



**UNESCO International Seminar
“Getting climate-ready: ASPnet schools’ response to climate change”
7-8 December 2015, UNESCO, Paris**

ASPNET PROJECTS AND INITIATIVES FROM AROUND THE GLOBE



BRAZIL

Colégio Israelita Brasileiro A. Liessin Scholem Aleichem, Rio de Janeiro

Activity: Liessin's Environment Core (NuMA - Núcleo de Meio Ambiente do Liessin)

The project, launched in 2011, aims to develop educational activities that mobilize the entire school community for sustainable development. In partnership with the school administration, actions are planned and put into effect that structure the space and make every member of the school feel responsible for maintaining the environmental legacy built up over the years. Different subjects are integrated through interdisciplinary activities, using cross-cutting themes as guides. Everyday situations are used to diversify the learning environments, with the emphasis on non-formal education with no pre-set curriculum, do-it-yourself and learn by doing.

Colegio Magno, Sao Paulo

Activity: News about the global climate: Developing a critical generation

The project aims to motivate students to develop a critical attitude regarding the global debate on climate. Beginning in July 2015, students were given the task of producing a newspaper via different media (video, web and print) on the theme of climate change, introducing different points of view for a general public. Students were divided in small groups, responsible for collecting information, producing and presenting the news. Different information sources were provided to them. Some asserted that global warming is a real problem; others denied it existed. Students were asked to present both points of view and to check facts in order to publish an accurate report. The news will then be presented to the whole community and to the other ASPnet schools in Portuguese and in English.

Escola Municipal de Ensino Professora Alcina Dantas Feijão, São Caetano do Sul,

Activity: Deconstruction

The goal of the project is to use the tools of advertising to develop an effective communication campaign that challenges consumerism and environmental irresponsibility. Students are asked to think about climate change, analyze communication on the subject and imagine a new horizon of possibilities. Next they gather information and brainstorm, and then produce their innovative campaign. In the final phase they report and reflect on the results.

Organização Educacional Farias Brito, Fortaleza

Activity: Planting Awareness, Harvesting Responsibility

The organization has a long tradition of environmental awareness. Since 1979, when its managers responded to rising temperatures by enhancing natural ventilation in schools rather than installing air conditioning, several initiatives have promoted scientific research, responsible consumption, waste avoidance and alternative energy sources. "*Planting Awareness, Harvesting Responsibility* is an example of these initiatives that for twenty years have changed the mindset of the school community." The project establishes partnership with biologists, plastic artists and organizations focused on sustainability to provide lectures, studies, creation of comic books and various interventions that benefit communities. It reaches around 11,000 students of Primary and Secondary School (6-17 years old) and involves approximately 300 professionals, including teachers and educational coordinators.

Colégio Guilherme Dumont Villares, Sao Paulo

Activity: "GDV – Game Of Life" – Climate Change

The activity was launched in 2015, with the aim of consolidating learning about mitigation, adaptation and reduction of natural risks within the theme Education and Climate Change.

Taking an interdisciplinary approach, a group of teachers from related subjects decided to create a game as a strategy to motivate the work. The game was set up using the Facebook platform, format ARGs (game based on a narrative that mixes reality and fiction), because of its easy access. "It allowed students to participate in discussions, explore possibilities and solve challenges in an interactive, involving, game-like scenario, using their intellectual, emotional and practical intelligence." The narrative conducting the game unfolds in two scenarios, one in a community that represents the past and in another that reflects the present. Alternating between the two realities, the students are led to recognize and face the consequences of climate change, exploring possibilities to deal with its impacts in the future.

DENMARK

Endrupskolen, Fredensborg

Activity: “Haver til Maver”

The school has maintained a partnership since 2006 with Haver til Maver, a Danish non-profit working for fuller, healthier and greener lifestyles, mainly through its culinary schoolyard program, which brings nature, gardening and cooking into children’s primary education. The programme consists of eight separate visits during the school year to one of its locations. There, classes are met by experts such as farmers, cooks, biologists or gardeners who guide teachers and students in the use of plants, trees, vegetables, smells, tastes and outdoor as learning-resources. “Just picture carrotmath, smelly-spelling or earthworm dancing in the earth’s greatest classroom!”

