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Scientific Diasporas: helping them help their home countries



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- Introduction
- Presentation of our diaspora study
 - Policy Proposal



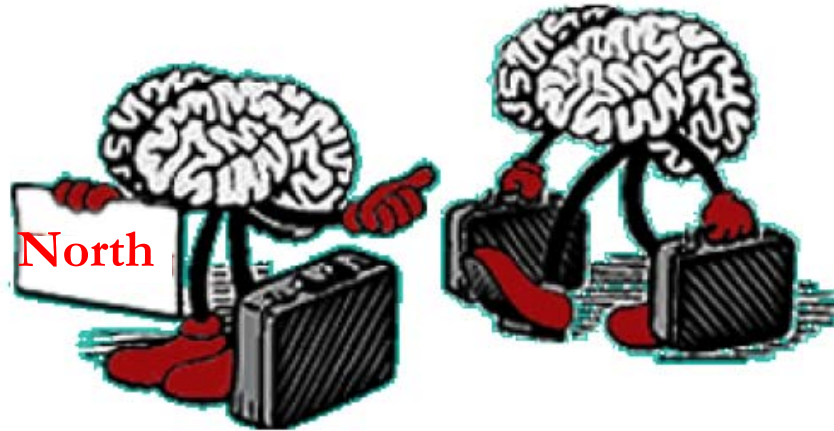
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Canadian Program on Genomics and Global Health

*Harnessing genomics to improve
global health equity*

www.geneticethics.net



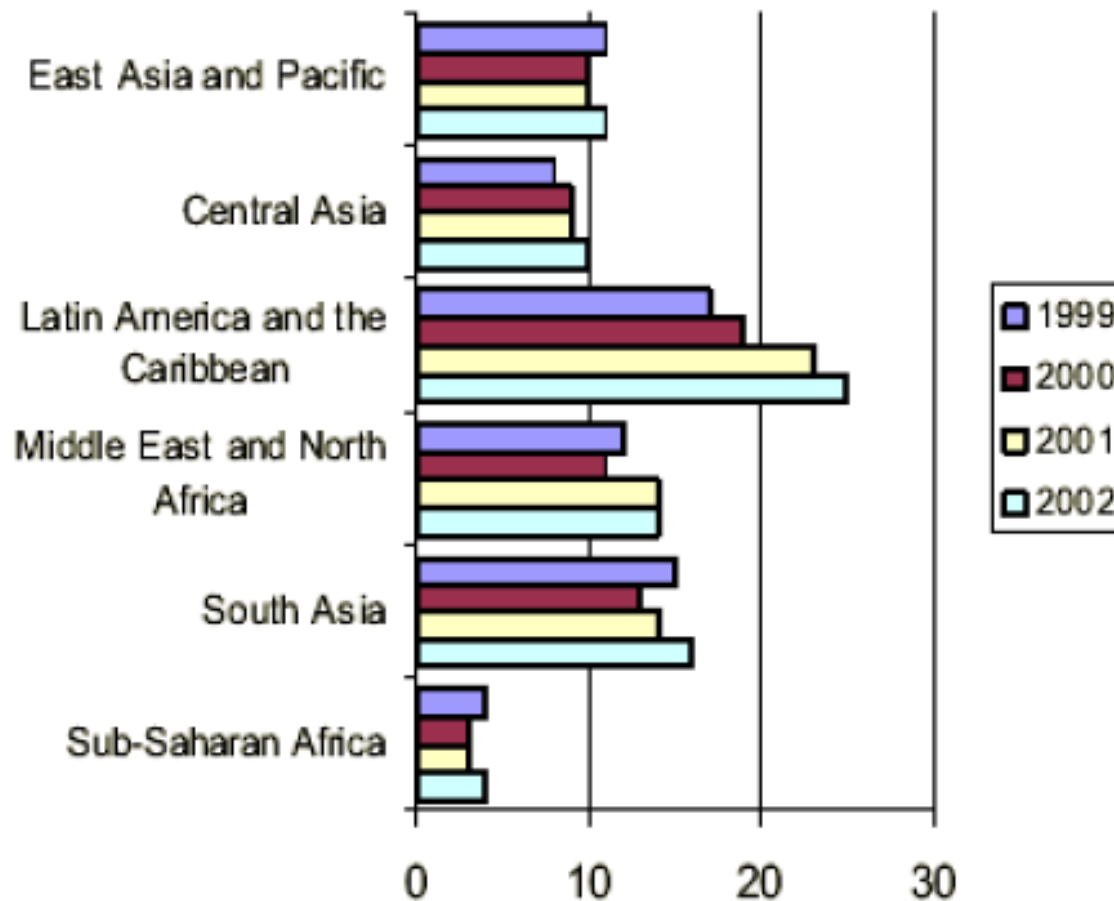
Brain Drain

- There are 3.6 million Africans spread around the world and more than 300 000 of them are highly qualified professionals-doctors, engineers, and scientists-working in “Northern” countries
- Canada is home to ~300 000 Africans



