The Heart of the Matter: **Infusing Sustainability Values in Education Experiences of ESD with the Earth Charter**



Celebrating the UN Decade of Education for Sustainable Development











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> United Nations Educational, Scientific and Cultural Organization

Cultivating Good Water and the Earth Charter. The experience of Itaipu Binacional in Brazil.

Nelton Friedrich

Introduction

Itaipu Binational is a public company that belongs equally to Brazil and Paraguay. In 2003, at the peak of the social and political transformations that Brazil was undergoing, a new direction was given to State owned companies, to expand their social activities in the surrounding communities. Within this context, Itaipu embarked on an extensive process of reviewing its mission and goals. The company, inspired by the Earth Charter, incorporated socio-environmental responsibility, the commitment to develop new technologies, and a commitment to sustainable development into its institutional mission. This change was also inspired by the rising global trend of increased importance of companies´ involvement in the social and environmental issues of the communities where they are located. This process helped to expand the company´ s mission and to clarify the understanding that Itaipu could play an important role in promoting the common good and caring for the community of life in its area of influence.

One of the practical results of this change is expressed in the Cultivating Good Water programme (Cultivando Água Boa - CAB), founded in that year to primarily protect water, the environment, the human community, and the rest of the community of life. The field of application for this programme is the following area of hydroelectric interest: the Rio Paraná Watershed with a surface area of about 8000 km² and approximately 1 million inhabitants distributed among 29 municipalities.

This programme became an important platform for dialogue, interaction with and among the local communities, knowledge generation, and shared management of projects implemented by the community in partnership with Itaipu. Previously, in addition to the company's focus on energy production, the relationship with the community would only happen at the institutional level (with municipalities whose towns were flooded by the reservoir areas),

rather than with the actual communities in the watershed.

The programme was conceived and is being implemented based primarily on the principles and values contained in the Earth Charter (the renowned writer, theologian, and member of the Earth Charter Commission, Leonardo Boff, is both an advisor and directly involved with the philosophical orientation of the programme). However, the initiative is also inspired by other environmental documents and initiatives such as the Millennium Development Goals, Agenda 21, the Kyoto Protocol, the Treaty on Environmental Education for Sustainable Societies and Global Responsibility, the Water for All – Water for Life Document by UNESCO, National Environment Conference documents, the National Plan for Hydrological Resources, and the public policies of the Brazilian Government.



eonardo Boff speaking to teachers.

From its conception and through implementation, Cultivating Good Water elected the following structural pillars:

- environmental education as a maximum priority (including diverse formal and informal education and educational communication) through an emancipatory, critical, and transformative approach, capable of captivating and moving hearts and minds toward sustainability. A collective environmental education covers all actions of the programme, penetrates social and family circles, and promotes sustainable development;
- (2) the watershed a natural unit for planning as an area for realization and immersion into everyday problems, belonging to communities and consequently reconstructing the local-global relationship;

- (3) socio-environmentalism as the main goal, promoting the correction of collective and individual passive environmental liabilities, constantly engaging society (aware of the urgency of the problem and conscious of its causes), valuing social politics and the inclusion of socially and economically fragmented segments;
- (4) innovative governance: participatory democracy as the lifeblood of the process, not merely presenting pre-made solutions or the promotion of an idea, but also ensuring solid opportunities for participation and fertile spaces for creativity that enable the re-signification of community life by realizing that our weakness lies in individualism and disarray;
- (5) the reconciliation of humans with nature, beginning with reflection-awareness-action (provoking questions about the socio-environmental planetary crisis, climate change, global warming, water scarcity, new epidemics, unsustainable modes of production and consumption, views that are anthropocentric, mechanistic, utilitarian, linear, fragmented, and divisive, and even questions of an existential nature).
- (6) dialogue of knowledge including traditional, popular, and academic knowledge - and the salvaging of beliefs, feelings, rituals, myths, celebrations of belonging, cooperation, care, life, and well-being;
- (7) the understanding that "we are threads of the fabric of life" and that the holistic vision and systemic approach form the most coherent manner of understanding life, the mind, society, and therefore actions, including the making of a management model (sustainable, integral, and integrated);
- (8) the deconstruction of fear of the unknown, to dare, innovate, both within the internal realm of organizations and the external network of human relations – in order to avoid sameness and enable different ways of doing more, thinking and acting together within transformations for a sustainable future and the rise of new paradigms.



Activity with students on World Enviornment Day

Cultivating Good Water contains 20 programmes carried out through 65 interconnected projects, structured in an inclusive and participatory manner. The principles are: Environmental Education; Watershed Management; Territorial Information Management; Regional Sanitation; Sustainable Rural Development/Organic Life; Medicinal Plants; Participatory Monitoring of Water Quality and Environmental Evaluation; and programmes of social and technological inclusion: Sustainability of Vulnerable Segments (Indigenous communities, youth, villages, fishermen, collectors of recyclable materials, and small producers); Production of Fish in our Waters; Biodiversity in our Region/Biodiversity Corridor and research and protection of endangered species.