Roskilde Gymnasium, Roskilde

Activity: Eco-School, UNESCO ASP Baltic Sea Project (BSP) and Let’s Take Care of the Planet (LTCP)

The activity, which is ongoing since 2012, uses the Eco-School whole-school approach, symbolized by a green flag reminding students and staff to take care of the environment and to integrate sustainability into school activities. It is run by an Eco Council with representatives from school management, staff and students. The Eco Council initiates sustainable projects, for example solar panels or urban gardens, to be pursued through daily educational practices. Once a year the Eco Council organizes an Eco Week during which all classes focus on sustainability; in 2015 the issue was waste and recycling. The activity also includes local cooperation (with the municipality to implement their climate adaptation strategy) and international cooperation (through networks such as the UNESCO ASP Baltic Sea Project and Let’s Take Care of the Planet).

Sonderskov-skolen, Sønderborg

Activity: Keep Focus

In 2015 the school installed solar panels and sensors on water and heat meters, connected to a clearly visible monitor at the main entrance, enabling everyone to observe levels of consumption. The school has formed an energy patrol, a group of 8-10 students and a teacher, who encourage others to become more aware of saving energy and water. The classes that are the most conscientious about turning off lights and water are awarded a Smiley to hang in their classroom. In 2015/2016, the school is developing an app enabling students to keep track of their consumption at home and show their parents.

DOMINICAN REPUBLIC

Colegio San Jose Obrero, Santo Domingo

Activity: Plant a tree and watch it grow

Since 2010, the school has been participating in the “100 Million Trees by 2017” campaign launched by Environment Online. EO is a global virtual school and network for sustainable development; it links students around the world who study the same environmental topics and share their learning results in their local communities and on the web. The tree planting activity is an approach to learning about forests, water, biodiversity, climate change and related issues. As they learn the importance of replanting forests, students are also acquiring skills – how to cultivate different kinds of trees, map-reading and orientation. This year they are learning about the weather and how it affects tree growth.

Colegio Santa Rosa de Lima, Santo Domingo

Activity: Taking Care of the Future with Science Corners

Since 2014, the school has been raising awareness of sustainability issues through project-based learning. Students create micro-laboratories of investigation, in and out of the classroom, with the purpose of finding solutions to problems related to Education for Sustainable Development (biodiversity, climate change, disease prevention, etc.). Each class selects the subtheme on which they wish to work. This theme is explored and developed throughout the year in Science class.

Instituto Politécnico Parroquial Santa Ana, Santo Domingo

Activity: “Diario de artista”

Launched in 2013, the project links education for peace and sustainable development with the arts. In the first phase, as part of the celebration of the International Day of Peace, the school took part in environmental activities organized by UNESCO’s ASPnet. Next, participants defined themes for the conceptualization of works and sustainable art projects through audiovisual documentation, brainstorming film forums and photographic surveys; they also made architectural models. Finally, they built art pieces for exhibition inside and outside the school environment.

Liceo Gerardo Jansen, Salvaleon de Higüey

Activity: Proyecto del Mar Caribe “Observando la Arena” (Sandwatch)

The project aims to sensitize students to the state of marine and coastal resources. It involves them in activities for the care and protection of these natural resources, in which students, teachers, members of the community and governmental institutions work together. Particular beaches are selected to observe, measure and analyze ocean water contamination. Students participate in environmental stewardship and influence others to provide an effective response to climate change. The project complies with the targets of the school curriculum in the natural sciences.

Liceo Sor Ana Nolan Fe y Alegría, San Pedro de Macorís

Activity: “Mi Barrio Limpio”

The project promotes a healthy environment in the school. Students’ leadership and ability to work cooperatively are developed, which has a positive impact on their families and communities. Focused on better management of waste and the proper use of water, the project builds awareness of the importance of preserving natural resources.

FRANCE

Collège du Bas-Chablais, Douvaine

Activity: Club UNESCO

Six teachers and 20 pupils have been working weekly for the last year on different sustainability issues. Taking a local to global approach, they have correspondents in Russia (Siberia) and in the United States (Oregon) with whom they share experiences. To learn about climate change, they focused on the challenges of the 2015 climate conference in Paris. They carried out modelling experiments on the greenhouse effect and produced photos and videos, while also pursuing the subject in their biology and physics classes. Through a partnership with the CREA research centre in Chamonix, students participated in the Phenoclim research project about the effect of climate change on plants. In addition, the school has collected plastic bottle caps for a charitable organization; let part of its lawn run wild to observe biodiversity; created an organic vegetable garden; and set up a paper recycling system.

