



COUNTRY INDICATORS FOR FOREIGN POLICY

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PRELIMINARY SELECTION OF INDICATORS DISCUSSION PAPER

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EXECUTIVE SUMMARY

The Country Indicators for Foreign Policy (CIFP) project has recently begun work on a pilot project in partnership with the Forum for Early Warning and Early Response (FEWER) and the University of Maryland Global Events Data System (GEDS). The project will begin the integration of the CIFP into the FEWER network, and will emphasize the analytical training and capacity building of local analysts participating in the FEWER network. The pilot project consists of two regional concentrations: South East Asia and West Africa.

Since work on the pilot project began in October 2000, the CIFP has undertaken a number of activities to move the project forward. These activities have included consultations with FEWER in Ottawa and London, and participation at the International Security Forum Conference in order to raise the profile of the pilot project. The Phase II expansion of the CIFP has also begun, focusing upon cleansing, updating, and expanding the CIFP data set.

The CIFP project currently encompasses over 80 indicators covering a wide range of interrelated areas. For the pilot project, this list of indicators will be supplemented with a variety of additional indicators required to more fully address the causal factors informing conflict development in the pilot countries, and in order to better assess the effects of conflict on human security in those countries where conflict is or has been entrenched.

The selection of these additional indicators has been informed by a number of factors, including consultations with FEWER, and a consideration of indicators identified by local analysts in their early warning reporting. Additional indicators will be added which address social development, socioeconomic factors, the environment, macro-economic factors, governance, political violence, child soldiers, and small arms. The expansion of indicators for the pilot project will also include sub-national, regionally differentiated indicators, in order to better assess the underlying causes of conflict in the pilot countries.

The CIFP is also currently developing materials that will serve the dual intent of collecting information on indicators not currently available in quantitative format, and of building local conflict analysis capacity, through providing means of assisting local analysts to identify and analyse relevant factors that operate as causes and/or accelerators of crises.

This document is intended as a discussion piece on the indicators being added as part of the expansion of the project's data set. It is also intended to offer some preliminary indications of the modalities of the CIFP's integration into the FEWER network. The CIFP team encourages feedback and constructive criticism.

CIFP PHASE II MANDATE

A consensus exists that a more effective early warning policy, including monitoring of preliminary signals and the historical record, should be employed as part of our Human Security approach to international affairs. This emphasizes the need for and important role of transparent, easy to interpret, open source early warning information. Structural indicators provide global overviews, country performance measures, and issue-based perspectives on political, military, demographic, social, economic and environmental factors. This type of information is included in best practice early warning analysis together with events data and local field analysis.

Currently, with the generous support of the Canadian International Development Agency, the CIFP has begun work on a pilot project in partnership with the Forum for Early Warning and Early Response (FEWER) and the University of Maryland Global Events Data System (GEDS), that will begin the integration of the CIFP into the FEWER network. Within the framework of the pilot project, the CIFP will bring to FEWER, through its database of indicators, structural data that will serve as a supplement to events data provided by GEDS, and local analyses provided by local partner organizations participating in the FEWER network.¹

While the exact modalities of the CIFP's integration into the FEWER network are still being explored, the pilot project is intended to establish a framework for communications, information gathering and information sharing between the participating organizations. The CIFP is also expected to take a lead role in the development of analytical risk assessment reports that will integrate the different levels of information. These reports are intended to meet the knowledge needs of both local analysts and Canadian decision-makers requiring grounds for policy decisions, in order to contribute to linkages between early warning and early response. The pilot project will also emphasize the analytical training and capacity building of local analysts participating in the FEWER network.

In order to meet the structural data needs of these reports, the CIFP is in Phase II development. In addition to cleaning and updating the data set, this process includes supplementing the data set with a variety of additional indicators required to more fully address the causal factors informing conflict development in the pilot countries. This document is intended as a discussion piece on the directions in which this expansion will proceed.²

The pilot project consists of two regional concentrations, which were originally conceived as being South East Asia (Cambodia, Indonesia, Philippines) and East Africa (Kenya, Uganda, Tanzania). FEWER has since requested that the project consider switching focus from East Africa to the West African countries of the Mano River Basin and Senegambia. It is FEWER's position that CIFP efforts would be better directed towards the West Africa network at this time, due to a changing focus in East Africa away from early warning and towards early response, and in order to better complement current FEWER efforts to strengthen early warning networks in West Africa. After a review of data sources, the CIFP has agreed to this shift.