This range of actions is aimed at revitalizing community life, focusing on the quality and quantity of water, soils, air, and food, sustainable production, conscious consumption and sustainable cities, in order to improve the quality of life of people and of Mother Nature, comprising a unique community of life. Therefore, this will enable the application of the principle of shared responsibility, strengthening of associations, cooperation, the building of a new, clean, and more local economy, new urban and rural opportunities, and productive inclusion through new arrangements. In essence, the programme searches for a new way of being, feeling, living, producing, and consuming.

One of the principle aspects of Cultivating Good Water (CAB) directly related to the Earth Charter is the strengthening of local communities, enabling and empowering them to take care of themselves and the territory where they live, thereby constructing a planetary citizenship and a local-global connection. The programme involves local partners in every capacity, working toward co-responsibility with more ample community participation. There are more than 2,000 partner institutions among various universities, organizations, government sectors, NGOs, civil society organizations, and 29 management committees.

The diverse and multi-faceted character of the programme guarantees management based on care for the environment and human beings, and signifies a path of hope toward the construction of an environmentally right and sustainable area.

The fundamental axis of CAB is environmental education, and the foundation of environmental education is in the Earth Charter, that is established through a process of transversality that encompasses all actions directed toward the construction of values and knowledge inspired by the ethics of care and respect for life and the natural resources that sustain it.

From UNESCO, the programme brought the understanding that education is not an end in itself, but rather a fundamental right and key instrument for changing values, behaviors, and lifestyles. In order to reach a sustainable future, it is necessary to formulate a consciousness among the population of the importance of the environment, and one of the ways in which people are able to obtain this consciousness and the abilities necessary for the improvement of their quality of life is through environmental education.

In the 29 municipalities covered by the programme, there are 29 collective educators and hundreds of environmental educators who foster the principles of the Earth Charter on diverse fronts, especially through workshops and informational speeches that lead inhabitants of the watershed to identify and live out the principles of the Earth Charter in their daily practices and in the recuperation of socio-environmental liabilities within communities.

Implementation

The role of environmental education, the principles of the Earth Charter, and community ownership becomes evident in the implementation stages of CAB, which are the following:



Kids at the Water Pact ceremony

1. Awareness: with great participation from communities, leaders and the local powers seek to raise awareness by deepening reflections for action. Without placing blame, a rich dialogue on climate change, water scarcity, waste management, environmental liabilities, community situations, social values, and questions about lifestyles occur.

2. Workshops for the Future: there are three moments (1) Concerns Wall,(2) Tree of Hope, and (3) Way Forward.

Concerns Wall: the facilitator of the workshop stimulates and encourages the participants to open their hearts and present their concerns, critiques, complaints, and anxieties. Everything is noted and a string of concerns emerges. This, in turn, motivates us not to have only concerns about our daily lives.

Tree of Hope: this is the moment for proposals. Each dream presented by members of the community is discussed, only that which is agreed to by

all is what shall be attached to the tree of hope. This way it shall no longer remain merely an individual dream, but a collective one. This moves us from concerns to the dreams expressed by communities.

Way Forward: inspired by the final part of the Earth Charter, the way forward is the work plan for the watershed, reflected, discussed, and decided upon by local communities, with the understanding that many actions, changes and improvements depend solely on them; others ask for a sharing of responsibilities (communities, municipalities, Itaipu, cooperatives, social movements, entities, and other spheres of power). The work plan became known as Agenda 21 of the Area; "of the area where I live and work, where I have dreams, family, friends, frustrations, anguishes, loves, and flavors".

3. Within the sequence of this process, the Water Pact occurs, a moment to celebrate and join together. All the communities of the watershed find themselves in a beautiful and captivating ceremony, with rituals and mystical actions coordinated and played by its residents. It begins with the ritual of water, then fire, earth, air, peace, and the description of what happens in the process of reaching awareness through workshops on the way forward. Global-local and local-global connections are made, referencing documents like the Earth Charter and the values of the Ethics of Care, the reinforcement of shared responsibility and the reaffirmation of the desire to execute together what was collectively defined, such as Agenda 21, including the signing

of conventions, agreements, and terms of compromise. Rituals, music, theatre, poems, games, and many other actions by local actors inspire emotions and encourage feelings of belonging. The last act of the Pact is its signing, which is commemorated (with high symbolic value) through the sharing of an enormous cake displaying a drawing in the icing of the watershed drawn by the community.

Lessons learned

In 10 years of carrying out the programme, more than 250 Workshops of the Future, totaling about 10,000 participants, were held throughout the territory, which mobilized the communities toward solutions for environmental liabilities in 197 watersheds; the recuperation of 21,000 hectares of previously degraded agricultural soils; the readjustment of nearly 2,000 kilometers of rural highway that contributed to the erosion and contamination of rivers; and the protection of nearly 1,400 linear kilometers of forest surrounding rivers and streams of the region, among other significant results.

With regenerated forests, species of flora and fauna begin to reappear, attracting bees again and, therefore beekeeping. Coofamel (the Cooperation of Beekeepers), established six years ago, has 417 points-of-sale throughout the country, and has presented the region with new opportunities for beekeeping, including introducing the jataí bee, whose honey contains medicinal properties.