Collège Vincent Van Gogh, Blénod-lès-Pont-à-Mousson

Activity: Eco Radio (webradio 100% développement durable)

The whole school (and its monitoring committee comprising all college staff, student representatives, parents and partners) was mobilized on the global warming theme via the Eco Radio project. A student created a new program called "Road to COP21". The creation of the webradio was facilitated through partnerships with CLEMI, a body for the training of teachers on news media for school, DANE (division for academic digital education) for hosting the website of the radio on: <http://www4.ac-nancy-metz.fr/clg-vincent-van-gogh> and Radio Activity, a communal organization. Since 2013, over 250 students, administrators and community members have participated in the webradio's research, production, editing and setting up of the online podcast.

Lycée Jean- Baptiste Dumas, Alès

Activity: Manufacturing a membrane puncturing system

Formerly a mining town, Alès is now a center for ecotourism and development for innovation and research. Given its geographical context, near the Cevennes natural reserve, the area is particularly sensitive to climate change. The school thus decided to engage in new educational strategies focused on sustainable development and climate change. Since 2012, the school has been active in a few projects, mainly energy study and architectural layout of a bioclimatic house and most recently the manufacturing of a membrane puncturing system on the site of ethnobotanical gardens of La Gardie. These activities have brought together over 350 students, teachers, school administrators and community members.

Lycée Marseillereve, Marseille

Activity: Les Sentinelles (The Sentinels)

The year-long (2014-15) project included activities to increase awareness of water and energy issues; studies of biodiversity on the school grounds; actions to limit consumption; partnerships with stakeholders; and participation in local and international conferences on sustainable development. It will be followed by a new, expanded version, "Les sentinelles de l'eau" (The water sentinels).

GERMANY

Leibniz-Gymnasium St. Ingbert, St. Ingbert

Activity: InnoGrün – die nachhaltige Schülergenossenschaft (sustainable Students' Cooperative)

The name of the student cooperative points to its key aims: Inno stands for the development of innovative business ideas and Grün (green) for the need to be sustainable and environmentally friendly. InnoGrün sells a wide range of sustainably sourced products from organic cotton school T-shirts (a popular item), to jams and juices and recycled exercise books. Many of the materials come from the local Bliesgau biosphere reserve. "When materials are bought from further away InnoGrün always aims to use organic and Fairtrade certified goods." Students are involved in every aspect of the business, from decision making to production, finance and marketing, and thus gain key skills for their future careers. InnoGrün has existed since February 2013, and this year it was registered as an official Schülergenossenschaft (student cooperative), ensuring a solid legal base for the business.

GREECE

Hellenic American Educational Foundation – Psychico College, Middle School

Activity: Greenhouse effect and Bioclimatic Architecture (Design Technology Lesson)

The activity was launched in 2009. Students first explore the Greenhouse effect and how it relates to global warming. They investigate which of their actions provoke this phenomenon and try to find solutions. They focus on “Bioclimatic Architecture” combined with environmentally sustainable behaviour for residents. “We aim to make kids to understand that every action they make has an impact on the planet, especially on the climate, and on their society.” Along the way they also come to understand terms like “energy”, “economy”, “sustainability” etc. The methodology used is Project Based Learning (PBL). Pupils learn by “doing”, “exploring” and solving real problems. “Thus we promote 21st century skills, especially critical thinking, creativity, collaboration and communication.”

First Experimental Lyceum of Athens – Gennadeio, Athens

Activity: Study of Complex Systems with NetLogo software. Study of Climate Change as a Complex System

The subject of Climate Change was introduced in the school in 2013 as a part of the general subject of “Complex Systems”, which is studied with the help of multi-agent simulations of the computer programme NetLogo. Complex Systems properties (“emergence”) and Complex Problems (the “investigation or exploration” problem) are examined by simulating relatively simple ecosystems with the NetLogo models “Ants” and “Segregation”. To learn about the transmission of viruses and information in complex ecological nets and computer nets, they use the NetLogo model “Virus in the Net”; for Complex Systems properties such as “positive feedback” and “negative feedback”, it’s the “Climate Change” model. At the same time, various sustainability-related activities have been carried out within the school, such as examining the energy efficiency of the school building.

