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Repapel: Paper Collection and Recycling in Schools, Montevideo *Uruguay*

Best Practice

New for 2002

Categories:

Production and Consumption Patterns:

- production/consumption cycles
- resource conservation
- waste reuse and recycling

Children and Youth:

- 0-9 years
- environmental programmes with a youth focus
- recreational/ cultural programming

Environmental Management:

- pollution reduction
- resource management

Level of Activity: National

Ecosystem: Coastal

Summary

The general goal of REPAPPEL is to generate participatory activities in primary schools, enabling children to gain first-hand knowledge on how recycling benefits the Environment.

The project involved the distribution of school supplies made of recycled paper, obtained from old newspapers and other wastepaper collected in the schools that participated in the project.

To collect the discarded paper, a program for gathering used newspapers and other types of wastepaper was implemented in each of the participating schools. The children collected newspapers and papers from their homes and neighborhood and took them to school. The papers collected by each school were picked up baled and transported to a paper factory (IPUSA) that manufactures recycled paper.

The factory regularly gave back recycled-paper products (folders, notebooks, toilet tissue, and packaging paper) equal to the value of the newspapers and paper obtained from the participating schools. At its best, the project distributed recycled-paper products equivalent to 40 tons per month.

At the same time, paper-recycling activities were carried out in schools to give children the chance to sort and recycle paper themselves, making their own drawing paper and learning the basics of paper sorting and recycling. These activities were complemented with training workshops organized for teachers, to enable them to conduct workshops on recycling procedures. A total of 96 schools from Montevideo participated in this exercise; with over 25,000 children and several companies donating discarded paper for use in the manufacture of school supplies.

Since 1999, 950 tons of paper have been collected from schools. In return supplies worth US\$ 120,000 have been distributed to the same. The paper recycling initiative has been carried out in other cities of Uruguay, namely: Trinidad, Melo, Colonia, Salto and Paysandu.

Narrative

SITUATION BEFORE THE INITIATIVE BEGAN

Primary schools offered very limited opportunities for participation in which children could directly appreciate how recycling furthers Environmental conservation.

There were no paper collection and recycling facilities. Most company excess paper was discarded along with other refuse, thus losing the economic, environmental and educational benefits of paper recycling.

ESTABLISHMENT OF PRIORITIES:

Priorities:

1. To develop and implement organized and participatory activities of paper collection and recycling in Montevideo schools.
2. Set up and carry out environmental education workshops on paper recycling in primary schools in Uruguay.
3. To take advantage of the economic and environmental resources of paper collection and recycling to support low-resource schoolchildren of Montevideo by providing them with school supplies.

The priorities were established through observation of isolated paper collection and recycling efforts carried out in schools which pioneered this experience.

These priorities were defined by CEADU specialists along with teachers from 15 urban schools of Montevideo who participated in a seminar on "Education for Sustainable Consumption" organized by CEADU in 1998.

FORMULATION OF OBJECTIVES AND STRATEGIES:

General Aim or Goal:

To develop environmental awareness among children through hands-on participatory paper collection and recycling activities, as part of their early learning process.

Specific Aims or Goals:

1. To distribute, in schools, supplies made with recycled paper obtained from the collection of old newspapers and other wastepaper in those same schools.
2. To develop an environmental education program on paper sorting and recycling in schools.

Strategy:

Gradual (concentric) growth of the project's scope, in three stages:

1. Beginning at each of the schools chosen (low-resource schools), direct participation of teachers was sought

2. The scope of the project was expanded to include students' parents and neighbors, who agreed to contribute paper as a way to provide school supplies for their children.

3. Paper collection was expanded to the stores, companies, offices and factories of the area of influence of the neighborhoods where the schools were located.

REPAPEL's goals and strategy were established taking into account the discussions maintained by Teachers, Principals and Pedagogical Staff of urban public schools of Montevideo, concerning the possibilities of setting up paper recycling programs in low-resource schools of Montevideo.

MOBILIZATION OF RESOURCES:

The NGO CEADU's specialists carried out planning efforts, defined goals, designed data registration forms, organized informative workshops and performed project follow-up and assessment activities.

The principals of each of the schools involved coordinated the activities with the project specialists and their teaching staff.

The teachers introduced the project to the children and supervised the paper collection and sorting, with the general aim of meeting the targets set by the Project. Along with CEADU specialists, they were in charge of the educational activities connected with paper recycling.

Students' parents, neighbors and/or friends saved old newspapers and other wastepaper for them to take to their schools.

