

Association of Universities & Colleges of Canada (AUCC)  
University Partnerships in Cooperation & Development Program – Tier 2

## Project Description – January 2003

Capacity building of civil society in water resources management in São Paulo State, Brazil

### I. Developing country context and needs

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#### Brazil's development needs and priorities

After 20 years of military government ending in 1985, the first years of democracy in Brazil were characterized by recession, hyperinflation, and allegations of government corruption. Elected first in 1994 and soundly re-elected in October 1998, the government of Fernando Henrique Cardoso is the first democratically elected government in Brazil in 30 years to earn and maintain international respect. Brazil today is a country of extreme inequities, but efforts are underway to reduce inequity, partly drawing upon donor support to implement essential reforms. Brazil has achieved some real success to date, while recognizing that much remains to be done. Brazil also stands at a watershed with the tremendous growth of democratic civil society institutions and the broad adoption of *cidadania* – the recognition of each individual's rights and responsibilities as a citizen.

Since the return to civilian government in 1985, a number of positive trends have emerged in support of decentralization, integration and simplification of programs, and democratization:

- Moves away from an authoritarian and centralized model of government, towards rationalization of services, decentralization, and increased public participation.
- The strengthening of civil society. Brazil has seen dramatic growth in the number of NGOs and other forms of organized civil society. Public participation is playing an increasingly important role in public policy formulation and program delivery. There is an increasing recognition of the importance of equity, the need to develop collective social responsibility for addressing social and economic issues, and the necessity to create an effective voluntary sector.
- Brazilians have adopted a global term, *cidadania*, to refer to the key elements of building civil society and protecting human rights. It stresses the need to develop in every citizen the awareness of his or her civil, political, economic, and social rights and responsibilities. It also involves the empowerment of citizens to participate fully and equitably in public policy-making and implementation.
- Accountability of public institutions. Public institutions are under increasing pressure to demonstrate greater accountability, transparency, and responsiveness to their constituents and clients.

Substantial challenges to future equitable development remain, including how to develop and preserve economic stability and liberalization, regional equality, access to social services, human rights and the rule of law, environmental sustainability and public sector reform. One of Brazil's major development challenges is strengthening the capacity of civil society to contribute to achieving sustainability. Civil society ("sociedade civil" in Portuguese) is a term commonly used in Brazil to indicate NGOs, community groups, and neighborhood associations as well as individual citizens. Increasingly, Brazil's social, economic and environmental policies envision a much stronger role for civil society, both in terms of setting the priorities, making decisions and carrying out initiatives.

#### What Canada has to offer

In this context, what Canada has to offer, and what Brazilian partners often request of Canada, is expertise related to the values and methodologies that provide a solid foundation for an equitable society. These principles of equity include power-sharing and participation, fairness and justice, transparency, accountability, and gender equality. The goal of CIDA's bilateral program in Brazil is to contribute to the achievement of greater equity in Brazil. CIDA's current programming framework emphasizes that this will be accomplished by supporting Brazilian efforts on public sector reform, social sector reform, and improved environmental management which allow and encourage principles of equity such as broader public participation in decision-making.

CIDA's development program with Brazil is relatively small, and represents only 2% of the total Official Development Assistance to the country. But CIDA's bilateral program is innovative as it is the only bilateral program in Brazil to be fully responsive, requiring that projects be developed jointly by the Brazilian and Canadian partners. This approach has the advantage of empowering project partners to self-identify and to develop projects which are clearly in line with Brazilian priorities. Brazil is in a phase of rapid economic and social development, and Brazilians are interested in exchanging experiences on institutional models and initiatives.

### **Water resources management in São Paulo State and the need to strengthen civil society**

One of the recent opportunities for civil society to participate directly in decision making has been the creation of river basin committees in São Paulo State, which address major development challenges at a watershed level. Created by the São Paulo State government, these committees are formed by representatives from senior government agencies, local government and civil society. The river basin committees, which have been operating for several years, represent one of the most promising examples of multi-stakeholder decision making in Brazil.

In the area of water resources, São Paulo State faces a number of challenges, including the competing demands on water by different user groups, the protection of drinking water supply in metropolitan and rural areas, and the conservation of freshwater biodiversity. Much of the domestic wastewater in São Paulo State remains untreated, with significant impacts to human health and aquatic ecosystems. The river basin committees attempt to address these challenges by initiating and approving projects within the context of the regional development priorities. The experience so far with the river basin committees has clearly suggested the need to strengthen the capacity of civil society to participate more effectively. Specific needs include: (i) improving the awareness among civil society groups about the role they can play in the river basin committees; (ii) improving the knowledge of civil society to participate more effectively in the (often technical) debates with the other stakeholders in the river basin committees; and (iii) strengthening the capacity of civil society groups to organize themselves and develop initiatives for possible (financial) support by the river basin committees and other organizations.

At a more general level, there is a need to identify, document and promote the current experience in water resources management in São Paulo, in particular by illustrating successful case-studies of civil society participation as examples for others in São Paulo State as well as in other states. Two factors make this a particularly critical period in the evolution of water resources management in Brazil: (1) it is likely that a new law on water pricing will come into effect in São Paulo State within a year or two, and this would result in substantial increases in the Fundo Estadual de Recursos Hídricos (State Water Fund); the river basin committees play a key role in how these funds are allocated, and this is likely to continue; (2) the experiences of the management model for water resources in São Paulo can provide very valuable lessons for the development and implementation of river basin committees in all of Brazil; strengthening the approach towards civil society participation in São Paulo State will therefore have a multiplier effect at the national level.