Hellenic College of Thessaloniki, Junior High School, Thessaloniki

Activity: When you smile, the world smiles with you

The purpose of the activity is to spread the message of environmental safeguarding and protection so that more and more citizens may act against climate change. The method is based on the multiplying effect, namely the chain reaction that starts within the school’s Environmental Group. The message is passed on to other students, teachers, school staff, families, the local community, and stakeholders nationally and internationally.

Second Gerakas Senior High School, Gerakas, Attica

Activity: The Impact of Human Activities on climate change

The main objective is to sensitize students on current environmental issues related to sustainable development, in line with the whole-school approach. During the school year 2014-2015, the focus was climate change. Students in groups of 4-5 were assigned a part of the whole project, namely to carry out research, collect information and present their findings to the others. During the programme, cooperation was developed with other educational institutes. Participants visited institutions, carried out experiments and invited climate change experts to give lectures. They collaborated with another team at school studying medieval cities. A school trip to Italy was organized to visit Venice and Ravenna, two port cities immediately affected by climatic changes.

Ralleio High School for Girls (Ralleio Geniko Lykeio Thileon Pirea), Piraeus

Activity: A Sustainable School: Converting Fry oil to Biodiesel

The objectives of the Sustainable School are in line with those of the UN Decade for ESD, with ESD integrated into school subjects: Management of Natural Resources, Environmental Education, Chemistry, Religious Education, Sociology, Social Studies, Greek Language, English Language and Physics. The school makes an effort to involve all stakeholders – teachers, students, parents – in the effort to learn about climate change and its consequences. It has made decisions to reduce the school’s ecological footprint and organized a number of activities to save paper, energy, heating oil etc. One project was the collection of used frying oil from families to be transformed into heating oil.

INDONESIA

Amalina Islamic School, Tangerang Selatan

Activity: Adiwiyata

The goal is to create a healthy, clean and green environment in the school and surrounding community, while raising environmental awareness. At the beginning, the principal and teachers inform all the students on global issues and let the students think and react in their local context. When they have been briefed, the students run activities divided into three teams (Healthy, Clean and Green). To be “Healthy”, the students pledge to not use plastic and Styrofoam and to eat wholesome food. “Clean” activities include separating organic and inorganic waste and recycling. In the “Green” category, students plant trees and flowers around the school and take care of them. A student council monitors the activities of the three teams, with a teacher facilitating.

SMA LABSCHOOL Kebayoran, Jakarta

Activity: Go Green School

This “Green School” has made the commitment to systematically develop programmes to integrate environmental values into all school activities. This begins with the physical appearance of the school, “styled ecologically so that it becomes a vehicle for learning”, encouraging the entire school community to engage in environmentally friendly behavior.

Jakarta Vocational School 27 (SMKN 27 Jakarta)

Activity: 27 vocational high school programmes to reduce the impact of climate change

The school provides vocational training based on environmentally sound methods. There are four main areas of activity: reforestation (planting trees), gardening, organic waste recycling, and water conservation. The planting of shade and productive trees not only improves the campus atmosphere, it provides a natural laboratory for students to learn about reducing pollution and CO₂ accumulation. The organic waste recycling programme makes waste compost, a process that greatly reduces methane gas (CH₄) production, which contributes to climate change. The water conservation programme is based on well absorption and biopori holes that restore the flow of rain water into the ground to form an oasis.

SMA Negeri 10 Malang, Malang – East Java

Activity: CLEAN and CLEAR Program (CnC)

The CnC Program was devised to educate all school members about environmental protection and waste management. Students are the main actors, with the support of maintenance staff and teachers. The idea is simple. Students are asked to sort the daily waste produced at school, and put it in the appropriate trash bin. To make it more fun for the students, the program is designed as a class competition. Each class sorts their waste into plastic, paper, and organic, which is then collected by gardeners and janitors. The plastic and paper is recycled and the organic waste is composted. Teachers, gardeners and janitors fill out score cards for each class. Every Thursday the judges announce the week’s winner, and the winning class has the right to wear casual clothes on Friday.