Financial Capital

Remittances (billion of dollars)



Scientific Diasporas: A New Approach to the Brain Drain

by
Jean-Baptiste Meyer and Mercy Brown

*Prepared for the
World Conference on Science
UNESCO - ICSU
Budapest, Hungary, 26 June-1 July 1999*

- self-organized collective bodies made of highly skilled expatriates who – in conjunction with other individuals at home – develop activities to contribute to the scientific and technical development of their members and/or their home country



Study Purpose

- To determine how Canada can draw on its skilled immigrant communities to foster science and technology (S&T) innovation in the developing world



Study Methods:

Design:

Semi-structured, open-ended face-to-face interviews.

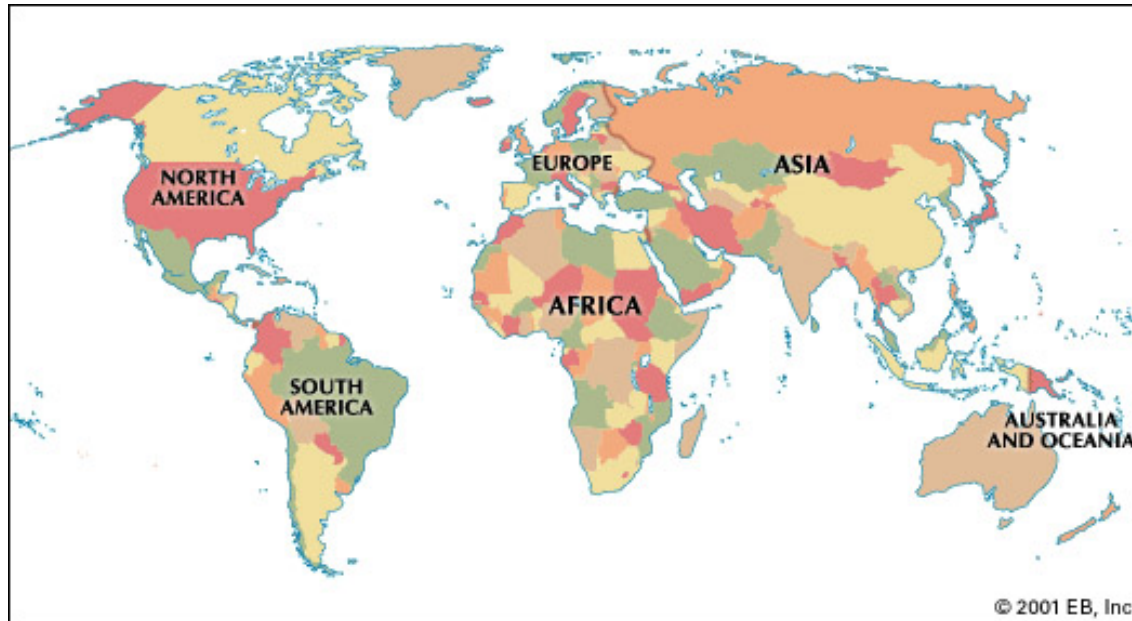
Sampling:





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- **Algeria**
- Argentina
- Bangladesh
- Brazil
- Bulgaria
- **Cap Verde**
- Chile
- China
- Colombia
- Cuba
- Dominica
- **Ethiopia**
- **Ghana**
- Haiti
- India
- Kazakhstan



- **Lebanon**
- **Nigeria**
- **Malaysia**
- **Maldives**
- **Mexico**
- **Pakistan**
- **Peru**
- **Philippines**
- **Romania**
- **Russia**
- **Zimbabwe**

**Sample Size to date: 60 interviews completed
(industry and academia sectors)**



Participant Profiles

- We found that the 60 participants interviewed can be separated into 3 groups with different characteristics that may affect how one engages them:
 - Group I: interested, concerned citizens
 - Group II: individual leaders
 - Group III: diaspora knowledge networks (DKNs)