At present water resources management is one of the most important topics on the national and regional public policy agenda in Brazil. A national water resources management system is being implemented and the model chosen reflects the great expectations that are being put on civil society participation, since the entire system is based on river basin committees formed by representatives of the senior government agencies, municipalities and civil society. Civil society participation is not only important but fundamental for the success of this model; but civil society is the segment most in need of support to participate effectively and affirm its participation. This project will substantially contribute to meeting that challenge.

It should be recognized that in general there is no major lack of technical knowledge in the area of water resources in Brazil. A previous CIDA-funded project has also substantially contributed to the further development of technical skills of the agencies in São Paulo State involved in water resources management. The current challenges in the river basin committees result mainly from a lack of experience with multi-stakeholder processes and interdisciplinary approaches to dealing with the complex planning and allocation issues. There is also a clear lack of training materials in the area of water resources which are specific to the Brazilian context, appropriate for civil society groups and accessible to a wide audience.

## **The Brazilian partner organizations**

The Brazilian partner organizations in this linkage project are the Ecoar Institute for Citizenship in São Paulo, WWF-Brazil in Brasília, and the University of São Paulo. A brief introduction to each organization follows.

The **Ecoar Institute for Citizenship** (<http://www.ecoar.org.br>) is a not-for-profit association based in São Paulo city, established following the UNCED conference in Rio de Janeiro in 1992. Ecoar is one of Brazil's leading NGOs in the areas of sustainable development, environmental education, citizenship building and natural resources. In recent years it has implemented several education and training programs as well as public education campaigns. Ecoar's staff of 17 is well balanced in terms of gender, disciplinary background and diversity of experiences. Ecoar is very well connected to many environmental NGOs, agencies and academics in Brazil, and has taken a leadership role in developing collaborative projects with a range of organizations. Many of its staff members and advisors also hold positions at universities in the region.

While Ecoar will be the primary Brazilian partner organization, the **University of São Paulo** (<http://www.usp.br>) will also play an important role. The University of São Paulo is one of Brazil's leading academic institutions, and this partnership involves two of its units. The first is the Escola Superior de Agricultura Luiz de Queiroz (ESALQ) (<http://www.esalq.usp.br>), a satellite campus in Piracicaba with applied programs in agricultural sciences, environmental management and forestry. The second unit is the Coordenadoria Executiva de Cooperação Universitária e de Atividades Especiais (CECAE-USP) (<http://www.cecuae.usp.br>) at the main campus in São Paulo, which runs a wide range of extension programs including environmental education. Both units of USP have a very applied focus, and have been active in the areas of professional development and distance education. Both units will play a key role in project activities, in particular the contribution of faculty expertise through exchanges, short courses, and small collaborative research efforts. All trainees will also be drawn from the graduate student body of the university.

**WWF Brazil** (<http://www.wwf.org.br>) is one of Brazil's most visible and active environmental NGOs at the national level. Its activities are sometimes thematic and national in scope, sometimes much more focused on local issues. One of its principal campaigns at present is the Freshwater Conservation and Management Program, whose aim is to contribute to the debate about water resources and to influence public policies related to the sector. Some of the main objectives of the Freshwater Conservation and Management Program are to help in the restructuring of water resource management in the country, promoting a new vision about water, which should be seen as a living system whose long-range functioning should be preserved for the well-being of all segments from society in the present and in the future; to strengthen public policies and the institutions responsible for the management of water resources in the country, promoting an ecosystem approach in terms of water basins; to develop working models for priority water basin committees, increasing the participation from members of the civil society, while developing the integrated use of the soil and the management of water resources; and to implement and document management models for different water resources.

There are **strong existing linkages between Ecoar, WWF-Brazil, and USP**. Ecoar has excellent working relationships with both university units and has carried out a number of recent projects with each. For example, ESALQ faculty members and their students have been very closely involved in a number of recent Ecoar projects, contributing both expertise as well as coordination. Presently, the Center for Environmental Education and Policy at ESALQ-USP is developing a distance education course for environmental educators, to which Ecoar is a contributor. Ecoar has also been working with CECAE since 1995 on a range of projects and outreach activities. Jointly they have organized the Brazilian Forums on Environmental Education, and organized the Brazilian and São Paulo State Networks on Environmental Education. CECAE was also part of a recent environmental education project run by Ecoar, and CECAE-USP and Ecoar have jointly produced three recent publications, including "Evaluating environmental education in Brazil: Audiovisual materials (2001)". WWF-Brazil's Environmental Education Coordinator is Larissa da Costa, who was formerly a director of Ecoar and who has worked closely with USP researchers and on CIDA-funded water projects in São Paulo.

The experience of the Brazilian partner organizations in civil society capacity building is demonstrated by their respective activities over the past years.