SMK Wikrama Bogor, Bogor, West Java

Eco-School Program (ECOS Program)

The school began implementing the various parts of the ECOS umbrella programme more than 15 years ago: Green Building, Green Behavior, Green Curriculum, Green Policy, Green Campaign and Action, and Green Economy. The objective is to develop the school as a centre of excellence in environmental practices that reflect education for sustainable development. The school’s long-term efforts have been recognized with a number of awards, including the Go Green School (2006), Smoke Free School (2007), Best National E-learning (2008), Indonesian Ecological Primary School (2012), and Indonesian Green (2012 and 2014) awards.

JAPAN

Akita Commercial High School, Akita

Activity: Environmental Education through Cooperation with Local Partners Based on Achievements in International Understanding

Through cooperation with local companies, the school has been exploring the idea of the ideal sustainable society, one that harmonizes environmental protection with economic activity. Students and teachers are also trying to put these ideas into practice in their own lives. Since 2010 when the project began, the Ecological Business Team at the school has published five books emphasizing the need to share the world's resources in a spirit of brotherhood. "We found out that global environmental problems are closely connected to those of world poverty. Through the just sharing of world resources we can solve the problems of poverty as well as those of climate change."

Fuji Sacred Heart School, Susono

Activity: Environmental Education

Environmental education that includes the subject of climate change has played a major role at the school since it was founded, on a vast campus that encompasses a tea plantation. All middle high school students get tea picking experience in the plantation, which produces green and black tea. On campus, all high school students participate in an annual orienteering to experience nature. Tenth grade high school students have activities in their integrated course focused on forests, with hands-on experience helping to restore the woods on the school grounds. Climate change is also a recurring topic in the classroom and at the annual Model United Nations.

Shinkayama Junior High School, Okazaki

Activity: Environmental education

"Our objective is to show our students they should take care of the environment. We educate our students so that they can work on environmental problems on their own. We teach students what they do will help society and future generations. We want to show our students that it is important to look at what's happening to the environment around them and think about solutions to those problems. We encourage our students to have a critical mind about what they observe in their daily life."

Shinshu University Matsumoto Junior High School, Matsumoto

Activity: Contributing to society by searching for nature and culture in the region (Matsumoto City)

The school's Eco-Campus activity aims to raise students' awareness of sustainable development issues through classroom study as well as school and community action. A student committee is in charge of recycling activities and initiatives to save water, electricity and paper. In each class, students learn about the nature, history and traditional culture of the area, and are encouraged to think up solutions for problems affecting their community.

Kobe Municipal Fukiai High School, Kobe

Activity: Global Sustainability: Engaging Students Online and Offline

Students engage in a wide range of project-based themes. For the 10th Grade, these are environmental issues (poster-making, online discussion) and UNESCO World Heritage Sites (online discussion, creating dioramas, kamishibai, travel pamphlets, etc.). Students in the 11th Grade focus on Food and Culture (making presentations using PowerPoint slides and/or skits); Volunteering (writing a report); Internet Debate (writing argumentative essays, online discussion); Natural Disasters Preparedness (making safety maps, posters, PowerPoint slides, videoconferencing, participating in the Natural Disasters Youth Summit); Art and Urban Life (making an album, videos, PowerPoint slides, videoconferencing); Innovation (writing a proposal, making presentations using PowerPoint slides). In 12th Grade, students tackle Sustainability issues and solutions (making PowerPoint presentations on safe water and sanitation, increasing life expectancy, chronic and infectious diseases, reducing population growth rate, refugees and internally displaced people, indigenous people, microfinance, and increasing GDP); and Conflict analysis (making timelines, conflict maps, conflict trees, PowerPoint slide presentations).

Hashikami Junior High School, Kesenuma

Activity: "We Are Future Disaster Fighters": Learn about self-help, assistance and public support

The objective is to develop emergency leaders who will spread disaster preparedness awareness from households to local communities. The school implements disaster prevention education using Periods of Integrated Study, in a three-year cycle under the broad themes of "self-help," "assistance (mutual help)" and "public support (public help)" that alternate from year to year. A comprehensive disaster drill is held every year that includes an evacuation drill using the earthquake early warning system (prepared in schools), and one based on that year's specific theme. In the course of the year-long activities, depending on the grade, students learn how tsunamis are generated and participate in a first aid and critical care workshop and other hands-on activities, including AED training and emergency cooking.

