



How Will Disenfranchised Peoples Adapt to Climate Change? Strengthening the Ecojustice Movement

Nicole Klenk, Dawn R. Bazely and P. Ellie Perkins.

From transcripts and summaries prepared by Alicia Filipowich (York Centre for Asian Research), Jennifer Jew & Annette Dubreuil

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The fourth assessment of the Intergovernmental Panel on Climate Change (IPCC) acknowledged that millions of people are currently, and will increasingly be, affected by the impacts of climate change, in the form of floods, droughts and other extreme events, as well as related threats to food security. In response to these global environmental changes, the international community, including civil society, is acting on the need for immediate adaptation measures and is developing strategies for future adaptation. However, the impacts of climate change are unevenly distributed, with many of the poorest, most vulnerable peoples experiencing the immediate effects of climate change, in the here and now. As the IPCC noted, developing countries are disproportionately affected by climate change and often, the least able to adapt due to lack of infrastructure and resources.

The first, of what we hope will be many Ecojustice-themed Conferences, was held at York University in 2009. The idea for the conference came out of a conversation that York University’s Sheila Embleton (Vice-President Academic) and Adrian Shubert (Associate Vice-President International) had, on a trip to South America, with Miriam Duailibi, Director of the ECOAR Institute for Citizenship in Brazil, an NGO formed after the 1992 Earth Summit. Miriam expressed her frustration at how many conferences on climate change tend to feature academics and others from the Global North lecturing the Global South about how to respond to climate change. Miriam challenged York University to hold a different kind of conference, at which

the Global North would be the audience, hearing about the circumstances, needs and realities of people in developing countries as well as how local peoples are responding to these challenges. A steering committee was formed in Fall 2008, and the scope of the conference was broadened to include voices from South Africa and India. Most significantly, the First Nations and Inuit presented the Canadian viewpoint. The conference brought together activists and academics from the Global South and the North to discuss adaptation to climate change.

Ecojustice Conference Summary

Ecojustice Conference Origins	1
Thematic sessions	
<i>Brazil</i>	
CO ₂ Capture and Geological Storage (CCGS)	2
ECOAR – Environmental Education and Agroforestry	2
<i>India</i>	
Lighting a Billion Lives	3
Steps for Adaptation	4
Drought and Floods in South Asia	4
<i>South Africa</i>	
Community-based Adaptation	5
Rooibos Tea	6
Small-scale Farmers	7
<i>Canada: Arctic and Sub-Arctic</i>	
Vuntut Gwitchin First Nation	7
Dene Kede Curriculum	8
Traditional Knowledge and International Law.....	9
Emerging Themes.....	10
Recommendations.....	10
Glossary.....	11
Funding and organizing committee.....	12

The conference ran over two days, and on each day, a three-person panel from two countries presented, one panel in the morning and one in the afternoon.

Brazil



Left to right: Paulo, Miriam & Eduardo

CO₂ Capture and Geological Storage (CCGS): Paulo Cunha

Paulo Cunha is a metallurgical engineer and an activist at heart. He works as a consultant in Rio de Janeiro, Brazil, with community organizations and advocacy groups on carbon sequestration and greenhouse gas mitigation. He is an editor of the Intergovernmental Panel Report on Carbon Sequestration.

Paulo began his presentation by reflecting on important values to keep in mind when thinking about adaptation to climate change, which really set the tone of the conference: **collective reflection, generosity, solidarity, responsibility, innovation, service, learning, love, and openness.**

Paulo described how CO₂ capture and storage can avoid millions of tons of CO₂; it is one of the large-scale solutions; it can be an emergency answer and be immediate. Capture and Geological Storage (CCGS) is an emerging technology suited to large stationary point sources of CO₂ from power generation, industry and H₂ production. According to Paulo, if we store all CO₂ in saline aquifers for the next 50 years, we can store 500 per cent of all expected CO₂ emissions. This is a real solution.

