment framework

The State Failure Task Force has tried to refine the concept of democracy and its role in conflict development. The importance of intensity has been included by focusing on partial democracies (i.e. *partial* democracies being more likely to suffer state failure), and the time aspect is emphasized by including a time frame of democracy being established (i.e. *newer* democracies being more likely to suffer state failure).

The Task Force also emphasizes the importance of developing conflict impact assessments in order to better trace the effect of international interventions on the risk of state failure.