### **Spring Education Report**

# Fixing to take on failed, failing states

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n the past two decades, failed, failing, and fragile states have grown in number and notoriety and are, for various reasons, a priority for the international development, defence and security communities.

Academics and policy-makers have spent a considerable amount of time and resources trying to understand both the causes and the consequences of fragility. They are still uncertain how to properly engage states affiliated with it.

As a result, several donor countries, including Canada, have created specific units and funding envelopes within their bureaucracies in the hope that such mainstreaming will be enough to counter the myriad challenges fragile states pose.

At the same time, international organizations such as the World Bank and the OECD have also been funding research and providing operational guidance to donors.

Overall, the resulting research and policy contributions have led to an increased emphasis on human security, state-building, democracy and governance, integrated approaches between development and security, and the "novel idea" that the international community can promote development by moving beyond the outdated conflict paradigm that was in vogue in the 1990s.

Through extensive research, we now know that fragile states are so because they are weak in legitimacy, authority and capacity, and not just because they suffer from

ongoing conflict and violence. The recent upheavals in Egypt and Tunisia are testament to this fact.

Although there is limited consensus on the precise meaning of the term "fragility," there is no denying that the 30 to 40 so-called fragile states in the world represent a danger to their own populations in terms of well-being, and pose significant costs to neighbouring countries and the international community.

It is also now well-known that most of the MDGs will not be met globally by the 2015 target date because of a lack of progress in fragile states—even though net aid to the 43 fragile states identified by the International Network on Conflict and Fragility amounted to more than US\$41 billion in just 2008.

In our own work, through Carleton University's Country Indicators for Foreign Policy project, we have repeatedly argued that aid to fragile states is too volatile and poorly targeted, and that donors need to move from a reactive to a preventive change in attitude. A long-term and sustained international effort is needed if permanent progress is to be achieved in fragile contexts and situations.

To that end, it is clear there is a need for more people who are trained specifically to deal with fragile contexts at the state, regional and community levels

For those contemplating such work, apart from the obvious benefits of acquiring language skills and cultural awareness, there are a number of things they can do to help prepare themselves.

The first and perhaps least obvious is the need to improve analytical and diagnostic skills. The second is to clearly understand the policy and institutional environment in which you are expected to work and the

third requirement is to acquire practical skills such as mediation and negotiation.

So-called line departments at universities, including economics and political science, typically meet some of these theoretical and technical requirements.

But the very nature and complexity of a fragile-state environment necessitates an eclectic, if not interdisciplinary, perspective—a perspective that is offered in only a few dedicated international public policy institutions, such as the Norman Paterson School of International Affairs at Carleton University, Laval University and the Balsillie School in Waterloo.

By the same token, programs that typically focus on conflict and peace-building will only give a student a partial picture. Since fragility and failure are by definition a policy environment gone awry and where the issues that arise are not all related to violent conflict, there is also a need for policy analysis and prescription, and a sound knowledge of economics.

Simply put, programs that offer students a combination of elements that bridge theory and policy as well as different disciplines and policies such as conflict, development and international law offer the best chance to appreciate and understand the causes and sources of fragility, the dynamics of fragility processes, including stages, turning points and ripe moments, and the dynamics of third-party involvement, including stabilization, NGOs and the private sector.

As most students entering such programs plan on joining the work force with their newly acquired and practical skills, we believe such programs must possess practical assistance for decision-making, based on an understanding of techniques and forms of third-party engagement, including ethics and

principles for effective engagement.

With their large funding envelopes, donors are in a position to do immense good, but they can also do harm if there is a failure to assess the impact of their actions. Students must possess knowledge of policy evaluation and know how to put into practice measurements of effectiveness.

Developing solid research skills are the hallmarks of such programs, but sometimes knowledge can be best imparted through simulations, case studies and co-op programs in which the students find themselves confronted with puzzles and problems that defy easy textbook answers.

Through direct engagement, students will come to appreciate the complexity of fragile-state environments, competing interests and the need for strategic flexibility and accommodation.