Students of participating schools gathered the newspapers and paper and took them to their school. They also carried out paper recycling activities in workshops.

Owners of small stores (grocery stores, stationery stores, bars, etc.) located in the students' neighborhood promoted the project through posters and gathered paper for the children to take to school.

The wastepaper collected was delivered to the paper factory IPUSA (Industria Papelera del Uruguay Sociedad Ana) and for the same value (according to market prices) of the wastepaper received, the factory gave REPAPEL in return recycled paper and school supplies (folders, notebooks, etc).

In 1999, the Fund of the Americas (Uruguay Chapter) selected REPAPEL among more than 100 others and awarded it US\$ 80,000 in aid to launch the project's practical activities.

Uruguay's National Environmental Board (DINAMA) offered technical support to further define paper-sorting methods. In the year 2000, in cooperation with REPAPEL, it organized a citywide telephone directory exchange campaign. The paper obtained in this campaign was used directly to manufacture school supplies to be distributed in the participating schools.

Private companies, universities, school centers and other organizations that generate wastepaper signed agreements with REPAPEL by virtue of which they would donate their discarded paper for recycling purposes, thus producing school supplies for the project's beneficiary schools. The contribution of companies and school centers enabled REPAPEL to reach a monthly break-even point of 25 tons.

PROCESS

The project was initially carried out in low-resource schools, which were the project's first beneficiaries. The problem encountered at this stage was the large number of schools and teachers involved in the project, which made it impossible to establish from the onset the necessary coordination to carry out the paper collection in each of the low-resource schools participating in

REPAPEL.

In order for the project to succeed the teachers and principals of the schools involved had to be willing to continue the paper collection throughout the whole project. This necessary condition was only partially met through Recycling Commissions formed in each school, with teachers in charge of following-up and coordinating with the projects organizers.

Once the paper collection activities were coordinated, the project faced an additional problem, as it had to deal with high freight rates to transport the paper to the factory. This inconvenience was overcome when greater volumes of paper were collected through the additional support of companies, enabling the use of larger trucks and thus lowering the cost per unit.

After the project's educational goals were met, efforts were directed towards enhancing paper collection methods to reach a break-even point without financial aid. This was hindered by the fluctuations in used paper prices, which on many occasions prevented REPAPEL from attaining its economic goals.

During the project's first year, sponsorship was sought from the city's leading newspapers, as well as from institutions potentially interested in participating in this type of project. But REPAPEL gained media support only after it had been operating for a year.

The selection of the recycled paper supplies to be distributed among students of the participating low-resource schools was not always approved by all the beneficiaries. This problem continues to date. A general query is planned in order to better define the type of school supplies which will be distributed in future deliveries.

RESULTS ACHIEVED:

In the course of three years, 25,000 children from 96 low-resource schools of Montevideo have received school supplies made from recycled paper, for a value of US\$ 120,000.

At present, in the framework of REPAPEL, School Fund-Raising Committees, teachers and the community as a whole work together to collect discarded paper for the benefit of low-resource schools of Montevideo.

The recycling carried out by the REPAPEL project to support low-resource schools in Montevideo has promoted changes in the garbage disposal process and in municipal paper recycling policies.

Through REPAPEL, companies, institutions and government offices of Montevideo which generate wastepaper have the chance to support the low-resource school of their choice. This has brought about changes in the behavior of the population concerning garbage disposal, encouraging each workplace involved in the project to dispose paper separately from other types of garbage.

SUSTAINABILITY:

After an initial period based on financial aid (Fund of the Americas Contest and National Environmental Board of Uruguay), REPAPEL asked the large wastepaper generating companies (importers, offices, banks, shopping centers, supermarkets) to contribute their discarded paper to the project. At present, the project has reached the break-even point (20 tons of paper a month) and the amount of paper collected enables it to continue without external financial aid.

Financial sustainability of REPAPEL (for 3 months):

Analysis of a break-even point at twenty-five tons a month

QUARTERLY INCOME

Income from paper collected directly in schools: U\$S 4,200
Income from paper collected from donating companies: U\$S 2,400
Total quarterly income: U\$S 6,600 (corresponding to 75 tons of paper)

QUARTERLY EXPENSES

General coordination: U\$S 650
Freight (transport): U\$S 950
Administration and facility expenses: U\$S 600
Supplies made with the recycled paper which were distributed in the schools: U\$S 4,400
Total Quarterly expenses: U\$S 6.600

REPAPEL sought to maximize visibility and promotion of the project's activities through articles in the press, thus enabling community participation, involving the areas of influence of participating schools and a greater number of companies, offices and institutions that generate wastepaper. This has brought about changes in people's behavior, making them conscious of the benefits of separating wastepaper from other garbage, and thus supporting low-resource schools and the environment in general.