Diaspora Perspective

- High level of enthusiasm for network building and ‘giving back’

“...now that you are handing us a branch, you are stirring something sensitive and therefore, we are obliged to respond”

“...we have a moral responsibility to give back”



Diaspora Perspective

- Little systematic, organized activity linking them to their countries of origin

“...it has been quite frustrating trying to bridge [to home country]...the momentum is not there”

“...people have to believe, first of all, that it’s possible, and so I found That commitment is the hardest “



Diaspora Perspective

- Lack of knowledge of activities that organizations support with respect to building scientific and entrepreneurial bridges with the developing world
- A shortage of resources in community-based organizations to support networking and partnering activities
- Lack of formal vehicle through which exchanges (virtual and physical) of students, researchers, and business leaders can take place with developing countries

Desire to give back reinforced

- A growing capacity within Canada's diaspora communities to contribute significant scientific, business, and development expertise to their countries of origin
 - short term visits to developing countries where they can provide "hands on" science or entrepreneurial training;
 - 'virtual' teaching (web-based educational vehicles);
 - grant writing tutorials;
 - a venue to facilitate business partnerships ;
 - funding of joint research projects;
 - platforms that allow post-doctoral fellows spend some time in developing countries without penalty to their career in Canada
 - Government-run diaspora program for S&T development in developing countries



Policy Proposal

- Creation of a Diaspora Business Initiative (DBI) to provide institutional support and funding
- The creation of a Canadian Science Corps which would link to the Global Science Corps to send scientists in Canadian universities and businesses to developing countries



Diaspora Business Initiatives

- enable existing and encourage the development of new community-based organizations in key Canadian diaspora communities

International Community
Partnership Funds

Diaspora Business Initiative
Support Network



Canadian Science Corps

- Focus on linking scientists, researchers, and engineers to developing countries
- Cooperation with the Canadian Association of Universities and Community Colleges (AUCC)
- Cooperation with the Global Science Corps (GSC)



Strength in Cooperation

- AUCC has experience in managing and delivering world class international programs (e.g. youth professional international program, Canada Corps)
- Build on the Global Science Corps' strength and expertise in building partnerships with US universities and other organizations

Canada's Opportunity



- Recognition of the significant contribution of Canada's diaspora communities to our economic and scientific excellence
- Engagement of these communities around the need to build stronger linkages and networks with the business and scientific communities in developing countries
- Encouraging the development of new and enabling existing organizations
- Implementation of a Canadian Science Corps to enable scientific diasporas to share their knowledge and experience and contribute to S&T capacity building in the developing world