¹ For a discussion on the role of structural indicators in early warning, in relation to other forms of early warning information, please see the CIFP's "Methodology Review," available on-line at http://www.carleton.ca/cifp/others/methodsreview.pdf.

² The CIFP's "Methodology Review" (July 2000) includes additional information on the mandate of the pilot project. In addition to the project outputs cited above, such as an intensified database and analytical reports, CIFP outputs will include a mapping component and a stand-alone CD-ROM version of the CIFP data set.

UPDATE ON CIFP ACTIVITIES

Confirmation of funding was received in late September 2000. Since that time, the CIFP has undertaken a number of tasks to move the project forward:

Data Cleansing, Updating, and Expansion

Over the past two months, the CIFP has undertaken steps to improve the quality of our data in accordance with the priorities determined in the course of the May 2000 Needs Assessment. This includes the substantial tasks of updating, further backdating, and cleansing the existing data to remove observed inconsistencies, as well as expanding the number of countries included in the dataset.

The research team has made considerable progress, and these tasks are scheduled for completion in mid January 2001. With the data set clean, complete, and current, testing of the analytical techniques defined in the July 2000 Methodology Review may begin.

Consultations with FEWER

Indicator selection for the CIFP expansion is largely based on the results of FEWER's collaborative work with local early warning analysts and their understanding of the type of information needed to effectively assess conflict potential. This work is embodied in FEWER's Conflict and Peace Analysis Response (CAPAR) Manual, and in a series of network reports.³

In November 2000, a meeting was held in Ottawa with FEWER Director David Nyheim to discuss the directions of the pilot project. The selection of indicators was discussed, as were the ways in which the CIFP could best contribute to the needs of local analysts. It was at this meeting that the issue of switching pilot regions in Africa was raised.

A follow up meeting was held in London at the FEWER Secretariat to discuss the ways to operationalize the information sharing processes in the early warning framework, and to better define the CIFP's role. As a result of this meeting, it was determined that the CIFP will need to play an active role in training of local analysts in the West Africa network, thus increasing the capacity building component of the CIFP project.

International Security Forum Conference

The CIFP was invited to give a presentation on the project, current work, and future directions at the International Security Forum conference held in Geneva, November 15 - 17, 2000. The CIFP participated in workshop IV.5: Information Management in International Security: Access, Selection and Use Part 1: Working with a System of Federated Fact Databases: the Case of Facts on International Relations and Security Trends (FIRST).

The ISF conference was a wonderful opportunity to increase awareness of the project, and to meet others with an interest in this work, and the CIFP extends its gratitude to the Swiss ISN for inviting and hosting our participation. The presentation given and an abstract of the main talking points are available under the navigation heading 'programme overview" on the conference website: http://www.isn.ethz.ch/4isf/>.

³ The FEWER Manual and network reports are available at: http://www.fewer.org>.

Networking: SIPRI (FIRST), SPF (FAST)

Effective partnerships are central to the success of the CIFP in fulfilling its early warning mandate effectively, and are the cornerstone of the FEWER consortium. Expanding our partnerships was identified in the Needs Assessment as an important consideration for furthering the CIFP's credibility with our policy-making audience. In recognition of this, the CIFP is directing some efforts towards exploring new partnerships, and expanding existing partnerships.

Discussions have been held with:

The Swiss Peace Foundation (FAST) project. FAST is currently a FEWER partner, and is engaging in early warning analysis in the Caucasus Region, Southern Africa, and South Asia for a domestic policy audience. Their methodology includes automated coding of events data and field analysis from local partners, with structural data included on an ad-hoc basis. There are clearly synergies between FAST and CIFP, and opportunities for collaboration are under consideration. A formal discussion will occur in January at the FEWER council meeting in London.

The Stockholm International Peace Research Institute (SIPRI) Facts on International Relations and Security Trends (FIRST) project. CIFP currently has a working partnership with FIRST, and provides the data for a number of indicators available through the FIRST web site. Discussions focused on a number of technical issues that will facilitate information sharing as the CIFP re-designs its web interface in 2001. In addition, the possibility of jointly funding some specific technical development was discussed, and the feasibility of this option is currently under consideration.

⁴ Please see http://first.sipri.org/>.