Paulo discussed his proposed Brazilian Manifesto: “Seven Wedges” Sustainability

Approach. This approach tackles climate change through mitigation technologies and its potential application to CO₂ CCGS. He emphasized that such an approach would not only be about energy production, but also about speaking to citizenship values, environmental resiliency, and quality of life.

The Seven Wedges are:

1. Sustainability in all CCGS steps of technological development;
2. Sustainability in the facilities and in the implementation of the involved technology;
3. Sustainability in the relationship between installations and surrounding environment;
4. Sustainability by increasing the mitigation capacity of the project through additional mitigation measures;
5. Sustainability of adaptation measures;
6. Sustainability through educational activities;
7. Sustainability through information and communication.

ECOAR – Environmental Education and Agroforestry: Miriam Duailibi and Eduardo S. Quartim

Miriam Duailibi is the Director of ECOAR Institute for Citizenship in São Paulo. She has been involved in advocacy, environmental education and community development work in low-income communities in urban São Paulo since 1992. Eduardo S. Quartim is a forest engineer who works on conservation projects in Brazil. He is a Project Coordinator with the ECOAR Institute for Citizenship.

ECOAR Institute for Citizenship is a non-profit civil society organization that focuses on the environment, and education for sustainable development. ECOAR’s mission is to act on emerging environmental issues such as global warming, to contribute to the construction of sustainable societies and to help improve public social-environmental policies. To reach these goals, ECOAR has developed projects, consultations and partnerships that encourage

actions for sustainable development in a range of local areas and enterprises.

Projeto Floresta da Família is an ECOAR project that provides technical assistance and forest extension to farmers' families in the Atlantic rainforest. The project slogan is '*good results grow on trees*'. In the last five years, Eduardo has been working in three small towns near São Paulo with a combined population of 250,000. This area produces a large amount of vegetables and is also an important region for organic production. Nevertheless, environmental degradation on farms is a common occurrence. Forest production includes: timber products, firewood, coal, logs and lumber and non-timber products, such as corn, beans, manioc, honey, propolis and fruits.

The anticipated results of this project are:

1. To increase and maintain apicultural grass areas.
2. To increase and maintain biodiversity by protecting, enriching and planting Atlantic rainforest in permanent protection areas.
3. To ensure natural resources are conserved for present and future generations.

Implementation of Agroforestry projects can be challenging because farmers often find it difficult to visualize the concept of multiple-use areas, over single species planting. ECOAR is proposing land-use where fruits, roots, timber, and medicinal herbs are grown in the same system.

What is needed, said Miriam, is to raise public awareness about global warming, and how its harmful consequences are a matter of justice and ethics. We need to build a path to a new model of development: a new paradigm that links and integrates the politics of climate change, economic development, health, jobs, global and local environment and energy security in a systemic design.

India



Left to right: Chaitanya, Joyashree and Vivek

Lighting a Billion Lives: Vivek Jha

Vivek Jha is the Area Convener, Rural Extension Activity, for The Energy and Resources Institute, TERI, in India. Vivek is an urban and regional planner who trained at the School of Planning and Architecture in Delhi. At TERI he works with community initiatives, including the project 'Lighting a Billion Lives'.

Vivek began his presentation by saying that adaptation is one of the key focal points catalyzing climate change issues. Adaptation requires a clear assessment of vulnerability to and the impacts of climate change in different ecosystems and communities.

Solution sets should include three factors:

1. Development of a set of technology interventions with full participation of the community, encompassing innovations in agriculture, rural energy, natural resource management, and information and technology;
2. Development of institutional, market and financial mechanisms. These mechanisms are of utmost importance, and include policy frameworks at the level of government, NGOs, civil society, corporate, and other funding institutions.
3. Building local adaptive capacity in communities.