For the past 10 years **Ecoar** has been active in the mobilization and capacity building of civil society groups. One example is the Educ-Ação Ambiental project, which was carried out with the people living in close proximity to an area where the local government implemented a canalization project in the northern and eastern parts of São Paulo city. This project involved workshops, creating a local Agenda 21, and developing an action plan with the local community. Other projects include the participatory development of local Agenda 21 in various neighborhoods. Ecoar also developed the “Deasfios das Aguas” (water challenge) project in two phases; the project focused on capacity building of civil society groups in the river basin committee of the Alto Tiete, within Metropolitan São Paulo. In the municipality of Santo André, Ecoar carried out a project with the objective of strengthening civil society groups to participate more effectively in municipal environmental advisory committees. Presently, Ecoar is responsible for the implementation of a project with Petrobras to involve local communities in the management of a protective zone around an oil pipeline which runs through various neighborhoods. In summary, Ecoar has a very strong track record in community development, including the area of community involvement in water resources management, in São Paulo State.

**WWF-Brazil** will play a role in strengthening the network of partner organizations, provide opportunities for generating additional funds from other sources for joint project activities, and allow for national exposure of project results. WWF International has been active in Brazil since the 1980s. In 1990 a local office was set up in Brazil and in 1996 WWF Brazil was created. Currently, WWF Brazil has around 5,000 members across the country. It carries out around 60 programs and projects in Brazil in partnership with regional NGOs, universities and governmental agencies.

**CECAE** has developed, through its program USP Solidarity the Whole Year, a number of participatory local Agenda 21 initiatives, as well as contributing to the training of “sustainability agents” in many municipalities and other institutions in Brazil. CECAE is also responsible for maintaining a Network of University Programs and Environmental Education, which aims to strengthen course offerings and specialists’ training in working with civil society; at present 11 Brazilian university from across the country are part of the network. CECAE is also the coordinator of the “Avizinhar” (neighborhood development) project, which strives to educate adolescents in social risk categories, seeking their full participation in society and community activities.

At **ESALQ**, the Environmental Education Laboratory at the Department of Forestry has carried out a number of projects focusing on civil society involvement, such as:

- Creation of a participatory system for the evaluation of the Municipal Network of Environmental Education in the State of Pará;
- Research on the diffusion strategies of agroforestry techniques in the Vale do Ribeira in the State of São Paulo;
- A project on fire control and changes in agricultural practices, in collaboration with the Agricultural Workers’ Union in the State of Para;

Several of these projects were developed in collaboration between USP and Ecoar.

Both Ecoar and USP are well known for their competency in teaching, research and cooperative extension. As such, their approaches are complementary and synergistic, generating benefits for society and for the growth of each institution. USP’s capacity to be active in society will be increased with cooperative university extension, in the area of ecology and environmental education, by stimulating the development of research and teaching activities. For Ecoar this partnership will contribute to its efforts in capacity building, to its professional expertise in program development, and to strengthening of the institution in general. Contributions by civil society to water management require both technical skills and political knowledge of compromise, given the variety of proponent institutions and the differing objectives of all the relevant civil society and government organizations which are, and should be, involved in the management of water resources. In this sense, the proposed project joins an NGO that for a decade has been developing educational programs geared towards environmental issues in general and water issues in particular, and that has participated with other organizations in the environmental movement, watershed committees and environmental education networks, with a university well known for its excellence in the study of the humanities, its quality of teaching and research, and its skills in outreach, extension and community involvement.

WWF-Brazil is able to provide several benefits to the project:

- More visibility within Brazil, at the regional and international level;
- Access to extensive contacts and resources within the water sector in Brazil;
- Building on experience in working with several river basin committees;
- Huge potential to share the results of the projects at the national level.

The sustainability of the project will be further strengthened by the existence of a number of networks, which will provide for opportunities to share the project experiences with a wide audience of both academics and non-academics. These networks include:

- The Brazilian Network of Environmental Education (REBEA), active in all States of Brazil; at present, the Executive Secretariat is housed at Ecoar;
- The São Paulo Network of Environmental Education (REPEA), active in 6 river basins in São Paulo State;
- The Network of Popular Education and Ecology – part of the Council of Adult Education of Latin America;
- The University Network of Environmental Education Programs (RUPEA), involving 5 Brazilian universities with a common interest in developing a masters' program in environmental education.

The Brazilian project partners are active in these networks, which present great opportunities for the multiplication of lessons learned from this project. The RUPEA network, for example, is expected to be a major vehicle for sharing and implementing curriculum changes in several Brazilian universities.

It is important to recognize that the proposed partnership involving both a Brazilian university and Brazilian environmental NGOs may appear a bit unusual at first, but makes a lot of sense in this case. The three partners have complementary roles. While on the one hand the university is the “knowledge producer” and tries to share this with society, the NGOs on the other hand strive to mobilize society through direct intervention. This project, however, also attempts to go one step further by challenging the conventional notion that only educational institutions “produce” knowledge. Part of the objective behind the project is to try to demonstrate how a partnership between academics and non-academics can be very stimulating and effective. The partnership will encourage the NGOs to be a bit more reflective about their activities and to document “learning” more systematically. The partnership will also encourage the universities (USP and York) to be more pragmatic about teaching and research and to “field-test” approaches towards community organization and capacity building.

### **Expected results from the partnership**

The overall long-term goal of this project is to improve the management of Brazil's water resources. The major medium-term impacts of the projects are: 1) strengthened capacity of civil society in São Paulo State to participate effectively in the management and protection of the State's water resources; and 2) increased recognition by government agencies that participate in river basin committees within São Paulo State of the role of civil society in water resources management. The project will seek to accomplish this by strengthening the capacity of Ecoar and USP to develop partnerships with civil society and providing assistance to them through courses, collective projects and other activities; improving international linkages for research, curriculum development and interdisciplinary environmental education; and developing innovative methodologies to support public participation in environmental decision-making. The outcomes of the project, therefore, are mostly at the level of the Brazilian partner organizations. A number of civil society groups will be actively involved in project activities. Civil society involvement is an essential element of the project's activities (and is reflected in the budget), as part of the methodology for exploring new and innovative ways of reaching out to the community; but a key result at the end of the project's duration is for Ecoar, WWF-Brazil and USP to have strengthened their leadership role in capacity building for civil society in Brazil.