LEBANON

Al Manar Modern School, Ras El Maten

Activity: Sustainability Fair

The school took a multidisciplinary approach to incorporate sustainable development into the existing curriculum. In each class, teachers chose a theme, and through each discipline, students dealt with an aspect of the community – society, economy, or environment. At the end of the year, each class demonstrated a project showing the students' findings at a Sustainability Fair, to which parents, municipality representatives, NGOs and other schools were invited to share the proposed solutions. The activity also required training workshops for teachers on sustainable development and how to teach it, system thinking, and project evaluation.

Al-Kawthar Secondary School, Beirut

Activity: Sustainable living: Water Conservation\Earth Day\Back to Nature

Under the guidance of an Educational Committee that included principals, teachers and coordinators, activities began in October 2013 and were integrated into the curriculum.

The activity was introduced through videos and workshops in which students, parents and teachers discussed the topic and suggested ways to save the Earth and raise awareness. Students prepared and carried out projects on pollution, recycling and water conservation. They planted trees around the school, made handicrafts from recyclable materials and organized a school exhibition to display their work. Participants were also taken to visit forests to explore nature, and engaged in joint activities with other schools in Lebanon, Palestine and India.

Antonine International School, Beirut

Activity: A “Cool” City! Think, Make, Do, Say, Net!

Since October 2014, the “Cool” City Project has been transforming the school into a sustainable “city” with impact on the community and beyond. Methods used are interdisciplinary research (THINK), teaching (MAKE), Projects (DO), outreach (SAY), and Networking (NET). Emerging areas of focus are: reduction of CO2 emissions (decreasing number of cars on campus, for example); increasing green areas (planting); waste water management (grey water systems in toilets), increase energy efficiency (solar panels in dome-shaped playgrounds), food sustainability and waste reduction (recycling and composting).

The project is also geared towards citizen engagement, featuring blogs and networking through the school website and mobile app to publish all data publicly. This project is a well-integrated and easily replicable strategy to promote sustainability and respond to climate change.

Saint Georges School/ Hadath, Beirut

Activity: Global Warming and Climate Change

In 2009, Grade 10 and 11 students from the school participated in the Global Warming and Climate Change project through an online platform, Comfu, where they exchanged pictures, posts, videos, experiences and discussions about Global Warming and Climate Change with students their age from other countries. Locally, the students transmitted their new knowledge to other classes through PowerPoint presentations and slide shows. Later four students and a teacher were chosen to participate in the summit conference in Youth Town-Copenhagen. Meanwhile, the whole school worked on the theme, producing articles, drawings, games, suggestions and poems, collected and published as a magazine called “ In Earth we trust” and distributed to Youth Town-Copenhagen participants.

Rawda Fayhaa secondary school, Tripoli

Activity: Water, climate change, we are involved!

Since 2011, the school has been integrating education for sustainable development into its regular curriculum: religious and civic education, geography, languages (Arabic /English/ French), chemistry, economics, and life and earth sciences, using interdisciplinary and multidisciplinary methodology. By getting involved in the project, the students become eco-ambassadors and green players in their family and social environment.

NAMIBIA

Leevi Hakusembe Senior Secondary School, Windhoek/Rundu

Activity: Planting trees

The project creates awareness among teachers and learners – and through them, the entire community – of the importance of trees, “without which there would be no life on our planet”. After a first unsuccessful attempt in 2013 (grazing goats and cattle ate the saplings because there was no fence), participants planted trees around their school grounds in July and October 2015. More trees mean more oxygen and a reduction in carbon dioxide, lessening the risk of climate change. Trees help recycle water, and areas where trees grow receive more rain, much needed in arid Namibia. At the same time, trees provide shelter from the elements, and around the school’s soccer field they will give spectators welcome shade, since there is no pavilion. Participants are being encouraged to plant fruit trees, to boost the community’s food security and ability to live sustainably.

Onamunhama Combined School, Eenhana

Activity: Tree plantation

The school community decided in 2013 to implement a tree-planting programme to lessen the impact of climate change on their school environment. Benefits anticipated from the plantation programme, which involves everyone in the school, include lowering the risk of carbon dioxide accumulation that contributes climate change; creating shade around the playing fields; growing fruit that provides nutrition for humans and animals; and reducing the erosion of top soil by wind and water.