This is the philosophy behind INSTEP (*Integrating New and Sustainable Technologies for Elimination of Poverty*). INSTEP is an approach that was adopted by TERI in 2000. It seeks to introduce and integrate new and

sustainable technology for environmental protection, to improve agriculture, to bridge the information gap, and provide rural energy. One example is TERI's mission to light one billion peoples' lives in the next few years, by substituting the use of kerosene lighting with solar power lanterns.

Steps for Adaptation: Chaitanya Kumar
Chaitanya hails from a middle class family in Hyderabad. He recently graduated from university and has a background in computer science engineering. He is involved with a local organization called Hyderabad Unplug, which aims to create awareness of climate change.

Chaitanya focused on the state of Andhra Pradesh (AP), in the south of India, and his home city of Hyderabad. The coastal regions bordering the Bay of Bengal are highly vulnerable to the effects of climate change. A recent report said that the water table is critically low, and in 2020, the city will be bone-dry. People are already facing a water crisis in their day-to-day lives. Chaitanya's family, for example, receives drinking water only once every two days. The Krishna River is one of the main sources of water for Hyderabad. Water access to the river is a bone of contention for a couple of states. Food security is another issue. About 4,500 people committed suicide in the last seven years due to bad seeds, costly pesticide and drought.

Chaitanya spoke about adaptation methods that are currently being implemented in AP:

1. The purchase of weather-indexed crop insurance.
2. Better knowledge systems that provide not just the price of the crop but also weather patterns.
3. Avoiding yield wastage through proper storage techniques.
4. Implementation of agro-forestry techniques – where trees and crops are grown together to reduce crop failure from floods, to restore soil fertility and provide shade.
5. The introduction of drastic policies on family planning in rural India. This is a

controversial approach to take, since it affects age-old traditions.

6. Financial mechanisms that work with local cooperatives, self-help groups and banks at a wide-scale.
7. Education systems that work as platforms for villages to gather and discuss the issues of farming and share best practices.
8. A simultaneous shift to resistant/tolerant crops and organic farming.
9. Prevention of migration to urban areas in search of jobs, decentralization/de-modernization of industry in rural Andhra Pradesh.

Drought and Floods in South Asia:

Joyashree Roy

Professor Joyashree Roy heads the Department of Economics at Jadavpur University. She leads several major interdisciplinary research collaborative initiatives, including the Global Climate Change Programme and a Nippon Foundation-funded project with a research focus on tradition, social change and sustainable development. She has authored a book on Demand for Energy in Indian Industries - A Quantitative Approach (1992).

Joyashree spoke about research that illustrates some of the regional imperatives relating to climate adaptation strategies.

One project focused on the whole of South Asia. A major issue in this region is that it has the highest share of the world's population (25 per cent). Water scarcity is, and will continue to be, an immense issue. Her research team looked at four countries: Bangladesh, India, Nepal and Pakistan, and did field work in 3 of the 14 river basins. They found that floods were a serious threat in Bangladesh and India while in Pakistan the risk of drought was most important. The team also looked at mountain ecosystems: the Himalayan range from east to west.

Joyashree's team used the LIFE approach, which focused on *Livelihood, Institutions, Food security and Empowerment*. The project examined community and household

responses, with the goal of understanding how local needs and actions varied among different countries, and how coping capacity differed across regions. The project also aimed to foster mutual learning across different regions and to explore how the creation of adaptive capacity happens.

The project found that in drought-prone areas, migration was a major issue. However, this kind of migration was not occurring in the flood-prone areas. The droughts or floods tended to reoccur every third year.

The team also found that communities and households take two to three years to recover from a flood or a drought. Thus, if floods occur more often, then communities and households will not be able to recover.

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South Africa

Community-based Adaptation at SouthSouthNorth: Adele Arendse

Adele Arendse works in the environmental field of South Africa's public and NGO sectors. She is the Director of SouthSouthNorth Africa (SSN A). Adele has worked on projects developing alternative livelihoods, particularly in the context of the threat of desertification, as a result of trade and environmental policies. Adele has also worked in the field of pollution policy and prevention. More recently, she has been involved in the design and development of funding proposals as well as in implementing community-based adaptation to climate change projects.