The specific outcomes expected from the project are listed in the Logical Framework Analysis (LFA) table.

### **How the outcomes will lead to the desired long-term impacts of the project**

The river basin committees in São Paulo State are a unique opportunity for civil society to make a strong and lasting contribution to the improved management of water resources. A more informed, educated, and organized civil society will have a substantial impact on the performance of the river basin committees. Having access to on-

going training and professional development opportunities will increase confidence in the role civil society groups can play in shaping the outcome of water resources policy in Brazil. Reports on the project and the curriculum materials developed (video, websites, etc.) are also expected to contribute to general media and public education campaigns on water management in São Paulo State, for example via the USP radio/TV networks.

A number of factors make this a very appropriate time to carry out the project: (1) the amount of funds being handled by the river basin committees in São Paulo is expected to increase in the next few years; (2) implementation of a water resources management framework in other Brazilian states in the near future will be strongly influenced by the São Paulo State framework. Strengthened capacity of civil society in São Paulo State at this point in time will therefore have a substantial impact on how water resources will be managed across Brazil. Improved decision-making in water resources will contribute to improved access to clean and safe drinking water, improved basic human health conditions and reduced environmental impacts on aquatic resources.

### **Building on previous CIDA efforts in this area**

This linkage project is not a subsequent phase to a previous CIDA-funded project but does intend to build upon previous (and still on-going) CIDA projects in São Paulo State which have not formerly involved York University. The partnership builds upon the experience of two previous CIDA projects in the area of water resources in Brazil: Watershed Management 2000 (completed in 2001) and Community-based Watershed Management in Santo André (ongoing until 2004). The participation of a number of other Brazilian and Canadian organizations will ensure the new partnership benefits from the experience of these CIDA projects. The Watershed Management 2000 project focused primarily upon strengthening the capacity of staff at the São Paulo State Ministry of Environment and its technical agencies (i.e. CETESB), while the Santo André project focuses primarily on the staff of the Municipality of Santo André and other local organizations in the same river basin. Not entirely by coincidence these two projects represent two of the three major constituent groups represented in the river basin committees: state level government and local government. While both projects, in particular the efforts in Santo André, do have components which involve civil society groups, these have not previously been the focus of CIDA support in the area of water resources management. This proposal aims to direct CIDA support to the participation of civil society.

The partnership between York and Ecoar will build on the previous CIDA experience in water resources management in São Paulo by focusing on the role of civil society groups in the river basin committees. The partnership combines Ecoar's strength in environmental education and training for civil society, WWF-Brazil's national-level contacts / resources and experience with several river basin committees, USP's experience in applied research and innovative linkages with environmental NGOs, and York's strength in community work, environmental planning, and developing innovative, interdisciplinary curricula.

A concise effort will be made to build upon the efforts of the two previous projects. The Watershed Management 2000 project has already come to an end, and contacts have been established with the CIDA representatives in Brazil to obtain access to the results from this project.

The Santo André project has been extended until the first quarter of 2004. During the proposal development stage it was foreseen that the Santo André project would formally end prior to the startup of this project; the extension therefore provides an opportunity to develop a number of joint activities during the final stages of the Santo André project. Extensive project documents from Santo André have been obtained, including most training materials, presentations, photos, GIS databases and multimedia CD-ROMs. This has been accomplished in part because the Assistant Project Director on the Canadian side has been an active participant in the Santo André project, and has been involved in most major training workshops in Canada and Brazil (including the most recent Biomapping workshop in June 2002) as well as the development of multimedia CD-ROMs. The coordinators of the Santo André project have already been updated on the start-up of this project; while no specific joint activities have been scheduled at this time, this will actively be pursued in 2003, since both sides have expressed an interest in doing so. As an additional linkage, ECOAR has recent experience in working with the Municipality of Santo André and other municipalities in the ABC region.

A number of specific elements of the Santo André project will be of great benefit to this project, in particular training materials in the areas of gender, participatory mapping, conflict resolution. The experiences in the three pilot projects will also provide insights into various approaches to community participation.

It is very likely that an area within Santo André will be selected as one of the pilot study areas for this project, which will provide further continuity.

## **II. Relevance to Canadian Official Development Assistance priorities**

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This project is of most relevance to the ODA priorities of **human rights, democracy and good governance**. The project's main focus is the strengthening of civil society in order to fully participate in decision-making in society. While focused on the role of civil society in water resources management, and the river basin committees in São Paulo in particular, this can form a model for the effective participation of civil society groups in other sectors and in other regions of the country.

In addition, the project is of substantial relevance to the ODA priority of **environment**. The project is expected to address the human resources needs of institutions in the environmental area, provide training on environmental topics, and develop new curriculum and training materials in environmental studies. It is expected that these contributions will ultimately lead to improved environmental conditions in São Paulo State.