Itaipu Hydrolectric plant

It is worth reiterating the important roles of transformative education, conviction, the awakening of a socio-environmental consciousness and the reunification of humans with nature. Without collective individuals and citizen participation, we would not have the behaviors and attitudes that have enabled such results.

Specifically within this area, the programme has already involved more than 19,400 environmental educators directly in actions and trained 720 managers for watershed management; 201 Earth Charter and Climate Change workshops were offered, involving 3,950 participants, including teachers, indigenous people, collectors of recyclable materials, environmental educators, public managers, fishermen, organic farmers, and cultivators of medicinal plants.

Complementing the Earth Charter Workshops (many of them personally conducted by Leonardo Boff), 140 workshops of Eco pedagogy have been established for teachers. A manual for Eco pedagogy was developed and distributed throughout the region. From this work, the 2011 distribution of 100,000 copies of the Earth Charter Children's Version containing bio-regionalized illustrations followed, in order to encourage the replication of this work by students of the entire watershed area.

Between 2011 and 2012, schools implemented their Eco pedagogical projects with methodological support from the Environmental Education Programme of Itaipu. The best practices were selected based on a contest, and the prize was converted toward strengthening projects.

The systemic approach that characterizes the programme and builds the interface between environmental education and the Sustainable Rural Development Programme/Organic Life, enables the insertion of organic food in school lunches within municipal schools of the region. Add to this the bi-annual promotion of recipe contests for healthy lunches, preceded by courses in conscious consumerism and healthy cooking (870 school cafeteria workers participated in the last contest).

This is a real revolution, shifting the condition of the school cooks from previously being anonymous mixers and warmers up of industrial food to a new leadership role for the cooks fostering responsible consumption and care with their meals, as authors of cookbooks, as well as contributing to a rich debate and movement around the healthy food chain, healthy living, and a sustainable planet. The Letter for an Organic World, with 135,000 examples distributed to schools, and the Matita Theatre Piece (becoming conscious about organic food) complement this initiative.

The uplifting mobilization resulting from environmental education enabled the internalization of various public policies in the region. An example of this is the Research-Action-Participant proposal (Pesquisa-Ação-Participante - PAP) – or People who Learn by Participating. Together with the Department of Environmental Education of the Ministry of the Environment (DEA/ MMA) and the Ministry of Education, Cultivating Good Water contributed to the promotion and formation of the Environment Educators programme (Formação de Educadores Ambientais - ProFEA) in the region, and the continuation of strategic educating.

The results of the PAP groups are extremely positive. In the first process of training educators, 1,907 people were trained, creating 81 learning communities. In Medianeira, for example, the Community Learning Garden Belo Horizonte, in partnership with environmental educators, began work to train people in the neighborhood, making a calendar for personal encounters. The community improved its social ties and many positive socio-environmental incentives flourished.

One of these is the Apoena project "caring for nature and promoting health", created by local activists and people of the most diverse segments of society, from teachers, to collectors of recyclable materials, to youth, farmers, and educators. It is also important to note that the community has been able, through popular pressure (including public demonstrations, communication initiatives, and direct communication within organizations and through legislative and executive power), to adopt the Municipal Park, which was revitalized.

Finally, it is important to mention the green rooms and spaces, which serve as transmitters of information and formulators of socio-environmental actions installed in BP3 municipalities (municipalities from Parana region); the training of community communicators, with an emphasis on edu-communication; actions directed toward the implementation of sanitation programmes in 52 municipalities in Western Paraná; the membership of participating municipalities within CAB within the movement of Sustainable Cities (containing commitments and goals to be reached in relation to sustainability); the construction of water tanks within schools, preceded by Eco pedagogical projects on culture, the reuse of water and the adoption of organic gardens; as well as the participatory monitoring of water quality using bio indicators (the community learns to "read the small organisms that are in the water", using a magnifying glass and physics-chemical kit, and can attest to whether the water quality is good or polluted). All this generates a profound change in the behavior and outlook toward water and bodies of water.

For its size and the scope of its actions, the Cultivating Good Water programme was awarded the Earth Charter Prize (Earth Charter + 5), which took place in Amsterdam, Holland, in commemoration of the five years anniversary of the launching of the Earth Charter.

In Leonardo Boff's evaluation, "Even within the current global system, which is highly unsustainable, the Cultivating Good Water project breaks with the dominant logic and shows that it is possible, from the bottom up and stemming from the people and communities, in the frames of a given ecological region, to create a miniature biocivilization, a model of that which can, and possibly should, be the future of a reunited humanity on this unique Planet Earth".

Contact information: Nelton Friedrich Enviornmental Coordination Director Itaipu Binacional Email: <u>nelton@itaipu.gov.br</u> www.cultivandoaguaboa.com.br Brazil "The impact it generated in our community was a surprise. The recovery and readjustment of the soil, as well as the installation of a new community water supply system, resulted in the water quality and the amount of water improving significantly. The regeneration of the riverbank vegetation has given the community a new look. One can even say that the weather has improved. "(Milton Dillmann, Sanga Buriti, Itaipulândia)."

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