Adele Arendse

SouthSouthNorth is an NGO with broad international experience in the field of sustainable development, climate change, poverty reduction, social change, and gender issues. They work in countries that include Bangladesh, Indonesia, Brazil, South Africa, Mozambique and Tanzania. The organization pioneers new approaches and new instruments for addressing climate change and promoting sustainable development.

Adele described “Adaptation by Design”. This approach looks at the kind of adaptation strategies that are necessary to redress current vulnerabilities to climate change impacts. The approach takes account of the appropriate use of technologies, traditional coping practices, diversified livelihoods as well as the interventions made to date, by governments.

The SouthSouthNorth Network adaptation team uses a framework called LOCATE: *Local Options for Communities to Adapt and Technologies for Enhancement*. This framework follows a basic four-step process.

1. Identify where the hot spots are – a quantitative process;
2. Find local people to work with, who will be project owners – a qualitative process;
3. Design a process – create a Project Idea Note or PIN, then flesh it out into a Project Design Document. Use this document to source funding.
4. Implement and then monitor and evaluate the impact of this process.

At the end of the day, a climate adaptation looks quite similar to a development project, but the starting point is different.

One key take-home message from SSN is the importance of participation. It is vital to involve the stakeholders at every level of the project cycle, when planning for adaptation.

Rooibos Tea: Bettina Koelle

Bettina Koelle works in the Northern Cape of South Africa. She is a founding member and Executive Director of Indigo Development and Change, which is an NGO based in the Northern Cape. For the past 15 years, she has been working with marginalized rural communities and the Heiveld Co-op. Many Canadians have recently learned about rooibos red bush tea. It comes from South Africa and some of the tea harvesters are from the Western Cape's rural small-scale farming communities.



Bettina spoke of the importance of understanding the impacts of climate change and adaptation in the context of the environment in which people are operating, and the struggles they face. For example, Bettina described how the rooibos industry oppressed small-scale farmers under apartheid, and how this oppression continues, in that it is still very difficult for small-scale farmers to export their rooibos tea. But to the small-scale farmers, this is a mixed blessing. They produce in the driest part of the area where the rooibos grows. It is not a coincidence that because the land is so marginal, it wasn't very useful until rooibos became popular. This is why small-scale farmers were allowed to remain here.

In the area where the Heiveld Co-op is located, there was a very serious drought from 2003 to 2006, which was followed by three very good years for rain. People were asking themselves in this process, what could we expect in the future? What shall we do?

At the Heiveld Co-op, they view the sustainable management of their wild rooibos as a means of producing a potentially more resilient crop of rooibos. Local farmers are actively engaged in monitoring environmental conditions for land use planning. They record rainfall and temperature to provide a baseline against which change can be measured. These activities help to increase their resilience and problem-solving capacity, which in turn helps them adapt to what the future brings: not just climate change, but all of the other challenges that farmers must face on an ongoing basis.

Bettina remarked that adaptation requires a focus on interactive participation. The process involves an interdisciplinary or trans-disciplinary methodology that seeks multiple perspectives and makes use of systematic and structured learning processes. Ideally, this will lead to self-mobilization. This is when people are empowered to take initiatives independently of external institutions to change systems.

Bettina concluded by saying that there is no one single technical solution. It is important to integrate knowledge and experience from all levels. It is also not enough to only include local knowledge. We must put all of our heads together. Integrative and holistic approaches need to be collaborative and involve all stakeholders. They must build on existing practices, research and local institutions. And last, but not least, self-mobilization and empowerment are the most important factors in increasing resilience.

Small-scale Farmers in the Swartland District: Rhoda Malgas

Rhoda Malgas is a lecturer in the Department of Conservation, Ecology and Entomology at the University of Stellenbosch. She currently teaches

courses about sustainable natural resources. She has worked on community-based natural resource management with small-scale farming communities for nine years, on issues that include land-use and climate. Some of these communities are located in Suid Bokkeveld and Swartland, in the Western Cape.



