

## **Climate justice partnership linking universities and community organizations in Toronto, Durban, Maputo and Nairobi**

by Prof. Patricia E. Perkins (BA, MA, PhD)  
and Ana Louise Tavares Leary (BA, MES candidate)

Faculty of Environmental Studies  
HNES 109, York University  
4700 Keele Street  
Toronto, Ontario  
M3J 1P3  
Canada

email: [esperk@yorku.ca](mailto:esperk@yorku.ca); [ana.leary@gmail.com](mailto:ana.leary@gmail.com)

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**ABSTRACT:** This paper describes a project based at York University in Toronto, funded through the Climate Change Adaptation in Africa program of the International Development Research Centre and the U.K. Department for International Development (DFID), which is working to increase the participation of marginalized groups, especially women, in urban water governance. Students and faculty members from the University of Nairobi, Kenya; Eduardo Mondlane University in Maputo, Mozambique; and the University of KwaZulu-Natal in Durban, South Africa are working with civil society organizations in the three cities and with York University researchers to show how organizing in local communities can help the vulnerable to deal with climate change.

As people in marginalized communities begin to address collectively the impacts of climate change, this summons political attention and allows those with direct experience to influence government policy. Civil society organizations, with support from local and international faculty and students, facilitate and focus this activism. University students help to document the NGOs' work during internships with the NGOs. They also learn community development skills and make contacts. Faculty members publish and disseminate ideas about grassroots climate change adaptation and resulting political responses through presentations, publications and the project's website: [www.ccaa.iris.yorku.ca](http://www.ccaa.iris.yorku.ca).

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### **I. Introduction**

The grave challenges posed by global climate change require creative approaches and contributions from all levels of society in order to develop workable and effective adaptation solutions which address society's most important needs first. This paper reports on the methodology and initial results of an ongoing project which demonstrates the value and potential synergies of university-community partnerships focusing on sustainable development problems.

Partnerships between university researchers/teachers and local community groups exist in many places, but academics generally do not comment on or emphasize the political importance of these relationships. For example, in his excellent recent survey of global democracy-building initiatives, MIT sociologist Xavier de Souza Briggs mentions the importance of grassroots organizations and their links with government, but does not comment on how universities can facilitate this connection, or indeed on the effects of his own academic research in articulating and building awareness about grassroots knowledge and its policy impacts (de Souza Briggs 2008). Similarly, political ecologist Joan Martinez-Alier highlights the importance of poor people's environmentalism and what it can teach both government and academia, without mentioning the crucial assistance researchers provide when they name and legitimize the knowledge of the poor (Martinez-Alier 2002). In terms of climate change adaptation, community-based approaches have clear political implications, and require appropriate research and training reinforcements, which are the function of universities -- even if grassroots organizations do not make this connection (Ensor and Berger 2009). As Vandana Shiva has said, "[The] best environmental education is in the minds of those that have suffered environmental destruction. It is from there that the place of learning needs to start" (Shiva 2008).

This paper's explicit focus is the potential of university-based research and training projects to reinforce community-based climate change adaptation and political responses to climate change at the grassroots level. Since universities and poor communities often share physical environments in close proximity, where climate change impacts are felt and available to be studied, university-community collaboration is a creative approach to addressing the challenges of climate change that is both legitimate and promising. The methodology of this paper is to describe one ongoing attempt to build such links, and then to discuss their challenges, potential and lessons for the future.

"Strengthening the role of civil society in water sector governance towards climate change adaptation in African cities—Durban, Maputo, Nairobi" is a three-year project

based at York University in Toronto, Canada, which links academic researchers and civil society organizations in three African cities with York students and faculty (Climate Justice and Water Management Project 2012). Its goal is to improve watershed governance for climate change adaptation and enhance resilience and adaptive capacity of vulnerable and marginalized groups, especially women. This project, which started in 2010 and runs through the end of 2012, is supported by the Climate Change Adaptation in Africa (CCAA) program—a joint initiative of Canada’s International Development Research Centre (IDRC) and the United Kingdom’s Department for International Development (DFID). Like the earlier Sister Watersheds Project, also based at York University, this project’s methodology includes collaboration between students, NGOs and academics as well as community-based research and environmental education. Project partners based in universities and several NGOs in Nairobi, Maputo and Durban are working together to achieve the following objectives:

- To characterize the institutional framework for urban water governance in the three cities, and explain how different actors within this framework cope with climate change and variability
- To identify and test viable alternatives for enhancing civil society’s role towards adaptation to climate change and variability by vulnerable groups (e.g. by developing education, training and awareness programmes) and
- To share widely the knowledge generated for potential adoption by other cities in Africa.