Preliminary Survey of Indicators for the Pilot Project

The CIFP project currently encompasses over 80 indicators covering a wide range of interrelated areas. These include indicators of internal stability, population heterogeneity (including ethnic cleavage), domestic conflict, international relations, militarization, macro-economic and trade performance, social development, human security, and environmental sustainability.⁵ For the pilot project, this list of indicators will be supplemented with a variety of additional indicators required to more fully address the causal factors informing conflict development in the pilot countries, and in order to better assess the effects of conflict on human security in those countries where conflict is or has been entrenched.

The selection of these additional indicators has been informed by a number of factors, including consultations with FEWER, and reference to FEWER surveys of indicators identified by local analysts in their early warning reporting.⁶ In addition, a number of indicators have been included on the basis of evidence in the early warning literature of their being strong crisis predictors. Emphasis has been placed on indicators that underscore the roots of conflict in human insecurity.

A. Social Development Indicators:

The CIFP currently includes a variety of indicators measuring social development. These include composite indicators such as the UNDP's Human Development Index (HDI) and gender disaggregated indicators such as the Gender-related Development Index (GDI) and Gender Empowerment Measure (GEM). In addition, the CIFP currently includes indicators on education (gender disaggregated primary and secondary enrolment rates) and health (life expectancy, infant mortality, maternal mortality, AIDS cases, and access to safe drinking water).

However, additional indicators need to be included that more fully cover issues in the areas of health, nutrition, and food security – particularly indicators focusing on the nutrition and health of children. For example, the CIFP will include critical indicators of the well-being of children, such as under-5 mortality rates (U5MR) and rates of child malnutrition (under-fives suffering from underweight, stunting and wasting). Indicators such as average daily per capita supply of calories (kilocalories) and protein (grams) can also provide information on nutritional security. Access to basic services such as health, education and sanitation will be included as well.

Proposed Additional Indicators:

- 1. Under-5 Mortality Rate (U5MR) (Source: UNICEF, WHO)
- 2. % of Under-Fives Suffering from Underweight, Stunting and Wasting (Source: UNICEF, WHO)
- 3. Average Daily Per Capita Calorie / Protein Supply (Source: UNDP, World Bank)
- 4. % of Population Without Access to Health Services (Source: UNDP, World Bank)
- 5. % of Population Without Access to Education Services (Source: UNDP, World Bank)

⁵ A full list of current CIFP indicators is included as Appendix A.

⁶ See, for example, FEWER's 'Conflict and Peace Analysis and Response (CAPAR) Manual' (July 1999), which includes a recommended set of indicators identified by the Africa Peace Forum, among others, and FEWER's 'Conflict and Peace Indicators: Caucasus' (October 2000), a survey of indicators based on reporting by FEWER lead agencies in the Caucasus. The West Africa Network for Peacebuilding (WANEP), the FEWER lead agency in West Africa, has also recently produced a training module, "Proventive Peacebuilding in West Africa" (October 2000), a region-specific adaptation of the FEWER CAPAR manual, with recommendations concerning indicators as well,

6. % of Population Without Access to Sanitation (Source: UNDP, World Bank)

B. Socio-Economic and Environmental Indicators:

A key component of conflict potential is differential access to resources. The CIFP currently includes indicators of a country's overall level of economic development (including GDP and per capita GDP), as well as rudimentary information on levels of income inequality in the form of the GINI Coefficient's measure of income concentration. However, in addition to these measures, an indicator is required that addresses relative levels of human poverty, such as the percentage of a population below income poverty lines (\$1 a day, and the National poverty line). Similarly, while an indicator such as unemployment rates is often difficult to collect for developing countries, it is a critical measure of economic opportunity when it is available.

Additional indicators of social stratification – such as concentration in land distribution — will be incorporated as available. In addition, abrupt changes in access to, or exhaustion of, renewable resources can have a serious impact on food and income security, and may operate as conflict accelerators. The CIFP currently includes indicators on depletion of fisheries and forestry resources, and will supplement these with indicators on changes in crop yields, available agricultural land per capita, and soil degradation as relevant. In cases where aggregate risk indicators currently exist as part of famine early warning systems, they will be included as available.