Rhoda spoke about the effects of climate change in the Swartland, South Africa. Stronger winds along the coast, and hotter temperatures, overall, are predicted as well as drier winters and drier warmer summers. This less predictable weather, especially in mountainous regions, will make it harder for farmers to judge the weather and to plan how to farm the land.

Rhoda described the participatory process in which local farmers are invited to workshops and how the *mentor farming systems* are established. The concept of a mentor farmer is that a knowledgeable farmer within the community is elected to mentor his fellow farmers. It is usually someone with lots of experience, who has good rapport with people. It has been a very effective way of disseminating best practices information amongst farmers and using social networks that, of course, the local farmers would have access to.

Canada: Arctic and Sub-Arctic

Vuntut Gwitchin First Nation and Self-Government: Joe Linklater

Joe Linklater, has been Chief of the Vuntut Gwitchin First Nation, based in Old Crow in the

Yukon, for over 10 years. He was thrust into leadership by elders in his community who filled in his nomination forms. They came to him, saying, "Sign here, you are running for Chief." Even though he was a young man, he had the confidence of his community. During his period as Chief, during which time he has been re-elected on numerous occasions, he has not only undertaken the tasks of community leadership, with respect to economics and governance, but he also represents the Dene Nation internationally.



Joe explained how the answer to the question "how will disenfranchised peoples adapt to climate change?" is to empower them. Joe used the Vuntut Gwitchin as an example of how one First Nation has become empowered in real world terms. Vuntut Gwitchin means 'people of the lakes'. This area used to be a big, prehistoric ancient lake. When the last ice age came, it didn't touch the north Yukon. As a result, because of the arid conditions, when the lake drained, 2,000 lakes were left in its place: this is the ancestral homeland of Joe's people.

These natural areas are extremely important to the Vuntut Gwitchin, and are of immense ecological significance. They see the north Yukon into Alaska as one huge ecosystem. So anything that happens to the major resources, such as muskrats, caribou, and moose, will affect the entire ecosystem. Because the Vuntut Gwitchin have been living in that area for so long, some estimates are around 30,000 years, they feel they are a part of this ecosystem.

However, the rivers are now widening, because of slumping and riverbanks caving in.

The result is that many rivers are now shallower, and the rivers freeze right to the bottom, making ice fishing and travel for hunting impossible. Land is slumping too, and the Vuntut Gwitchin will have to move their traditional meeting place because of this. Migration patterns and numbers, in salmon and caribou, for example, are also changing, forcing an increased reliance on store-bought foods, rather than country foods – and this has led to increased obesity rates in Old Crow. All of this causes stress in the community, especially among elders and youth.

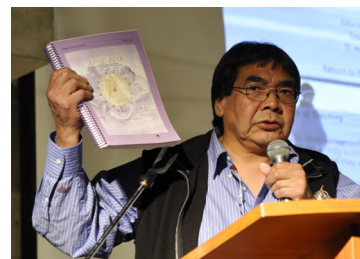
Climate change will have other significant consequences in the area: melting permafrost, leading to roads being torn up, pipes being damaged, homes and buildings affected, so that much infrastructure will have to be replaced. For their community, what the Vuntut Gwitchin have done is decided to design their own homes. They have done this through the Integrated Community Sustainability Plan. They came to the realization that their homes are not going to last as long as they used to because of the changing climate, and the melting permafrost, because houses are shifting. So, the Vuntut Gwitchin are designing homes that are easier to repair. They are also designing homes that are easier to retrofit, as a mitigative measure against the high costs of adaptation to climate change.

Joe concluded by saying that when managing the caribou, the Vuntut Gwitchin point out that we shouldn't be thinking in terms of managing fish and wildlife – they manage themselves. We need to manage *ourselves*. We can't stop weather or predation or disease, but we can control people's action and that is something very important. We need to remember this at all times.

