CANADIAN GLOBAL AFFAIRS INSTITUTE
INSTITUT CANADIEN DES AFFAIRES MONDIALES

Climate Change and the Future of the Canadian Armed Forces

by Ted Fraser

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CONFERENCE REPORT

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Lieutenant-General (retired) D. Michael Day *– Fellow, Canadian Global Affairs Institute*

Major-General S.R. Kelsey *– Chief Force Development, Canadian Armed Forces*

QUESTION*: The Center for Climate and Security has done extensive research meant to guide countries and armed forces in their planning for climate-related uncertainties. What do you think are the most pressing challenges the Canadian Armed Forces (CAF) will face when it comes to the security implications of climate change?*

Erin Sikorsky

- The first challenge is the Arctic. As the area becomes more navigable, you increase the number of security risks and confrontations.
- The second challenge are the domestic impacts. There will be an increase in the frequency and the severity of extreme weather events, including floods and heat waves. The Canadian military has already deployed in these situations, so there are implications for military training.
- The third challenge is the exacerbation of risks of conflict and instability in already-fragile states. Climate change sows the seeds of conflict, and the world order, to varying degrees, will be reshaped by climate change in the future.
- These risks will get worse in the future, but they are already here today.

D. Michael Day

- There are four elements that will impact the CAF, all of which implicate climate.
    - First, climate change is impacting the number and complexity of conflicts across the world.
    - Second, as conflicts increase in frequency, the CAF will have to make hard decisions about which capabilities – and capacities – it will use, and how it will dedicate its resources without spreading itself too thin while being deliberate about where it chooses to engage.
    - Third — Canada's history in Afghanistan and elsewhere is a reminder — those conflicts will feature an array of complicating factors, including food insecurity, water insecurity, systemic institutional corruption, internal and external factionalism, and they are often at the crossing points of great power conflict.

- Four, the procurement system, which is already under stress and risk, will be under pressure to become more and more green. This is not a bad thing, but it is a complexity that we have not yet considered.

***QUESTION**: General Kelsey, as Chief of Force Development, your role is to help prepare the CAF for the future threat environment. What kind of climate outcomes is the CAF planning for? What is the CAF doing to position itself to face these anticipated challenges?*

Major-General S.R. Kelsey

- We do accept that the character, frequency, scale, and duration of these climate-change driven events, and they do impact how the CAF postures itself.
- The CAF will have to evolve its practices, and it is an opportunity for innovation. There will be higher expectations from Canadians for the CAF, and Canadians want to see Canada help around the world. Climate change is unquestionably going to be the driver for the CAF going forward, and it will be the catalyst for instability while, of course, also driving conflict.
- *Strong, Secure, Engaged* has given the CAF lots of resources to effect change, but ambitions often surpass resources. The CAF needs to see the future differently and recognize that there is a bias to retaining the old structure.
- The CAF has to use science, mirrored with intelligence, to understand the adaptions that are necessary, tapping the value of modelling and analytics.
- Finally, the CAF has to lead and hit its emissions targets. There is an easy opportunity to make some great gains, and there is a tremendous opportunity for innovation.

***QUESTION**: What type of mission/ operations should the Canadian Armed Forces specifically prepare for?*

Erin Sikorsky

- There are two areas where we can expect increased activity: humanitarian assistance and disaster relief.
- There will likely be an uptick for requests for Canadian support. In 2020, we saw 25 climate-related disasters in the Indo-Pacific that the Red Cross had to respond to, and those numbers will continue to rise. There will also be an increase in demand for peacekeeping and stability operations. Canada, for its part, could assist in francophone countries; West Africa is a place where we see a lot of climate impacts.
- But it is not just climate *alone*. Climate is intersecting with other risks. It is conflict, COVID, and climate; food insecurity and poverty have risen as a result of this combustible mix.
- Climate change considerations will need to be accounted for in all operations, because it affects all portfolios. A key challenge for wealthier countries is that they will face climate

impacts at home in addition to abroad and will have to balance those competing demands.

***QUESTION**: Canada has been involved in southwest Asia for a generation, and in the wider Middle East for multiple decades. What does that mean for the type of operations previously mentioned, but the way that Canada has been engaging in those parts of the world – how would you flesh out what that means going forward?*

D. Michael Day

- Future involvements will not be *based* on climate change. It will be *complicated* by that.
- During Canada's time in Afghanistan and Iraq, we have learned about the legal framework surrounding detainees how to navigate that. We have experienced the 'moral' aspect of operations. The government right now, for example, is failing morally on the issue of Afghan interpreters and bringing them to Canada. We have understood that the 'risk issue' is inherently connected to cost. Those are lessons that will determine where we are going.
- Another important aspect pertains to strategic objectives. The complexity of the legal-moral-risk framework will strongly inform how Canada develops its strategy. Climate change changes the dynamic of the framework. The ability to switch between different missions becomes a bit more facile; there is going to be more missions of greater complexity available to Canada to choose from, which will impact strategic objectives.
- There will be more places to engage in, but Canada and the CAF will have to think about how to do this. The CAF cannot change instantly. Every decision the CAF has made is 'let's do more of the same.' That puts it on a specific path and constrains its options, meaning it has the same capabilities, diminished capacities, and a wider range of missions to choose from.

***QUESTION**: What types of additional personnel might be needed within the military to tackle climate security risks? What kind of tools and training do current personnel need?*

Erin Sikorsky

- A "climate-competent" national security workforce is necessary. Not everyone needs to be a climate scientist, but they need to know how to engage with science, how to build that bridge between climate science and national security in order to leveraging it for the development of strategies and plans.
- It *is* about tools — getting tools into people's hands and helping them understand how to use them. But it is also about culture and leadership and showing that climate is an important priority, and something that everyone is expected to understand. The Executive Order that President Biden signed at the beginning of his administration on climate accomplished that to an extent, with orders to the Pentagon, State Department,

and intelligence communities. But that needs to be sustained, and a workforce that cares about these issues is essential.