In sum, the future generation of practitioners and policy-makers working in fragile contexts should be exposed as much as possible to interdisciplinary knowledge, be equipped with both theoretical and applied skills, and above all, be given the opportunity to demonstrate to themselves and the organizations for which they work that they are making a real difference through the application of content and process oriented measurements of effectiveness.

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## essons in protecting critical infrastructure

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s our critical infrastructure systems continue to grow in complexity, interconnectivity, and interdependence, it is becoming increasingly difficult for one particular group of experts to successfully assure their safety and security. That's why critical infrastructure protection, or CIP, is growing as a specialized field spanning several sectors of expertise.

Public Safety Canada defines national critical infrastructures as "processes, systems, facilities, technologies, networks, assets and services essential to the health, safety, security or economic well-being of Canadians and the effective functioning of government."

The nation's critical infrastructure includes energy and utilities, finance, food, transportation and government, as well as information and communication technology, health, water, safety and manufacturing. Protecting this infrastructure is of national importance because failure to do so will jeopardize the safety, security, sovereignty, prosperity and resiliency of the country.

Effective protection of our critical infrastructure requires competencies in a number of areas, including security policy and governance, operations security, physical security, information system security, emergency management, business continuity planning, infrastructure engineering design, security engineering and facility hardening.

The combined and collaborative efforts of an inter-disciplinary team of security policy analysts, infrastructure engineering specialists and risk-management practitioners are necessary to provide integrated protection for those key facilities essential to meeting our national objectives.

Recent natural, accidental and deliberate threats have demonstrated clearly this requirement for collaboration among CIP specialists, including: major snowstorms in December 2010; an eight-hour Blackberry outage in December 2009; massive explosions at a propane plant in Toronto in August 2008; the collapse of an overpass in Montreal in September 2006; Hurricane Katrina in August 2005; the July 2005 London terrorist bombings; the major power blackout in August of 2003; and the 2003 SARS outbreak.

Effective and complete informationsharing among CIP stakeholders as well as a comprehensive appreciation of the interdependencies within and among the various critical infrastructure systems are essential to the appropriate protection of critical infrastructures. Both can be achieved through training, education and experience in working collaboratively.

Currently, most critical-infrastructure operators, engineers, policy analysts and security specialists work in "silos" and fail to appreciate the cost-effectiveness of integrated, pro-active, risk-based CIP programs.

A new genre of professionals is required to be trained and educated in the specific challenges of CIP in order to meet the current and future risks to Canada's national objectives.

There is no indication that the current level of threats to critical infrastructures will decrease, and Canada will continue to rely heavily on them to support the objectives of secured health, safety and security of citizens and the effective functioning of government.

CIP practitioners, advisers and leaders require a mix of skills in order to meet the chal-



lenges ahead. They include mastering the theory of CIP; critical thinking and analysis; production of clear and factual CIP reports; presentations to senior decision-makers; collaboration with other experts in CIP; and conduct of CIP activities through supervised practicums, internships and co-operative placements. They also need to be security-cleared and trusted individuals, and should possess professional certification in the CIP specialty.

Few educational opportunities currently exist in Canada to provide these necessary skill-sets efficiently. The only integrated educational program available is the applied and inter-disciplinary Master of infrastructure protection and international security program at Carleton University.

Launched in September 2010, this program is designed for the CIP triad of infrastructure

engineers, policy analysts and security practitioners to work together and share their respective skills, education and experience in the completion of individual and group assignments, including academic papers and practicum assessments of actual critical infrastructures.

The program provides a unique graduate education stream for domestic and international students with backgrounds in history, political science, economics, engineering or natural sciences who wish to make a difference and serve the interests of their respective countries.

This program is also appropriate for current security and infrastructure protection practitioners who are interested in enhancing their expertise in the protection of critical infrastructure.

The aim of any educational program in CIP is to provide an environment for students from each of the specialties within the CIP triad to learn the theory of facility protection, and then to apply that theory in a collaborative, synergistic manner wherein all skill-sets can contribute to an effective protection program.

Because teamwork is so essential to the continued protection of Canada's national critical infrastructures in support of our national objectives, it must also be a vital part of CIP education.

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