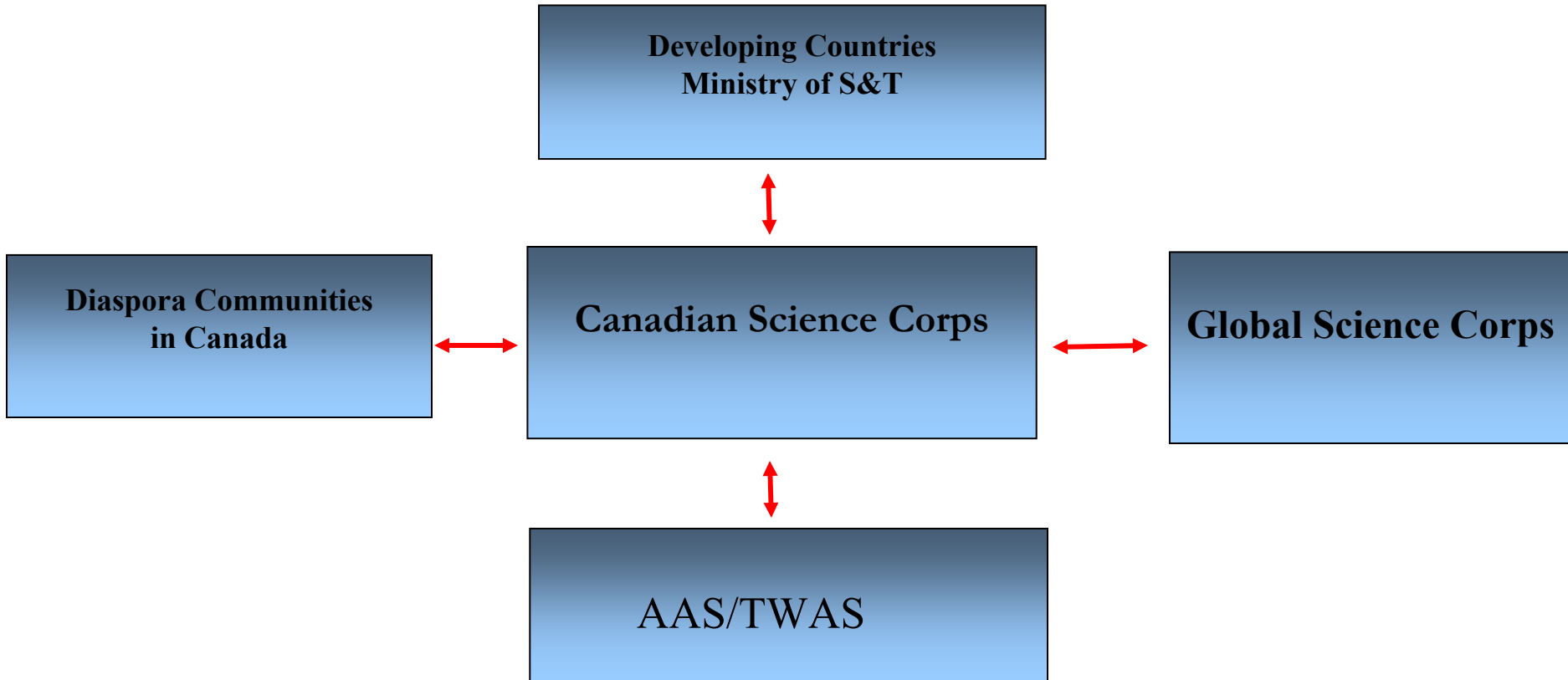
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Funding partners listed at www.geneticethics.net

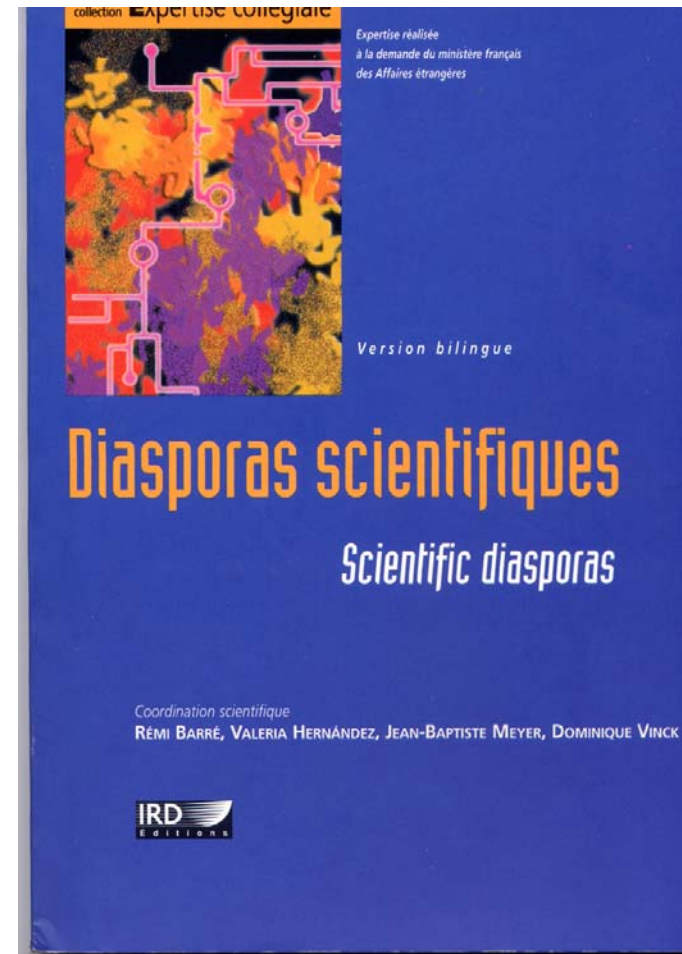


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- The French Ministry of Foreign Affairs is initiating pilot projects with scientific diasporas in French speaking developing countries
- Morocco, Mali, Senegal, and the Comores



Source: Remi Barré *et. al*, IRD editions 2003



Transfer of Knowledge Through Expatriate Nationals (TOKTEN)

The **TOKTEN** concept is a global **UNDP** mechanism tapping on expatriate nationals, who had migrated to other countries and achieved professional success abroad, and mobilizing them to undertake short-term consultancies in their countries of origin, under UN.