Montevideo has a high percentage of paper (10%) in its urban garbage, most of which comes from old newspapers. Since it gets wet easily and there are no formal recycling facilities, most of the paper was lost in the city's landfills and sewerage system, generating sanitation problems, sewer clogging and final disposal problems.

More newspapers are sold in Montevideo than in any other cities in the region, in relative terms; however, in comparison very few are recycled due to a lack of economic incentives.

Due to an absence of efficient newspaper collection infrastructure and the lack of environmental awareness of the advantages of recycling paper, Uruguay's paper industry is forced to import used newspapers from other countries (mainly, the United States, Brazil, Argentina and Chile) in order to meet the increasing demand of recycled-paper products. REPAPEL has begun to offer an alternative for final disposal of paper, while supporting low-resource schoolchildren and providing educational elements to raise environmental awareness among children.

LESSONS LEARNED:

Before REPAPEL, people were not used to sorting their garbage, and paper was mixed in with other waste, missing the chance to take advantage of this potential resource. Once the project began, it was discovered that there was also the possibility of sorting the different types of paper discarded, as the prices differed according to quality (white paper, fanfold paper, cardboard, etc.). The project showed the need to teach schoolchildren and the community as a whole the different possibilities of sorting the paper. This helped to increase, within a short period of time, the value of the paper collected.

1. Paper recycling is a complex activity. The earlier the wastepaper is sorted, the more resources it generates.

When REPAPEL began its experience in schools, the neighborhoods also reacted favorably. The key factor that had prevented paper collection was the lack of an organized structure which would ensure that the recycled paper would be put to good use. Once REPAPEL guaranteed that the paper was returned in the form of school supplies, the community increased its support. This led to an intensification of the project's promotional activities, an aspect which had not been fully appreciated at the beginning of the project.

2. For the success of a project involving community participation, promotional activities are always more important than expected.

It is generally believed that environmental technologies and activities are always costly, and that environmental protection always generates additional costs which have to be paid. The REPAPEL experience, which reached a break-even point at 25 monthly tons of paper, showed that protecting the environment can generate interesting resources: in REPAPEL's case, support in the form of school supplies for low-resource schoolchildren.

3. Environmental activities, in general, can be seen from a good resource management perspective.

TRANSFERABILITY:

REPAPEL was launched in 1999 in 100 schools of the city of Montevideo. At present, it has been satisfactorily replicated in five cities outside Montevideo (Trinidad, Melo, Colonia, Salto and Paysandu). It is possible to fully replicate the project in densely populated urban areas, featuring both a limited number of schools and a paper processing plant to receive the wastepaper and manufacture recycled-paper products.

The teacher training activities and the paper-recycling workshops with children can be fully replicated, and it is possible to integrate them into the curriculum through environmental protection learning activities.

The GUTTENBERG paper-recycling project carried out in schools (paper manufacture using wastepaper) is fully replicable in different conditions. It is available to any institution wishing to launch this type of project.

The first thing that must be established in order to replicate the initiative is the number of schools that are to participate and which factory will be in charge of processing the wastepaper and manufacturing the products (school supplies) to be distributed in the schools.

It is important to stress the propagation aspects of the experience, which enable it to expand naturally. The process is initially carried out in the schools, with the students collecting the paper. Then, their parents start contributing with paper, later the neighborhood gets involved, supplying more paper, and finally companies donate their discarded paper, ultimately enabling the project to reach its break-even point and self-sustainability

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Type of Organization: Non-governmental organisation (NGO)

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Partners

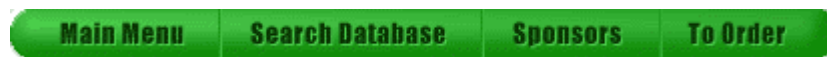
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Type of Organization: International Agency (Multilateral)
Type of Partner Support: Financial Support

Financial Profile



Year	Total Budget in US\$	<i>Partner A (% of the budget)</i>	<i>Partner B (% of the budget)</i>	<i>Partner C (% of the budget)</i>
1999	120,000	60 %	30%	10%
2000	75,000	0	20	80
2001	50,000	0	0	100



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