Proposed Additional Indicators:

- 1. % of Population Below Poverty Lines (\$1 a day; the National poverty line) (Source: UNDP, World Bank)
- 2. Unemployment Rates (Source: UNDP, World Bank)
- 3. Concentration of Land Distribution (Source: Various)
- 4. Agricultural Land Per Capita (Source: FAO)
- 5. Soil Degradation / Desertification (Source: FAO)
- 6. Crop Yields (Source: FAO)
- 7. Aggregate Famine Risk Indicators (Source: Various)

C. Macro-Economic Indicators:

The relationship between macro-economic stability and conflict potential is identified in numerous studies, and has been demonstrated in the impact of the 1997 Asian financial crisis. The CIFP currently includes indicators of a country's overall level of economic development and trade exposure. However, a number of macro-economic indicators, demonstrated in the literature to be strong crisis predictors, are not currently included in the CIFP dataset: inflation rates, exchange rate stability, and changes in investment levels. These factors can have a profound impact on income security and the quality of life within a country. In addition, foreign direct investment data can be disaggregated by sector in specific country analyses in order to identify how investment in certain sectors may impact conflict potential.

Similarly, with respect to fiscal policies, the CIFP currently only includes data on military spending. This will be supplemented with data on government spending in other areas, including debt servicing, health and education. This data can be used to index indicators such as debt spending as a percentage of GDP.

Proposed Additional Indicators:

- 1. Annual Rate of Inflation (Source: World Bank, IMF)
- 2. Exchange Rate Stability (Source: World Bank, IMF)
- 3. Portfolio Investment (Source: World Bank, IMF)
- 4. Foreign Direct Investment (Source: World Bank, IMF)
- 5. Overall Budget Deficit (Source: World Bank, IMF)
- 6. Overall Debt Levels (Source: World Bank, IMF)
- 7. Total Expenditure on Debt Servicing (Source: World Bank, IMF)
- 8. Total Expenditure on Health (Source: World Bank, IMF)
- 9. Total Expenditure on Education (Source: World Bank, IMF)

D. Quality of Governance Indicators:

The CIFP currently includes a range of indicators surveying a variety of governance issues. These include composite indices of Democracy and Autocracy, which gauge regime characteristics such as the openness of political competition and institutionalized constraints on the chief executive. The CIFP also currently includes composite indicators of 1) Political Rights, surveying characteristics of electoral law, political regulation, and minority representation in decision making, as well as 2) Civil Liberties, surveying freedoms of assembly, association and civil society organization.

However, one key indicator currently absent from the CIFP data set is a specific measure of Freedom of the Press. Additionally, a good proxy variable for a country's commitment to internationally recognized human rights standards is the number of core human rights treaties it has signed and ratified. These include treaties covering 1) economic, social and cultural rights, 2) civil and political rights, 3) racial discrimination, 4) torture, 5) the rights of women, and 6) the rights of the child, including the optional protocol on the use of child soldiers.

Proposed Additional Indicators:

- 1. Press Freedom (Source: Freedom House)
- 2. Core Human Rights Treaties Signed and Ratified (Source: Office of the High Commissioner for Human Rights)

E. Political Violence Indicators:

While the CIFP currently includes aggregate numbers of internally displaced persons (IDPs) and numbers of refugees by country of asylum ('Total Populations of Concern" from the United Nations High Commissioner for Refugees [UNHCR]), this data does not currently differentiate between the two groups, nor does it indicate the country of origin of refugees. These numbers need to be disaggregated in order to provide more thorough information on the numbers of refugees produced by a given country, as well as the major recipients of that country's refugee flows. In addition, data on refugees and IDPs should ideally be gender disaggregated where possible, and specify the percentage of which are children, in order to highlight cases in which these segments of the population are disproportionately affected.

Similarly, while the CIFP currently includes data on armed forces, including conscription standards, it also needs to incorporate data on child soldiers. This data should include information on whether governments and other combatant groups allow child soldiers, a specification of whether recruitment occurs through conscription or volunteering, as well as numbers of child combatants. While gender disaggregated data on child soldiers is difficult to obtain for most countries, in cases where reliable

estimates are available they will be incorporated into the data set. The CIFP is currently surveying different data sources to see which may provide the most reliable and consistent information of this sort, although it is likely that for the time being the CIFP will need to rely on multiple sources. Current data sources include the country reports produced by The Coalition to Stop the Use of Child Soldiers, and the Rädda Barnens ChildWar database (Save the Children, Sweden).