- The example of the United Nations and the Security Council of inserting 'climate advisers' into peacekeeping missions is worth looking at. They have one in Somalia for the mission there, for example. But to make it sustainable, it would require training everyone. Biden's Executive Order ensured that the U.S.' national defence strategy *had to* integrate climate risk analysis into it. That emphasis will trickle down throughout the workforce and make an impact.

- It will not necessarily require hiring new types of people; taking security experts and ensuring that they use a climate lens is sufficient.

***QUESTION**: That ties into what you were describing regarding the need for different thinking. Can you offer some insight into how the CAF has been engaged in some of that 'different thinking'? What are you anticipating will be the implications for CAF force structure—investments you're already making or particular areas you're recognizing?*

Major-General S.R. Kelsey

- The problem demands some new thinking. Although there is a tendency tend to simplify the future security environment, the CAF has adapted how that consideration is undertaken and it is characterized as a future operating environment.

- What has not changed are the causes of instability: political, economic, food, water, or even energy. In the future operating environment, even if the catalyst for instability is climate change, the nature of the task will not be exclusive or linear. Additionally, the regions of the world that are most likely to be affected by climate change are currently fighting instability or weak governance.

- What the CAF does needs to be challenged, and it needs more poignant top-down consideration. Whether it engages domestically, internationally, in the Arctic — the tools will change depending on the situation.

- It is no longer unusual that the late spring is also the time of floods or fires, and so change that is happening today is reflected through small training adjustments like this. From the 1990s to 2010, there were six major climate change-related operations by the CAF. Since 2011, there have been 30. The CAF is the force of last resort, but it is ready to engage in disaster relief missions.

- We know that, internationally, the demand for the CAF will increase. But this is not a question of adding more people, it is more about accessing the talent and capacity we already have.

- The personnel aspect is tricky in general terms; it is a clear challenge for the Department of National Defence. It requires an enormous investment in talent, and retention is another significant challenge. But the future will demand future skillsets that we have yet to integrate into the structure.

- One of the CAF's objectives moving forward is to see if there are any particular capacity available in the Reserve Force, and to leverage it.

***QUESTION**: We face an existential threat from climate change, but also an existential threat from geopolitics. How do we resolve the issue of climate change when the responses to both of these threats to Canadian security are paradoxically opposed?*

- Some choices need to be made, but the two intersect and cannot be understood without the other. Climate sets the parameters; it is a structural force. There is no national security concern that will not be affected by climate.
- It means two things for geopolitical competition with China and Russia:
    - One, there can be benefits in tackling climate change that then can help in the competition with China. For example, Canada's allies in the Indo-Pacific – who are concerned about climate change and its impacts: if Canada can help them, that helps with the competition with China.
    - Two, there is an opportunity to better understand where Russia and China are coming from on climate change. For a long time, the simplistic narrative has been that Russia is benefitting from climate change and China is out to get whatever it can in terms of economic development. But both countries recognize some of the climate security risks they are facing—they're not monolithic. The Russian national security strategy mentioned climate change *nine times*; in China, there is an interesting debate between those who think the country should move away from coal and others who want to maintain the current system.
- China faces risks, too: they have a lot of coastal cities, there is a risk of desertification and flooding, and understanding that is important, and it cannot be completely separated from geopolitics.

***QUESTION**: Do we need to start looking at the brigade model?*

- In terms of 'force structure,' there are people, supporting infrastructure, training, and equipment. It is a multiplication table — if one of those four factors is 'zero,' you get nothing. As you adjust one of those, so too does everything else adapt.
- When we think about moving away from a medium-weight combat capability piece, we need to accept that we are constrained by some factors — treaties, structural issues, and more. Force generation requires a 5:1 ratio. Meaning, to have one organization deployed, you probably need five in total: one recovering, one preparing, and two in other frames.
- In terms of three strategic mission sets, we have to defend Canada, North America, and engage internationally. The Air Force has NORAD commitments. That constrains the CAF's operational leeway. When you look at the Navy, Canada's economy really floats on salt water, so our responsibility to contribute in the seven strategic chokepoints *requires* certain capabilities.

- We either maintain our current force or move to something else. But dividing up the military means that we would be one-time actors for a couple months, episodically. Additionally, some kind of combat capacity is necessary.

***QUESTION**: Is DND working on adaptation plan for CAF infrastructure?*

- The force the CAF has today is not at all the force Canada needs. FORCE 2025 is the Army's instrument for effecting change such that they can transition properly.

- The CAF has done the same thing: understanding outputs, understanding training – deciding whether to train for the most likely or the most difficult – and one of the largest considerations is as much about workplace attributes as it is about capabilities.

- What we know about today from a 'peak load' perspective is that we do not have the 'medical' we need as a result of climate change, and we do not have enough operational support. But it's not about the Department asking for more money, it's about using and innovating the force structure that we have. This is why the Army is at the centre. We need to get better access to the capacity we already have.

- Infrastructure is part of that. Of course, climate change will further exacerbate what are already fragile circumstances, and there are going to be a number of program decisions to position the force for the future.

About the Author

Ted G. Fraser *is an MA candidate at Carleton's Norman Paterson School of International Affairs. He completed his Bachelor of Arts (Honours) at the University of Toronto, where he majored in political science and international relations. A former Toronto Star reporter and EU-Canada Young Journalist Fellow, Ted has also written for The Globe and Mail, VICE, The Hill Times, and Ottawa Citizen.*

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