While the project does not involve any physical infrastructure, the decisions being made in the river basin committees often involve infrastructure, for example water treatment facilities. A part of the project will therefore address what role civil society plays in policy development and decision-making around infrastructure in the areas of wastewater treatment, water supply, sanitation, etc. In this way the project addresses the ODA priorities of **infrastructure** and **basic human needs** in the area of water and sanitation.

The project is also of relevance to ODA's **women in development** priority. Participation of women will be encouraged in all aspects and levels of the project in various ways, and gender considerations will be an important element in the design and delivery of training activities and curriculum development. The two project directors are both women, and of the six members of the Project Management Committee four are women. The gender balance of all involved senior faculty and staff in both Brazil and Canada is around 50/50. It is expected that the gender balance of the students involved in the project will also be balanced; participation by female students will actively be sought. York University Affirmative Action procedures will be followed where hiring and/or contracting occurs in Canada, and a similar procedure will be employed where feasible and appropriate in Brazil.

The gender balance among the representatives in the river basin committees (from state level agencies, local government, and civil society groups) is reasonable; women's participation among the NGOs representatives is particularly strong. Nevertheless, a conscious effort to ensure ongoing participation in project activities by women will be required. Participation of women participants and women's groups will also actively be promoted and supported in the pilot project areas, with a number of activities specifically addressing gender issues.

Women's participation in the river basin committees also does not imply that gender issues are a key element in how the committees are formed, how decisions are made and what projects are endorsed. Building gender issues into the water resources management framework, therefore, is an objective of the project. There will be a substantive component of the training delivery and curriculum development activities which will address gender issues in general, and the importance of gender considerations in the functioning of the river basin committees. Some of this will be in the form of awareness building for male participants (as part of the pilot projects) to test and further develop gender awareness building in training and curriculum development.

### **Strengthening the international focus at York University**

Key York University documents speak to issues of internationalization and York's international development strategy. York's Mission Statement stresses its openness to the world and global concerns, and its commitment to social justice, accessible education, tolerance and diversity. The University's Academic Plan calls on York to expand "... the international, multicultural and comparative dimensions of all research and teaching and international exchanges...." Many of York's academic units (departments, faculties and organized research centres) have programs which reflect an international character, and strategies to further develop this international focus in their research and teaching.

York is the third largest university in Canada and is host to 2,200 international students (2000-01 figures). The study of Latin America and the Caribbean has been an integral part of the university's academic program since the 1970's. In 1994 internationalization was adopted as a strategic academic priority. In spring 2000, the York

international strategy was officially accepted. It defines internationalization as building on York's prominent academic interest and expertise in the dynamic study of geographic areas blended with the interdisciplinary and the thematic (*Moving Forward the Internationalization of York*, 2000). Accordingly, this project builds on York's thirty years of experience in international development projects, of which about half have been in Latin America and the Caribbean. This project will therefore provide York students and faculty with an opportunity to focus on Brazil, as one of the most important countries in the region.

This project aims to further York's commitment to internationalization by establishing a partnership with a developing country that entails the following: academic research beneficial to all parties; an exchange of ideas between the two countries, in terms of civil society capacity building and within an academic context; the involvement of well-established York researchers and research centers such as York International; and the creation of new avenues of opportunities in established degree programs with an international dimension.

### **Fostering development education**

Canadian students on visits to Brazil will have the opportunity to make international comparisons and learn from Brazilian experiences in the areas of water resources management policy and planning, community participation, environmental education, media and communications, local governance, and other related topics. They will also be able to test their ideas through practical studies in the Brazilian context. York University students and members of the wider non-academic community who attend seminars and short courses in Canada held in connection with the project will be exposed to specific aspects of Brazil's unique approach to water management. Both groups will be able to discuss, share information, and learn from comparisons which emerge. Participants in the listserves and readers of web-based materials developed during the project- both academics and others- will also have access to the communication, information sharing and comparison opportunities created by the project. Through its specific matching of students and community-based workers with similar interests, in both Canada and Brazil, the project will build interpersonal, institutional and professional linkages with the potential for long-term development education benefits.

### **Experience of the Faculty of Environmental Studies and York University**

The Faculty of Environmental Studies (FES) at York University (<http://www.yorku.ca/fes>) is well positioned to undertake a project of this nature. It is one of Canada's largest and most established academic units involved in interdisciplinary teaching and research activities related to environmental issues. The faculty has both undergraduate and graduate programs in environmental studies, with 35 full-time and many other jointly appointed and part-time faculty members. FES has developed a number of innovative approaches for addressing sustainability in an interdisciplinary manner, including active partnerships with environmental NGOs and other community groups and universities, both within Canada and internationally.

This project will both build on and help to expand the Faculty's considerable strengths and experience in international development, women in development, sustainability, resource management, environmental education, bioregionalism, urban and regional planning, watershed planning and management, community organizing and participation, and cross-cultural collaborative projects.

The Faculty also brings to this project substantial experience in international development and project management as well as resources that have enriched the life and experience of its students, the university community and university partners. Its experience in international projects, including a number of CIDA-funded projects, is considerable. For example, FES is part of the Urban Environmental Management Project with the Asian Institute of technology, and the University Consortium on the Environmental Component of the Collaborative Environmental Program in Indonesia. It is also involved in *Las Nubes*, a tropical rainforest research initiative in Costa Rica. Las Nubes – the clouds – is a rainforest area that was donated to York University by Dr. Woody Fisher. In response, FES created the Dr. Woody Fisher Fund for Neotropical Conservation, in partnership with the Tropical Science Centre in Costa Rica, to support a wide range of research projects focussing on tropical deforestation, sustainable development, and biodiversity conservation. It has a very active Video, Media and Art Centre that is used to produce environmental videos, documentaries, radio shows, plays and puppet theatre. The York Centre for Applied Sustainability also has years of experience in working to promote the application of sustainability principles and practices throughout society, including the public sector, the private sector, and the civil sector.