Proposed Additional Indicators:

- 1. Number of Refugees by Country/Territory of Origin (Source: UNHCR)
- 2. Number of Refugees by Country/Territory of Asylum (Source: UNHCR)
- 3. Number of Internally Displaced Persons (Source: UNHCR)
- 4. Total Populations of Concern, Disaggregated by Gender and Age (Source: UNHCR)
- 5. Restrictions on the Use of Child Soldiers (Conscription, Volunteer) (Source: Various)
- 6. Numbers of Child Soldiers (Source: Various)

F. Small Arms Indicators:

The CIFP currently includes data on military expenditures, including all forms of major conventional weapons. However, there is a need to specify and clarify information pertaining to the traffic in small arms – such as automatic rifles, submachine guns, high powered pistols, grenades, etc. – which are the type of weapons most commonly involved in intra-state conflicts, and which are most often responsible for civilian casualties. While data on small arms is very difficult to compile, a variety of recent efforts have been made to collect small arms data in ways that allow for increased consistency and reliability. Such efforts include the Norwegian Initiative on Small Arms Transfers (NISAT), which provides information on small arms imports and exports, as well as on black market activities, and a proposed Yearbook on Small Arms produced with Swiss funding. In addition, FEWER members and supporting organizations such as International Alert have undertaken work to operationalize small arms indicators for use in early warning efforts.⁷

Proposed Additional Indicators:

- 1. Small Arms Imports (Source: Various)
- 2. Small Arms Exports (Source: Various)
- 3. Illicit Small Arms Transfers (Source: Various)

G. Regionally-Differentiated Indicators:

Currently, the CIFP includes only country-level data. However, considering that many intra-state conflicts derive in large part from disparities between regions, or between urban and rural areas, it is important for the CIFP to further refine its data to include these disparities. In many cases, such data is difficult to acquire. Nonetheless, regionally-differentiated data should be included for the pilot countries, where and when it is available.

Regionally-differentiated data has the greatest relevance in terms of discrepancies in economic (i.e. income security) or social developmental (i.e. education, health, nutritional security) indicators, though it is also especially important in considering other areas as well – such as regional renewable resource

⁷ See for example International Alert's "Arms Watching: Integrating small arms and light weapons into early warning of violent conflict" (September 2000), available at FEWER's web site: http://www.fewer.org/research/Armswatch.pdf>.

exhaustion. Similarly, discrepancies between different segments of the population (such as Human Development Indices for various population groups), while again difficult to obtain, will be incorporated as available.

H. Additional Indicators Not Available From Open Sources:

The production of early warning reports will obviously require more than open source, quantitative data, of the kind currently included in the CIFP. It will require a significant amount of data of various kinds from various sources. Indeed, the framework sought by the pilot project is one in which early warning reports would include coded assessments by in-country analysts of current situations and trends, in order to provide precisely the kinds of information that statistical country profiles are – in and of themselves – unable to capture. For example, many of the indicators cited in FEWER's most recent reports are 'perceptual' in nature: while growing economic disparities can be a significant conflict accelerator, the perception of such disparities can aggravate or inhibit the effect of these disparities on conflict development.

In this respect, the CIFP is currently considering the development of a set of in-country analyst questionnaires, in coordination with FEWER, that will be used to assess and code indicators not currently available in quantitative format; for example, growing economic disparity perceived to be related to ethnicity. The purpose of such a survey would be in part to facilitate the operationalization of qualitative information contained in field assessments, and particularly of the "perceptual" nature of many indicators, in order to increase their analytical import as well as their policy relevance. However, the surveys would also form part of the CIFP's contribution to FEWER efforts to build local conflict analysis capacity, through providing a means of assisting local analysts to identify and assess relevant factors that operate as causes and/or accelerators of crises.

⁸ An initial example of such a questionnaire was included in the CIFP's 'Methodology Review." The format of this questionnaire drew primarily on indicators provided by FEWER's 1999 CAPAR Manual. However, as FEWER has continued to refine and expand its set of indicators, for example in its October 2000 report on Peace and Conflict Indicators for the Caucasus, the CIFP has begun to consider extensive modifications to this questionnaire.