Concordia College, Windhoek

Activity: Climate Change and Agriculture

The one-year project, begun in 2014, created educational activities to raise awareness of climate change and generate ideas to combat its adverse effects. Agriculture was chosen as the main focus because the subject was not on the school curriculum, yet of immediate relevance to learners and teachers, most of whom are from farms and villages. “We got active as a school and decided to visit farms near Windhoek to investigate the visual scene of communities affected by climate change, leading to drought and flooding as well as deforestation,” explains a teacher. “We took advantage of the first-hand experience of group members on how to handle the challenges and the effects of climate change on agriculture.”

Gustav Kandjii High School, Otjinene

Activity: What Is Climate Change? Evidence, Causes, Effects and Solutions

Initiated in May 2014, the project involved five randomly selected students working for three months with guidance from a teacher. First the participants went around the suburb of Otjinene to see to what extent climate change had affected people’s daily lives. They observed the negative impact of the area’s declining rainfall in the last three years on food production and animal farming. Through interviews, they determined that people in the community needed to learn more about the issues surrounding climate change and global warming. Based on these findings, the students decided to stage an educational play simulating a television talk show, with a panel of four experts and a moderator. During the first phase of the project, students did research on climate change so they could present the topic knowledgeably to an audience. They developed display boards to present key information and pamphlets for their audiences to take home and share. Remaining time was spent rehearsing the play and polishing their performance.

Rehoboth High School, Rehoboth

Activity: Gardening and Compost

This simple and effective project, ongoing since May 2014, is based on teaching participants to make their own compost from garden refuse. They learn how to grow crops, albeit on a small scale, in order to be self-sufficient and to contribute to food security. Upholding the idea that “if you teach a man to fish, you feed him for a lifetime”, the project instils an understanding of conservation in learners. They come to realize the value of natural resources and are less likely, for instance, to litter.

SENEGAL

Halwar Groupe Scolaire

Activity: Climatic environmental factors and their influence

The activity consists of studying climate-related environmental factors and their impact on living beings, and the adaptation of living beings to variations in these factors.

Cours Sainte Marie de Hann, Dakar

Activity: Expanding green space around the school

This three-year project launched in May 2015 involves environmental education and climate change education. It is designed to make the institution's 4,500 students aware that "in greening our spaces, we can stop desertification in the Sahel countries." Activities are adapted to different levels. For primary classes, there is a vegetable garden using the "drop by drop" irrigation system where students learn to better manage natural resources. The secondary classes are given the task of building a "green wall", choosing the location themselves and using plants adapted to drought (requiring little water). Maintenance staff help with irrigation and share their knowledge. Students learn that simple action can achieve valuable results.

Le Collège Bilingue, Dakar

Activity: Collège Bilingue Sustainable Development Project

The Collège Bilingue was selected by UNESCO as a model of a Green School in Dakar and West Africa in 2010. It offers its students an environment designed to turn out bilingual (French/English) global eco-citizens. School policy is to use green energy and to avoid waste, for instance by using a solar power panel and canaclas (African system for rational water use). In addition to integrating related topics in its curriculum, the school works daily to promote sustainability through different projects. These include a club that meets weekly to plan and review activities, such as reforestation projects, sensitization on global eco-citizenship, and sharing experiences with other schools. Every year, the Collège organizes a Green Day with multiple activities promoting sustainability.

CEM Ousmane Ngom, Thiès

The school has long engaged in programs for the future of the planet. It had already participated in the Energy Project Development and Environment (EDEN) initiated by ASPnet. A big part of the school's 3rd class new history and geography curriculum considers the consequences of the exploitation of natural resources. This allows students to better understand and act on the dangers weighing on the planet due to human actions: deforestation, pollution, greenhouse effect gases, flooding, and coastal erosion.

Ecole d'application, Fatick

Activity: Beach sanitation and community awareness-raising

The aim of the school's activity was to build on the achievements of Sandwatch for a scientific analysis of the components of ESD and Climate Change. The activity brought together 6 schools with over 60 students and 150 members of the community. It allowed all participants to perceive the degree of vulnerability of the coasts and homes, involve students in awareness activities for the cleanliness of the beach and make everyone aware of the urgency for action and for the responsible management of resources.