The project is being implemented by the following community-based NGOs in Africa: Kilimanjaro Initiative (KI) and Kenya Debt Relief Network (KENDREN) in Nairobi; Women, Gender and Development (MuGeDe) and Justiça Ambiental (JA) in Maputo; and Umphilo waManzi (Water for Life) and the South Durban Community Environmental Alliance (SDCEA) in Durban. The University of Nairobi (Nairobi), Eduardo Mondlane University (Maputo), and the Centre for Civil Society at the University of KwaZulu-Natal (Durban) provide academic research coordination and student supervision for this project.

The project focuses on low-income areas of each city, as these tend to be most severely affected by periodic flooding and other climate change impacts. Residents of low-income areas often lack the ability to protect themselves against the impacts of extreme weather events (Adger et.al. 2006; Toulmin 2009; Daley, 2008). The capacity-building aspects of this project include training and research sponsorship for students and faculty in the partner universities; support for community-based research, workshops in low-income communities and secondary schools, curriculum and materials development, and skills development within the partner NGOs; training of environmental educators and organizers; contributions to the pool of experienced and qualified community workers in each country; strengthening of all the partner institutions’ capabilities to carry out international projects; and contributions to the international literature and professional knowledge concerning water issues, environmental education techniques, and community organizing for improved civil society involvement in governance. The networks being built extend from local and community-based linkages through regional and national-

level policy groupings to international academic and policy networks on civil society, watershed management, and governance.

The political process of policy development and implementation depends on the interchange between civil society groups, researchers generating information on current realities, and government. This project attempts to challenge the conventional notion that only educational institutions “produce” knowledge. Understanding community needs and what helps particular civil society groups to see and act to strengthen their role in democratic governance, for example, is something in which community organizations and NGOs have eminent expertise. This collaborative approach, also known as participatory action research (PAR) is broadly defined as “research by, with, and for people affected by a particular problem, which takes place in collaboration with academic researchers. It seeks to democratize knowledge production and foster opportunities for empowerment by those involved” (Kindon *et al.* 2008).

One objective of the project is to demonstrate how partnerships between academics and non-academics can be very stimulating and effective. This type of partnership encourages and allows the partner NGOs to reflect on and analyze their activities and to document “learning” more systematically than they are often able to do, by bringing student researchers into the NGOs as collaborators/interns. The partnership also encourages universities to be more pragmatic about teaching and research, and to “field-test” approaches towards community organization, equity, and capacity building. Students committed to the project's goals of supporting participatory engagement by local people in municipal water decision-making are given practical opportunities to develop their skills, as a way of hastening each city's climate change preparedness. This project aims to contribute to the integration and meaningful participation of women in formal decision-making processes, as well as to build their adaptive capacity and increase their resilience and ability to cope with climate change.

## II. University-community linkages for improved climate change adaptation

The single most important line of defense against climate change is education. Only with education can local communities, policy-makers, finance and insurance institutions, and global agencies flexibly incorporate complex scientific, economic, and socio-political information about a rapidly-changing world into effective and efficient climate change strategies. This is why universities have a crucial role to play, and why processes that extend universities’ expertise and information-access to non-traditional communities outside of academia are vital parts of any equity-promoting climate change adaptation strategy. Training students in how to facilitate these extension activities -- by nurturing their community development, conflict resolution, and environmental education skills -- is a major contribution which universities can and must make as the world heats up. Faculty members, too, need to progressively focus their research and publication efforts towards helping those first affected by climate change to develop adaptation strategies, and to guide policy development for equitable priority-setting. Civil society organizations which are already working with marginalized communities on

environmental issues can play an important bridging role. The ecological knowledge and awareness of local communities is an important resource for governments as they struggle to deal with the increasing numbers and severity of extreme weather events induced by global warming (Ensor and Berger, 2009).