APPENDIX A

LIST OF CURRENT CIFP INDICATORS⁹

A. Internal Stability

Tenure in Office **Democracy Index Autocracy Index** Number of Coups

Population Heterogeneity

Ethnic Diversity Rank Ethnic Diversity Index Religious Diversity Rank Religious Diversity Index Total Cultural Diversity Rank Total Cultural Diversity Index Ethnic Cleavage—Political Status Ethnic Cleavage—Cohesion

Political Violence/Refugees

Political Violence Index Number of Refugees Refugee Index

Crime

Terrorist Incidents (by location, Group Homeland, Victim's Nationality) Terrorism Index Corruption Index Transparency International Knack & Keefer Mauro

Drug Activity Black Market Index

B. Local Geopolitical Stability

Arms Imports—Volume Arms Imports—Index Arms Exports—Volume Arms Exports—Index Resource/Territorial Disputes—Number Resource/Territorial Disputes—Index Political/Cultural Disputes—Number Political/Cultural Disputes—Index Canadians Living Abroad—Number Canadians Living Abroad—Index

 9 Each indicator is indexed on a nine-point scale according to its relevance to foreign policy.

Regional Balance of Power & Security Influence

Fraction of Regional GDP Regional Balance of Power Index Regional Security Index

C. National Power/Influence

Population Index GDP Index GDP Per Capita Index Inequality Index

Military/Security Arrangement

Economic Organizations Index

Fraction of World GDP Economic Organizations

Economic Membership Index

Military/Security Alliances Index

Fraction World Armed Forces in Military Alliances

Military/Security Alliance Index

UN Organizations Index

Miscellaneous Organizations Index

Militarization Indicators

Total Military Expenditure—Average

Total Military Expenditure—Index

Military Expenditure as a % of GDP—Average

Military Expenditure as a % of GDP—Index

Total Armed Forces

Total Armed Forces—Index

Armed Forces Per 1000—Average

Armed Forces Per 1000-Index

Nuclear, Chemical and Biological Weapons Capabilities

International Trade Indicators

Exposure—Rank

Exposure—Index

Self-Sufficiency—Rank

Self-Sufficiency—Index

Dependency—Rank

Dependency—Index

International Trade Measures

Exports

Imports

Primary Commodities—Exports

Primary Commodities—Imports

Exports to Most Important Partner

Exposure Measure

Self-Sufficiency Measure

Dependency Measure

Accessibility Indicators

Sea Distance from Canadian Port Coast/Port Rating Port Facilities Rating Rail Link Rating Inland Transportation (road, rail) Rating Composite Seaport Rating Air Distance Rating Number of Airports Rating Overall Accessibility Rating

D. Social Development

Human Development Index

HDI Rank

HDI Index

Gender Development Index

GDI Rank

GDI Index

Gender Empowerment Measure

GEM Rank

GEM Index

Health Indicators

Life Expectancy Rank & Index Maternal Mortality Rank & Index Infant Mortality Rank & Index

E. The Environment

Absolute Environmental Impacts

CO₂ Emissions—Rank & Index
Fishery Landings—Rank & Index
Forest Area—Rank & Index
Number of Threatened Species—Rank & Index
Energy Consumption—Rank & Index
Average Environmental Score
Environmental Rank
Absolute Environmental Index

Per Capita Environmental Indices

CO₂ Emissions Per Capita—Rank & Index Fish Consumption Per Capita—Rank & Index Energy Consumption Per Capita—Rank & Index Average Per Capita Environmental Score Per Capita Environmental Rank Per Capita Environment Index

F. Human Security

Youth Related Measures

Education Primary/Secondary Child Labour

Urban Concerns

Urbanization Safe Water AIDS Cases

APPENDIX B CIFP PROJECT TEAM

Principal Investigator: David Carment, Ph.D.

David Carment has managed the CIFP's operations at NPSIA throughout the life of the project. He has been responsible for selecting the research team, the choice of country indicators, and the operationalization and analysis of these indicators.

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Project Managers: Susan Ampleford, M.A. Candidate, and George Conway, M.A.

Susan Ampleford and George Conway are serving as Project Managers for Phase II of the CIFP. Both Susan and George are currently M.A. candidates at the Norman Paterson School of International Affairs, Carleton University. Susan co-authored the CIFP *Needs-Assessment* in May 2000, and the *Methodology Review* in July 2000.

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Research Assistants: Angelica Ospina, M.A. Candidate, and Urvashi Ramnarine, M.A. Candidate

Angelica Ospina and Urvashi Ramnarine are currently M.A. candidates at the Norman Paterson School of International Affairs, Carleton University. Angelica and Urvashi are responsible for collecting data and expanding the data set for Phase II of the project.

Other: Beginning in January 2001, the CIFP will also engage two interns, a computer scientist, and a GIS Mapping Specialist.