Contents

Ac	know	ledgments	vii		
Ab	Abbreviations				
Preventive Measures: An Overview John L. Davies and Ted Robert Gurr					
L	Str	uctural Indicators and Risk Assessment Models			
	1.	A Risk Assessment Model of Ethnopolitical Rebellion Ted Robert Gurr	15		
	2.	The State Failure Project: Early Warning Research for U.S. Foreign Policy Planning Daniel C. Esty, Jack Goldstone, Ted Robert Gurr, Barbara Harff, Pamela T. Surko, Alan N. Unger, and Robert S. Chen	27		
	3.	Indicator Development: Issues in Forecasting Conflict Escalation Alex P. Schmid	39		
	4.	Early Warning Indicators of Forced Migration Susanne Schmeidl and J. Craig Jenkins	56		
II.	Dynamic Indicators and Early Warning Models				
	5.	Early Warning of Humanitarian Crises: Sequential Models and the Role of Accelerators Barbara Harff	70		
	6.	Dynamic Data for Conflict Early Warning John L. Davies and Barbara Harff, with Anne L. Speca	79		
	7.	Cluster Analysis as an Early Warning Technique for the Middle East Philip A. Schrodt and Deborah J. Gerner	95		
	8.	Timely Conflict Risk Assessments and the PANDA Project Doug Bond	108		
	9.	A Pattern Recognition Approach to Conflict Early Warning Peter Brecke	121		

vi Contents

Ш	. Spec	ialized Models and Applications	
	10.	Early Warning of Environmentally Caused Conflicts Günther Baechler	131
	11.	An Expert System for Assessing Vulnerability to Instability Grace I. Scarborough	142
	12.	The FUGI Model as a Global Early Warning System for Refugees Akira Onishi	159
	13.	Human Rights Abuses and Arms Trafficking in Central Africa Joost R. Hiltermann	174
	14.	FAST: A Pilot Study for an Early Warning System for the Swiss Foreign Ministry Andreas V. Kohlschütter and Günther Baechler	181
		Andreas V. Konischuller and Guniner Baechier	
IV.	Publ	ic Sector Information and Early Warning Systems	
	15.	The Global Information and Early Warning System on Food and Agriculture Abdur Rashid	185
	16.	USAID's Famine Early Warning System William P. Whelan	194
	17.	The Humanitarian Early Warning System: From Concept to Practice Adeel Ahmed and Elizabeth Voulieris Kassinis	203
	18.	ReliefWeb: An International Information Management Tool Dennis King	212
	19.	The Role of Early Warning in the Office of the UN High Commissioner for Refugees Andrei Dmitrichev	219
v.	From	Early Warning to Early Response	
	20.	Toward Response-Oriented Early Warning Analysis John G. Cockell	230
	21.	Information Sharing and Early Warning Charles J. Jefferson	241
	22.	Early Warning: An Action Agenda Donald Krumm	248
Ref	References		
List of Open Access Early Warning Projects			267
Index			281
About the Contributors			287