The proposed project will create many opportunities for York University students to learn about and to visit Brazil as participants. Written and web-based materials developed during the project- curricula, research reports and academic theses as well as videos and popularly-accessible documentation of community participation and governance activities- will all increase public awareness and access to information on water management in Brazil, and help to strengthen the position and reputation of the Faculty of Environmental Studies and York University.

### **III. Project management**

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#### **Project Management Structure**

All major project decisions will be made by the Project Management Committee, consisting of 3 Brazilians and 3 Canadians. This committee is responsible for reviewing the project's overall progress, revising the project's direction if necessary, finalizing and approving annual workplans, and responding to any external factors which might emerge during the project's duration. An annual face-to-face meeting will be held by the Committee; these will be scheduled whenever possible to coincide with other scheduled project activities to keep expenses for the meetings to a minimum. The committee will operate on the basis of consensus. The position of chair of the committee will be assumed by the Brazilian and Canadian Project Directors on an alternating basis. The joint management structures and budget considerations are addressed in detail on the respective pages in the application form. A part-time project coordinator will be contracted to carry out coordination and administrative duties. This position will be based at York University. Other administrative duties will be carried out by existing staff of the partner institutions.

On both the Brazilian and Canadian sides, a number of partner organizations have been identified which will be involved in the project in various ways. Key individuals within each organization will be kept up-to-date on project activities to facilitate their involvement, which will consist of: feedback on the project's general direction and project activities, in the form of comments on workplans and proposals for activities; participation in the implementation of selected activities which related very closely to their respective mandates; and suggestions for ways of including participants from their organizations and others in project activities. It is foreseen that not all partners will be actively involved in all project phases, but that each will play a role in selected periods during which their involvement is most appropriate.

As one element of project monitoring and evaluation a 3-member advisory team will be established. Each of these 3 individuals will hold a senior position within one of the Brazilian partner organizations (other than Ecoar or USP) and they will play a strong advisory role throughout the project period. This will provide critical feedback on the general project's direction and accomplishments from perspectives beyond Ecoar and USP. While the Project Management Committee will have the final authority on deciding the project's direction, and the advice from these senior individuals is non-binding, the advice will be considered as a strong indication of the needs and interests of Brazilian organizations in this area. Feedback will be solicited from the advisory team in the form of a review of progress reports, annual workplan and selected project documents. This feedback will serve as a key input into project monitoring. While recognizing that such an advisory panel is a bit unconventional, the project team feels that given the very challenging objective of the project, and the need to reach out to a wider community, the panel will be an effective way to include the advice of government agencies at the state and local level.

#### **Project methodology**

The capacity building of the institutions involved in this project in realizing the long-term objective of transforming social environments in terms of sustainability, with the effective participation of civil society, will be undertaken mainly through courses, workshops, communication networks, curriculum and materials development, development of training techniques, and educational exchanges. The overall project methodology includes the following elements: pilot watersheds; learning by doing; building on experience; distance education; and documenting the products and the process.

The project will use an action-research oriented approach as a strategy for learning. The strengthening of community groups as well as the other institutional project partners will occur through their involvement in the planning, analysis, implementation, and evaluation of the educational interventions. This type of involvement of the project participants, respecting and making the best use of their strengths, in all phases of the project, is the basis for the continuity of the project's work.

*Pilot watersheds* – Project activities will be based on a small number of pilot watersheds in Brazil to provide a focus in terms of geographic scale, water resource issues and communities. Most research, training, educational activities, and interventions in Brazil will be undertaken within the context of these pilot river basins. In Canada, watersheds with comparable characteristics in terms of scale, issues and communities will be selected to provide a reference for comparisons and exchange of experiences. The pilot areas will be used as a common reference for capacity building activities which will involve the participants within the watersheds in which they live. While the final decisions on pilot watersheds will be made in year 1 of the project following baseline data analysis, a preliminary selection of possible pilot river basins has been made, based on scale, the existing socio-economic conditions and the possibility for the activities to have multiple impacts in the capacity building of civil society in the area of water resources. The pilot watersheds that will be defined for this project will likely be chosen from within the following large river basins: Alto Tiete (Greater São Paulo) and the Piracicaba River. These areas have been chosen because of the serious concerns around water resources due to the large numbers of inhabitants (approximately 20 million), conflicts over water use, water quality degradation, and the diversity of socio-economic conditions. In the Toronto Region, the Humber River and Don River watersheds have been identified as preliminary watersheds for comparative purposes.

*Learning by doing* - The idea is not to have a series of project activities discussing among project participants how to reach out to community groups, but to go out and do it. This action-oriented approach will be started in the early phases of the project. The development of training courses targeting civil society groups, therefore, will very much be an iterative effort, with curriculum and materials being revised throughout a series of project activities, with regular evaluation mechanisms built in.