Climate change thus challenges universities to develop new ways of heightening their outreach, relevance, and partnerships beyond academia. By creating and sharing new models of how to do this, universities can contribute to climate change adaptation and mitigation strategies which go far beyond a passive scientific understanding of how the earth is changing.

Between 2002 and 2008, York University, the University of São Paulo (USP) and the Ecoar Institute for Citizenship, an NGO in São Paulo, joined together to work on a project linking academics and activists to strengthen the voice of marginalized people in water management -- the Sister Watersheds project. Designed by renowned Brazilian environmental educators Dr. Marcos Sorrentino and Larissa Barbosa da Costa, this project tested out community environmental education in two watersheds containing University of São Paulo campuses, those of the Piracicaba and Pirajussara Rivers, as well as the Black Creek watershed where York University is located. The project aimed to increase the potential for marginalized community actors to participate in local water governance. Masters of Environmental Studies students at York University whose theses analyzed aspects of the social-environmental situations of these communities were chosen to take part in Sister Watersheds student exchanges and spend 4-6 months in Brazil. Brazilian students also visited Toronto and researched similar issues there. One particularly productive exchange group, composed of Brazilian graduate students in the fields of hydro-engineering, urban planning, ecological economics, and landscape architecture, contributed a detailed study of how the growth of the York University campus has contributed to increased flooding probabilities in the Black Creek watershed over time. The studies by the USP and York exchange students proved valuable for communities in both countries, and helped their faculty advisors to deepen their understanding of the relation between watershed governance, civil society engagement, and climate change – leading to a number of new publications and research contributions.

Similarly, the CCAA project in Africa reinforces the importance of the interdependence of traditional and local scientific knowledge combined with academic work in communities. This in turn encourages NGOs and community organizations to develop their transformative power. Many times this type of work has great political weight. It can also facilitate the spread of important ideas regarding ways to confront not only climate change but also barriers to social and environmental justice (Desai, 2002). Such barriers, of course, exist in both the Global North and the Global South. Student exchanges and research partnerships can highlight creative methods of addressing these barriers which are appropriate in both Southern and Northern contexts.

For example, partly inspired by Brazilian examples of green community development and environmental organizing, students and faculty have contributed to activist projects aimed at environmental education and green job creation in the marginalized community

near York University in northwest Toronto. One of these, the Green Change project in the low-income Toronto neighborhood of Jane – Finch, is administered through the Jane - Finch Community and Family Centre, a nonprofit social services and community development agency. The goal of the project is to engage community residents in discussion about the environment and social justice issues in an accessible way. The project uses a social justice and anti-oppression approach where community members have ownership over the direction and development of the project. A training program for Green Change Agents was developed, which included workshops, tours and visits in the community. The award-winning training program introduced residents to five key areas: energy conservation, waste management and recycling, green active living, social justice and the green economy (Phillips, 2010).

York University students have been involved in the project as volunteers, interns, and community-based environmental educators. Three York Graduate Assistants have worked this year on developing new curriculum modules for the next phase of Green Change agents' training. In addition, these students have helped with fundraising, report-writing, and local outreach and environmental education for those living in the social-housing building where a new Centre for Green Change is being built. Faculty members have also been involved; an Environmental Studies professor sits on the Green Change Project's advisory board, and other faculty members have participated in gala fundraising events.

The CCAA project includes the same kinds of student internships locally, followed by international exchange trips which allow students to share their knowledge of climate change challenges and ways of addressing them. Graduate students based in Nairobi have produced an extensive study of the city's physical and institutional infrastructure for water management, worked with the NGO The Kilimanjaro Initiative to develop soccer fields (and resist pressures for expanding low-income housing in flood-prone areas) in the floodplain of the Nairobi River below Nairobi Dam in the Kibera slum, and helped the NGO KENDREN (the Kenya Debt Relief Network) to develop the rationale for considering climate debt relief as a parallel to financial debt relief as a climate justice strategy. In Maputo, students are working with urban farmers producing food on the university campus, as well as residents of several increasingly flood-prone low-income neighbourhoods who are seeking ways to mitigate climate change risks. They also are contributing to curriculum development on climate change for local high schools, working with the NGO Justiça Ambiental. In Durban, students are working with civil society organizations – Umphilo waManzi (Water is Life) and the South Durban Community Environmental Alliance – on a range of activist education and green development projects. By providing skilled interns and volunteers for community organizations' projects, and training university students in how to do community-level work, the project is building local and regional capacity to address climate change.