Dene Kede Curriculum: Andy Norwegian

Andy Norwegian is a Slavey language specialist from the Dehcho, who has worked for over 30 years to teach people about his mother tongue. He is the author of the two-volume dictionary of the Slavey language. He has won many awards

including the Northwest Territories Teachers' Association Aboriginal Education Award and a Ministerial Literacy Award. In addition to being a dedicated teacher and keeping alive the language of the Dehcho region, he led the development of the Dene Kede curriculum. He worked with many elders from the south to the north of the Northwest Territories to put together and formalize in the Western context a curriculum that could be used from kindergarten to grade 12. It has been adopted as the basis in the Yukon for teaching about climate change in the North.



Andy recounted how, in 1993, a number of aboriginal educators in the Northwest Territories decided that they should document traditional knowledge. At that time there was political pressure put on the government of the Northwest Territories to create language centres for each of the language areas. Thus, centres were established for each of the five Dene languages areas.

One of the first goals was to come up with a curriculum that was going to teach culture and language. Andy and his team identified two Elders from each region: a female Elder and a male Elder. These Elders sat on a panel that became a guiding committee for the curriculum development project.

Andy recounted the Dene creation story, which plays a central role in the curriculum. The creation story explains how the Dene were the last of all beings to be created and how their continued survival requires them to be in a respectful relationship with the land, all its animals, the spiritual world, other people and themselves. This is the Dene perspective. The purpose of the Dene

curriculum is to give this perspective back to their children.

One of the messages from the Elders' committee was to teach language in a cultural context. Thus, the teaching model of the Dene Kede, is that a key experience is very central to teaching. A key experience is an authentic cultural activity. For example, students are taken to a fish camp and they are involved in an authentic cultural activity. They learn the language by using it in these activities. Throughout the year, students are exposed to various cultural key experiences. Most experiences because of their holistic nature can be experienced in similar forms many times over several years.

For any topic in the curriculum, there are four components. For example, when taking a look at a body of water, the student is looking at it in terms of the surrounding land. The student asks what does it mean to the lands surrounding this body of water? What does it mean to the people that surround this body of water? What does it mean spiritually? What does it mean to him or her personally? Gradually and iteratively, children are asked to consider these experiences with reference to the land, the people, the spirit, the self.

If Dene youth do not know their culture and language, and where they are at, how can they recognize and respond to change, including climate change? By educating them about their roots, and to understand themselves as a people, they will increase their resilience and their capacity to adapt.

Traditional Knowledge, Respect, and International Law: Aaju Peter

Aaju moved to Iqaluit from Greenland in 1981. She speaks more than five languages. In addition she is an award-winning clothing designer. She is also a strong advocate for Inuit culture. More recently, she was in the news as a member of the first class of 11 students to graduate from Akitsiraq Law School: the first class of Inuit lawyers from Nunavut in 2005.



Aaju began her talk with a traditional song about the hardship of living in the arctic. She also lit a traditional oil lamp, the qulliq. She spoke about traditional knowledge and how the ways of her people have made it possible for them to survive in such a cold climate.

Aaju's wish is for the international community to understand how to treat the environment. In her words: "You do not put yourself higher, as the owner, of the very environment on which you depend. This is the environment that has given you life and supported you. You do not fight about it." In the Inuit tradition you do not fight about polar bears and how they belong to you. You must share. According to Aaju, the Inuit from Greenland and the Inuit from Canada share the polar bears. The tradition goes back many generations. They have always done this.

Aaju believes that her people's occupation, of the Canadian High Arctic is both a historical claim and a claim on Inuit youth. The issue is that the Canadian government signed agreements with the Inuit, and received all of this land from the Inuit, thereby securing sovereignty for Canada of the Arctic. But what does it mean if Canada is not fulfilling its obligations to the Inuit under this agreement? Is the agreement void because the government is not living up to its commitments? This is the main problem with which Aaju is struggling: that the Canadian government is still not implementing the spirit of its agreements. At the same time, Aaju told us that the Inuit people who were relocated to the high Arctic, and who survived in the Arctic so that Canada can claim sovereignty, are proud Canadians. It is part of their agreement.