*Building on experience* - The Brazilian partner organizations involved in the project have already developed and delivered several very successful courses in environmental education and water resource management, both in-class and through distance learning. The accumulated knowledge and experience of running such courses places these institutions in an excellent position to carry out more in-depth research in development issues and capacity building. The project will provide the Brazilian partner organizations with an opportunity not only to explore new and innovative ways to develop, deliver and evaluate such courses, but also to reflect upon their experiences. Project efforts will rely on a wealth of accumulated experience: (1) Ecoar's record in delivering training to civil society groups in São Paulo State. (2) The experience of ESALQ-USP in education for sustainability. (3) Existing experience of the Faculty of Environmental Studies in innovative approaches to teaching interdisciplinary approaches to environmental issues, including hands-on workshops, the use of video and other forms of creative expressions, group projects, etc. (4) Other Canadian examples, such as Streamkeepers, training programs by the Conservation Authorities, and the Watershed Report Card, to support curriculum development. (5) Previous CIDA projects in the area of water resources in São Paulo State – in particular in the areas of integrated watershed management, land-use planning, negotiation and conflict resolution, and analytical tools for water resources management. (6) Multimedia CD-ROMs by the Institute for Resources and Environment at the University of British Columbia in the area of watershed management in which one of the Canadian assistant project directors was very active.

*Distance education* - A wide variety of instructional techniques will be used in developing and delivering curricula and training programs, including presentations, interactive exercises, role playing games, small group projects and field trips. However, the delivery of workshops, short courses and university programs through formal face-to-face instruction can only reach a fairly limited audience, both in terms of the number of people, their geographic origins and the socio-economic groups they represent. Distance education will therefore be employed in an attempt to reach a broader audience. This will build on the experience of one of the Canadian project directors and others in the use of distance education in the area of water resources management. While access to the Internet has become very widespread in Brazil, and in São Paulo State in particular, difficulties remain with bandwidth and inequalities in access, which the project will need to recognize. Access to television on the other hand, is nearly universal. The strategy in the early phases of the project will be a dual-mode approach: developing curriculum materials which lend themselves to both face-to-face instruction and to distance education. A distance education pilot project will be initiated in the early stages of the project in parallel with regular workshops to explore the effectiveness and appropriateness of various forms of distance education, including Internet-based training and videos. A number of video-based training modules will be developed, building on the experience of Ecoar with developing television

programs in collaboration with local TV networks, and the experience of FES in using video in environmental education. Skills development in this area will be required, and some investments in (computer) hardware, software and related multimedia technologies is part of the budget. All training materials will be made available for free over the Internet and as paper course manuals and video-tapes for a small fee.

*Documenting the products and the process* - Systematically documenting and properly framing the experiences from the learning by doing approach is an essential step in the evaluation process, which allows for a critical evaluation of the completed activities. This evaluation, combined with other experiences and theories, allows for a growth in understanding, which is what Brazilian educator Paulo Freire has labeled “education through praxis”. This project will generate many tangible products, including training manuals, course curricula, educational materials, and multimedia materials. While these are important outputs, just as important in the project is the process through which these were developed. A conscious effort will therefore be made to document these processes, in particular the role civil society actors have played in their creation.

### **Project component 1 - Training and curriculum development**

A series of short courses will be developed and delivered in the pilot project watersheds, using face-to-face interaction as well as distance education. Together these short courses will form the training program. Some of the topics identified include: institutional and legal frameworks for water resources management, multi-stakeholder processes, negotiation and conflict resolution, integrated watershed management, community-based environmental assessment and mapping, analytical tools in water resources management, and program implementation and evaluation.

Content related to the themes of the project will be incorporated within existing and new course offerings both at York University and at USP. For example, a special topics graduate level course in environmental issues in Brazil will be co-taught by York faculty and Brazilian scholars. York currently has a graduate diploma in Latin American and Caribbean Studies, and a course with special emphasis on Brazil would be a very welcome addition. York has substantial strengths in Latin America and the Caribbean, but focus on Brazil has been largely absent.

Teaching materials will be developed, including:

- Production of videos involving the participants and community leaders. In order to reduce costs, the project proposes to acquire the video equipment to be used in video production, and build video-production into project activities. Not only will this reduce the need for special technical services, it will also be used as a method to make media production part of the process of exploring a theme.
- Brochures, educational games, and CD-ROMs, developed in a manner most relevant to the needs of the project;
- Creation of a website which will make most project documents available and provide for mechanisms for project participants and other interested parties to interact and contribute.
- All materials will be freely available for downloading at an Internet site, or for a small fee in printed form, on videotape and on CD-ROM.

### **Project component 2 - Collaborative research**

A number of small collaborative research initiatives will be developed. Some of these will focus on the training and education methods being employed in the project, such as the effective use of distance education, the appropriateness of various materials, and the evaluation of the impact of environmental education. Others will focus on the documentation of studies of water resources management in Brazil, comparative studies between Canada and Brazil in the area of water resources management, and analysis of specific social and biophysical conditions in the pilot watersheds.

An initial evaluation of civil society’s needs in relation to the selected river basin committees will be the first major research initiative of the project. This evaluation will involve professors and students from USP and York, as well as Ecoar and WWF-Brazil, and will include the development of a methodology for such a “hydro-social” mapping of civil society stakeholders, their potential contributions to river basin committees, their needs in order to participate more effectively, the differences and commonalities among the various civil society actors, and a gender and minority assessment of the river basin committee process.