### III. Research and policy implications of academic-activist partnerships

For both academics and non-governmental or civil society organizations, such partnerships can bring a range of important benefits. These include the following:

#### Environmental education

Skills needed in community-based organizations and local communities related to evolving green jobs, and for effective public involvement in watershed and other environmental policy processes, can be developed and shared in marginalized communities via organized processes of continuing education (Pinderhughes 2006). These can include environmental education programs for youth and seniors, adults, and in-service training for working professionals such as public health agents/nurses, teachers, and government officials. Local community organizations and NGOs are ideally situated to develop and fine-tune such educational programs, which can lead to increased employment opportunities and/or pay upgrades for local residents.

University students can develop marketable and lifelong skills in community development and workshop facilitation, fundraising, conflict resolution and dispute mediation, management, video production, and many other areas by working with community-based organizations through internships and field experiences. Their writing and research skills can be very helpful to organizations which are stretched and generally unable to document and share their accomplishments and creative solutions to environmental and political problems.

#### Creative organizing/workshop techniques/strategies and international sharing of ideas

Ideas, designs, and financing proposals can be shared internationally through green/climate change channels. For example, civil society networking surrounding the United Nations Framework Convention on Climate Change annual COP meetings involves a wide range of community-based environmental NGOs that have participated in the civil society forums accompanying the governmental negotiations. Academic conferences can bring together university-based researchers and local environmental activists for useful discussions on innovative policy and grassroots solutions to the pressing ecological situations people face on the ground.

A conference entitled “How will disenfranchised people adapt to climate change?” at York University in April 2009, organized by the university’s Institute for Research and Innovation in Sustainability, focused on local struggles and the importance of traditional ecological knowledge for addressing climate change in Arctic Canada, Brazil, South Africa and India (IRIS 2012). Likewise, Majora Carter’s advocacy work highlights the common strategies marginalized areas can use in sparking green community development throughout the global North and South (Carter, 2010).

#### Role of municipal government and public education

Cities worldwide have begun to develop climate change adaptation plans and to take stock of their new needs – physical, social, economic (Lucon and Goldemberg 2010).

When community groups organize to share their expertise and knowledge of challenges, as well as ideas on how to meet them, they may be able to build beneficial partnerships with local governments. Public officials everywhere need training in all aspects of climate change preparedness, and environmental education for the general public is also crucial in a warming world. Here too, networking, university support, and global communication help groups to learn from “best practices” and creative ideas in use elsewhere. University partnerships can facilitate and add “weight” to local organizations’ interventions with government officials.

#### Mobilizing finance

University-based researchers often have access to grants, information and research funding sources which go far beyond what community-based organizations can muster, and which place emphasis on practical applications of the research and teaching involved. For this reason, academic partners can be strong advocates and partners of community-based organizations in their environmental education and political outreach efforts. Academic partners can sit on community advisory boards; edit grant proposals; analyze, publish and disseminate innovative community initiatives; and contribute to local fund-raising efforts in a range of other ways as well.

#### IV. International networking and information-sharing

How can partnerships between academics and community groups contribute to research priorities, relevance, and success, and to global and local information-sharing which benefits all participants? Because of the power imbalances which are familiar to anyone who has attempted to undertake community-based research, it is important for partners to be very clear about the contributions, goals and benefits of all groups and individuals involved.

Participation in research projects can give community organizations and NGOs unprecedented access to international meetings, networking opportunities, and fundraising possibilities. Partners can develop joint research presentations and panels for international conferences, and jointly explore publication opportunities. Where universities have the means for online networking, Skype conferences, library facilities, and meeting rooms, they can share these and provide access to NGO partners which can be an important benefit for them. The increased dissemination and publicity of community-based activism which flows from academic attention can have important policy benefits. Student-initiated and produced videos, maps, social networking, website content, reports, grant applications, and other products can greatly contribute to NGOs’ work.