Aaju concluded her talk by saying that the Canadian government and the Inuit must talk and secure Canadian sovereignty over the Arctic with the kind of respect that the Inuit have for the environment. Other countries should respect the environment and treat it with the same respect as the Inuit.

Emerging themes

Diverse cultures, diverse policies

All of the speakers related experiences, projects, and narratives of local adaptive initiatives. A common observation made across the presentations was the need for adaptation policies to consider the diversity of knowledge, language, and needs.

Education and knowledge mobilization

The impacts of climate change affect all aspects of life, from child rearing, health, the economy, livelihoods, the state of ecosystems, consumption, energy use, etc. Education is essential for explaining what climate change is and how it affects people's lives. Education about heritage and culture, along with emerging technology is also needed for adapting to changing ecological and social conditions. We need to mobilize existing knowledge through innovative methods.

Participatory knowledge production

The complexity of the social and ecological impacts of climate change, as well as the compounding problems of poverty, disenfranchisement and resource access inequities, require that we revise our ways of doing climate change science. Participatory research can facilitate adaptation by engaging those who are directly impacted by changing environmental conditions. Collaborative and trans-disciplinary research can empower people by building their social capital through embedding them within larger networks of practitioners, knowledge producers, and decision-makers. Thus, by working with people to produce knowledge, rather than simply providing it from "experts", participatory research provides access to a

slew of resources that can be mobilized through linked local-global initiatives.

Traditional and local knowledge

Local, intimate knowledge of the land and how to make a living using this knowledge is a crucial component of adaptive capacity for responding to climate change. Respecting and mobilizing traditional knowledge is necessary and can empower the disenfranchised and facilitate adaptation to climate change.

Urgency and Technology

The impacts of climate change are being felt now. Arctic communities are, perhaps, more aware of the impacts of climate change due to the rapid environmental changes being experienced (e.g. permafrost thawing) Thus, there is an urgent need to adapt to climate change.

Whether technology brings electricity to a billion people in India, captures 500% of all expected CO₂ emissions, or facilitates the flow of information and communication among NGOs working with local communities, technology will play a major role in producing adaptive capacity. While new technologies are not the sole solution for adaptation, they were widely recognized as an important component of local and global adaptation toolboxes.

Recommendations

The conference built in plenty of time for discussion and at the end, the speakers were challenged to summarize the main action points for different groups, arising from their discussions and dialogue.

For those concerned about climate justice:

- Build international solidarity with the disenfranchised at all levels of decision-making, from buying fair trade products to the transfer of appropriate technology from developed to developing countries.

- Create opportunities to strengthen our joint intelligence and share experiences.
- Put pressure on governments in the Global North to take a fair and ethical position in global negotiations.
- York University should obtain Observer Status at the United Nations Framework Convention on Climate Change (UNFCCC) and go to the Conference of the Parties (COP 15) in Copenhagen and hold a side event.

Governments and the Private Sector:

- Should recognize that climate justice depends on transparency and respect in partnerships and relationships of all kinds – economic, inter-governmental, intra-governmental among NGOs and between governments and their citizens.
- Include the disenfranchised in any discussion on climate change.
- Climate-offending governments in the Global North must take accountable steps to ensure ecojustice.
- Empower people to adapt to climate change by devolving authority from central governments to local and regional governance bodies.
- Use traditional and local knowledge to inform policy-making and adaptation strategies.
- Make it public policy to share information widely and improve the flow of information internationally.

Consumers in the Global North and the wealthy everywhere:

- Reduce your consumption levels in an equitable way by taking responsibility for the loss of assets of marginalized populations.
- Be a Conscious Consumer, and become aware of the origin of the products you buy and the people who work to manufacture them.
- Act now!

