

Research funding for African scientists for climate change solutions

Marie-Claude Bibeau, minister of international development and La Francophonie, has announced that Canada will contribute CA\$22.6 million over five years to the African Institute for Mathematical Sciences - Next Einstein Initiative (AIMS-NEI), to train African mathematical scientists to develop climate change adaptation and mitigation solutions.



AIMS students

With the funding, AIMS will expand its successful model of training African post-graduate students in advanced mathematical sciences to incorporate a greater focus on climate change. The funding will be delivered via Global Affairs Canada (CA\$19.6 million) and the International Development Research Centre (IDRC) (CA\$3 million). IDRC will manage the funding on behalf of the Government of Canada.

With this Government of Canada funding, AIMS will develop a specialised program in climate change at AIMS-Rwanda and a climate change course option will be offered at all AIMS centres.

AIMS will also support up to three research chairs to lead some 50 African researchers to build a specialised body of knowledge in addressing the impacts of climate change in Africa. AIMS will create a climate change internship program for its students and alumni, as well as research fellowships for outstanding African women mathematical scientists to conduct climate change research. An additional AIMS centre will be opened in Francophone Africa.

AIMS is building a critical mass of mathematical scientists in Africa who can address the continent's complex economic, health, agriculture, and environmental challenges. Every year, some 50 of Africa's top students enroll in each of AIMS' six centres to take a 10-month graduate-level course, leading to a Master's degree in mathematical science.

Already, AIMS alumni have demonstrated their impact on climate change research. For instance, alumni have developed crop models to estimate the future of food security in the face of a changing climate; used mathematical modelling to help industry convert waste to energy; and developed models to understand the diffusion patterns of infectious diseases as warming climates lengthen transmission seasons.

"This initiative demonstrates Canada's commitment to Africa's youth and their ability to find lasting solutions to the world's most pressing challenges, like climate change. AIMS will make great strides to increase the recruitment and advancement of young mathematical scientists, especially women, in Africa," said Bibeau.

Quick facts:

- Canada is contributing CA\$22.6 million over five years to the African Institute for Mathematical Sciences Next
 <u>Einstein Initiative</u> (AIMS-NEI) so it can train African mathematical scientists to develop climate change adaptation and mitigation solutions.
- This funding includes CA\$19.6 million from Global Affairs Canada and CA\$3 million from the International Development Research Centre (IDRC).
- AIMS has six centres, located in South Africa, Senegal, Ghana, Cameroon, Tanzania, and Rwanda. AIMS has produced 1,211 graduates, 32% of whom are women.
- This new funding builds on past contributions, managed by IDRC, from the Government of Canada (CA\$20 million, 2011-2015) and the UK's Department for International Development (CA\$29 million, 2012-2017), in addition to CA\$2 million in IDRC funding, to expand the AIMS network.
- IDRC has supported more than CA\$190 million in climate change programming since 2006, while strengthening the capacity of more than 165 institutions and more than 1,000 researchers to conduct climate change research.

"Climate change adaptation and mitigation solutions depend on expert mathematical scientists who understand the local and regional context. This investment by the Government of Canada will build local capacity in science and mathematics that will contribute to solutions for Africa as it faces the challenges of a changing climate," added Kirsty Duncan, minister of science, Canada.

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