The benefits also flow both ways, and can strongly influence and benefit university partners as well. For example, York University has begun a tradition of inviting a series of “community scholars” to give seminars, advise students, and contribute in a practical and experiential way to classroom teaching over the course of a term or academic year.

At an international level, the Dame Nita Barrow Distinguished Visitorship speaker series at the Ontario Institute for Studies in Education of the University of Toronto brings international women activists from the Global South to lecture and meet with students each year. And of course, access to community-based experts on relevant and pressing research issues is a key benefit for academics of partnerships extending beyond the university.

Research projects tend to lead to opportunities for further research, exploration, and expansion of research partnerships. In this way, they both advance the careers, teaching relevance, and professional development of the faculty members and students involved, and they also contribute to global synergies and advance understanding of complex global problems such as climate change.

## V. Conclusion

The social change which is fundamental to “sustainable development” anywhere – in the South or the North – depends on a synergistic mix of information, public education, leadership, institutional flexibility, and political organizing (as well as serendipity). Research, when it is locally motivated and relevant and reinforces grassroots ecological, social, and political knowledge, is a fundamental pillar of interactive development, generating the current information which underlies public education and organizing around issues of importance for social change (Faber and McCarthy 2001).

The Climate Change Adaptation in Africa (CCAA) climate justice project in African cities is aimed at generating innovative ways of strengthening the ability of civil society to participate in watershed decision-making, within the institutional structures set out by national water laws and other statutes. Graduate students from partner universities visit each other’s campuses for short research trips; faculty members collaborate and direct the research; while the integral collaboration of community-based NGOs is essential. The NGOs have long experience with environmental education and organizing in low-income communities, and with presenting information in multimedia ways which are just as accessible to busy politicians and bureaucrats as to barely-literate community residents. The researchers and activists working with the CCAA project are fortunate to share a climate of change-oriented exploration and communication: What water-related issues are the most important to local communities? What are the best, most creative and interesting ways to help get the public involved in and knowledgeable about water issues? When the law creates space at the decision-making table for “civil society”, how can that democratic opening be used effectively and how can multiple publics and views be included? These questions are relevant in Canada just as in Mozambique, South Africa and Kenya, and in both urban and rural areas.

There are many examples of synergies between research and development-oriented activism. Masters’ papers and other research reports, researched and written with project support, include studies of international synergies to address climate change: participatory community organizing, women and water management, gender justice and

climate justice, innovations in participatory water governance in times of climate change, politics of climate justice, eco-social commoning of water, conflicts over water management, climate change and water governance, and detailed histories of local green community development and climate justice initiatives.

Without the theoretical insights drawn from academic fields such as action learning and research, participatory planning, the dynamics of institutional change and political organizing, the CCAA project's work would be impoverished. Likewise, the project's grounding in compelling current political and social issues, and its links to communities affected by these issues, is also crucial to its success.

Earlier writers on traditional knowledge and climate change have commented on the desirability of integrating scientific and community knowledge for better understanding of appropriate climate change adaptation processes (e.g. Reid et.al. 2009; Birkes and Jolly 2001). This paper broadens that idea to demonstrate that universities and their local communities can fruitfully engage on many levels to build strong sustainable development and climate change adaptation partnerships with great potential. Given the pressing challenges posed by climate change, and the expertise and needs at the community level, university researchers and teachers must build the skills and train students to expand these promising forms of outreach and collaboration.

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## **About the Authors**

### *Prof. Patricia E. Perkins*

Patricia E. (Ellie) Perkins is an associate professor in the Faculty of Environmental Studies, York University, where she teaches and advises students in the areas of ecological economics, interdisciplinary research design, and community development. Her research focuses on feminist ecological economics, local economies, climate justice, and watershed governance. She currently directs a "Climate Change Adaptation in Africa" (CCAA) project funded through the International Development Research Centre and the U.K. Department for International Development.

### *Ana Louise Tavares Leary*

Ana Louise Tavares Leary is a graduate student at York University, Toronto, in the Master in Environmental Studies program. She completed her Bachelor of Arts degree at McGill University in political science and international development studies. At York, Ana is a graduate assistant for the CCAA project. Her research focuses on climate change policy, international development and waste diversion.