Glossary

Ecojustice: brings together commitments for ecological sustainability and human justice. It does not see environmental issues and justice issues as separate, competing agendas, but as intertwined elements of the same issue. It asserts that it is not possible to care for the earth without also caring for humanity, and that seeking human justice must involve care for the environment.

Disenfranchised: deprived of power; marginalized; deprived of a right or privilege. Disenfranchisement has many faces. It is broader than a lack of rights and has multiple dimensions: hunger, lack of shelter, being sick, being illiterate, being unemployed, losing a child to illness or unclean water and poor sanitation. The disenfranchised, in the Indian context, includes a big portion of the Indian population. The disenfranchised are not only rural people or rural poor, but also urban poor. What they have in common is that they are poor.

Adaptation to Climate Change: According to the IPCC, adaptation is the adjustment in natural and or human systems in response to any climate stimuli that have harmful impacts or provide beneficial opportunities. The terminology of adaptation includes sensitivity, vulnerability and adaptability. The most vulnerable ecological and socio-economic systems are those with the greatest sensitivity to climate change and the least ability to adapt. Sensitivity is thus the degree to which the system will respond to a given change in climate and that is measured in different ways, such as looking at the composition and functioning of an ecosystem and how it responds to different climate stimuli and changes in the climate stimuli. Adaptability is the degree to which the system can adjust in response to these sensitivities, or basically what is happening or in anticipated changes. This can be likened to the term ‘adaptive capacity’ or ‘resilience’ of systems where there is an ecosystem or human system. This is

encompassed in discussions about the vulnerability of systems to climate change. Vulnerability depends in part on the sensitivity and the ability to adapt.

Resilience: explains how transformation and persistence work together, allowing living systems to assimilate disturbance, innovation and change, while at the same time maintaining characteristic structures and processes. It means that a critical body of culture and livelihood, which is important for the community of which we are speaking, including communities of practice, is being maintained.

Beyond the Conference

At York University, we applied for observer status at the UNFCCC. In December 2009, a delegation of students, staff and faculty attended COP 15. In Copenhagen, we organized or participated in seven side events. We also launched GlobalClimateJustice.net. The goal of this project is to provide a virtual space where everyone can share their experiences of climate change and how they are coping.

In August 2010, Ellie Perkins and Dawn Bazely were invited by Miriam Duailibi and her colleagues to participate in a Dialogue Table of civil society organizations at ICID+18, the 2nd International Conference: Climate, Sustainability and Development in Semi-Arid Regions, in Fortaleza, Brazil.

In summer 2010 the heavy monsoons in Pakistan led to serious flooding. Ironically, Prof. Roy's talk highlighted the problem of drought. The floods underscore the role of conferences such as ours in bringing to light the threats faced by disenfranchised peoples.

Funding and Organization: Who Did What?
The organizing committee members were Prof. Ellie Perkins (Faculty of Environmental Studies - FES), Prof. Kaz Higuchi (FES and Environment Canada), Prof. Richard Saunders

(Political Science), Prof. Dawn Bazely (Biology and Director of IRIS) and Prof. Adrian Shubert (Associate Vice-President International). Administrative support was provided by Annette Dubreuil (IRIS Co-ordinator) and Jennifer Jew and Tony Morris (IRIS Graduate Assistants and Masters of Environmental Studies students). Afsan Chowdhury (York Centre for Asian Research) and Prof. James McClellan (FES) assisted with the programme.

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Dr. Nicole Klenk is a Forest Ethicist and expert on social networks and climate adaptation. She is currently a post-doctoral fellow at the Universities of Waterloo and York, Toronto (CFCAS-Canadian Foundation for Climate and Atmospheric Sciences), working on climate change. Nicole worked from transcripts and summaries prepared by Alicia Filipowich, Annette Dubreuil and Jennifer Jew. Dawn Bazely and Ellie Perkins edited this conference report.



The conference speakers and the organizing committee