The overall goal of the collaborative research initiatives throughout the project is to increase the partner institutions’ capacity to conduct interdisciplinary research. This will take place via the student exchanges, collaborative

research, and ongoing evaluation discussions. Evaluation methodologies developed by the project participants will be used in both the mid-term self evaluation and the final evaluation of the project to assess its effectiveness in increasing capacity in both the participating institutions and in civil society.

### **Project component 3 - Educational exchanges**

Educational exchanges will involve faculty and staff of the partner institutions, as well as selected members of other civil society groups. Exchanges will consist of: short courses; collaborative research activities; seminars and public lectures; study tours; and community outreach activities in pilot watersheds.

### **Project component 4 - Network building**

Strengthening the existing linkage between the two Brazilian partner organizations, developing a stronger network with York University, and connections with other institutions (including civil society) in Brazil and Canada will contribute to institutional strengthening for all three project partners.

### **Project component 5 – Internationalization of York University**

Internationalization of York University will be accomplished via collaboration between Brazilian and Canadian faculty, and graduate students and exposure of York University in Brazil. The specific activities related to internationalization include: conducting graduate student research in Brazil; strengthening York University curricula; involving York University faculty and staff in training activities; assisting faculty, staff and students of the Brazilian partner organizations to study at York University; and promoting York University within the project's activities.

### **Project component 6 - Development education**

This will involve the incorporation of Brazilian development issues in the curricula of York University courses, the provision of resources for development education materials, lectures and public events for the Canadian public. The general aim of this component is to expand York University's activities in the area of development education.

### **Project component 7 - Project management and administration**

As discussed above, the project will be managed by a joint Brazilian/Canadian team, with a part-time administrative staff member based at York University.

### **Project component 8 - Mid-term evaluation**

A mid-term evaluation is foreseen for year four. The mid-term evaluation will involve 2 parts: a participatory self-evaluation by project participants, using evaluation methodologies developed as part of the project, and an evaluation by an external consultant. The external evaluator will use the indicators developed as part of the performance monitoring framework for ongoing monitoring and reporting. The proposed external evaluator is Tony Dorsey, Director of the School of Community and Regional Planning, University of British Columbia. He will not have been involved in any stage of the project. The terms of reference for the mid-term external evaluation will be based on the expected impacts, outcomes and outputs and the corresponding performance indicators as presented in the project plan. Other evaluation activities are included in the project management and administration component.

### **Performance monitoring framework**

Considering that the proposed project involves a significant process of exchange and learning at multiple levels - individual, collective and institutional – the indicators of evaluation must include both qualitative and quantitative aspects. Fundamental to the principles of process-based evaluation, which considers the monitoring of the learning process and not just the product, such evaluations will happen in a systematic and permanent fashion by way of meetings, workshops, questionnaires, participant feedback, and interviews. This process will be equally applied to the Brazilian and to the Canadian sides of the project.

In accordance with the expected results, the indicators for evaluation are listed in the LFA.

**Expected inputs** are listed and described in detail in the notes to the workplan and budget by expense categories.

### **Project communications**

Very extensive use will be made of Internet communications from the beginning of the project to improve communication among participants, enhance access to critical project documents, reduce costs for mailing/faxing/telephone and travel, and improve the participants' level of comfort with this aspect of collaboration. Most project documents, training materials etc. will be posted on a project web site.

### **How to deal with the language issue?**

While English is spoken by many university-educated professionals and government agency staff in Brazil, not all Brazilians involved in the project are fluent in English. On the Canadian side, in general very few faculty members and students have sufficient knowledge of Portuguese. The project will deal with these challenges in various ways: 1) In terms of senior project management, the level of language skills is high. Two of the three Canadian project directors (Perkins and Zandbergen) are fluent in Portuguese, while two of the three Brazilian project directors (Da Costa and Guarnieri) are fluent in English. Almost all senior Ecoar staff and USP faculty members are very comfortable in English. While translation during most meetings will remain essential, no outside translation services will be required for project meetings and communications due to the substantial number of bilingual participants. 2) Any Brazilian coming to Canada, or Canadian going to Brazil, will have to demonstrate sufficient command of the English/Portuguese language for the intended activities in which he/she will take part. The exception will be a very limited number of events with a larger number of participants (e.g. a public seminar by a visiting scholar with a large number of non-bilingual participants). In such cases, translation would be provided by one of the bilingual project participants or by hired translators. 3) Trainees will be required to participate in a substantial language preparation course prior to travelling to Brazil/Canada if they do not have the necessary language skills. It is expected that most Brazilian trainees (mostly graduate students or at similar level) will be sufficiently fluent in English. The number of Canadian students with Portuguese language skills is likely to be quite limited, but a fair number of graduate students are comfortable in Spanish, which – combined with language training in Portuguese – makes it feasible to expect a reasonable level of fluency. 4) All project documents, training materials etc. will be available in both languages in the early phases of the project – at a later stage, some specific training materials will only be available in Portuguese, as they will target Brazilian civil society groups.

## **IV. Other factors**

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### **Funding from other sources**

Both Ecoar and USP have been successful in the past in getting funding from a variety of agencies (mainly within Brazil) to carry out projects with a focus on the strengthening of civil society in the river basin committees. It is anticipated that future financial support for these activities will be secured for the implementation of training activities beyond the pilot scale foreseen in this partnership. While not firm commitments, it is very likely that additional resources will be mobilized from within Brazil to increase the reach of the proposed activities. It should be noted the contributions identified in the project's budget do not depend on the success of acquiring this funding.