Association des universités
et collèges du Canada



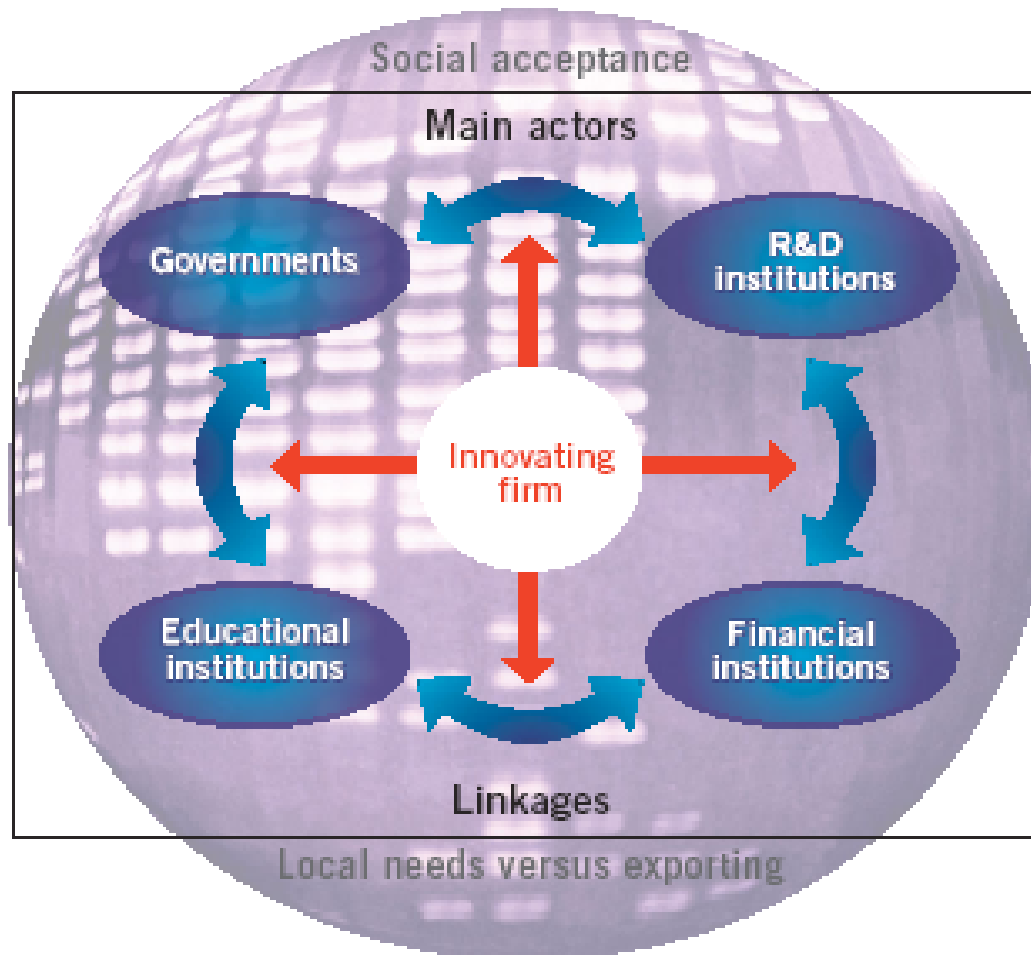
Association of Universities
and Colleges of Canada

AUCC

This program focuses on getting Canadian universities to help DC universities establish curricula (e.g. biomedical engineering program in Cuba)

-Funded by CIDA

-this is done at an institutional level



the network of institutions in the public- and private-sectors whose activities and interactions initiate, import, modify and diffuse new technologies



Different ways to harness diaspora contributions for development

- **China**
 - Long-term strategy of attracting direct investment and opening trade opportunities through overseas Chinese communities
- **India**
 - Recent diaspora multilateral policy focused on direct investment, portfolio investment, technology transfer, market opening, and outsourcing opportunities
- **Taiwan**
 - “Brain Trust” model, focused on attracting human capital from the diaspora



Diaspora Networks





Diaspora Perspective

“...if the Canadian government created an organization, provided us with a nucleus, made the initial effort, I think there would be so many people who would join...but to initiate it ourselves, the effort is too important and it would be done to the demise of the research we do and then it is our career that is compromised.”