





10. Mobile Living Lab, Demonstration Site and Education for Sustainable Development Learning Centre

Prepared by Living Lab/Centro de Diálogo y Transformación Inc.

Acknowledged by
Institute for the Advanced Study of SustainabilityUnited Nations University
as Regional Centre of Expertise
on Education for Sustainable Development:
Borderlands México-USA

http://rcenetwork.org/portal/rceborderlandsmexicousa-2018

THEMATIC AREAS ADDRESSED BY THE PROJECT



Borderlands, Zero Hunger Demonstration Site & Learning Center

- ° Sustainable Consumption & Production
- ° Biodiversity
- ° Health and Nutrition
- ° Traditional Knowledge
- ° Youth

























PARTNERS

Organizations:

1) Plan México Hambre Cero

Role: They provide the demonstration site and learning centre

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2) Agricultura Sustentable y Evolución (ASyE)

Role: ASyE is a leader in Biointensive Organic Agriculture in México.

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PROJECT TYPE

- ^o Engaging with transformative learning & research for SD
- ° Contributing to community engagement
- ° Contributing to capacity development of stakeholders & partners



- ° Agriculture
- ° Community Education
- ° Energy
- ° Food & hunger
- ° Plants & Animals
- ° Primary Education
- ° Secondary Education
- ° Waste
- ° Water











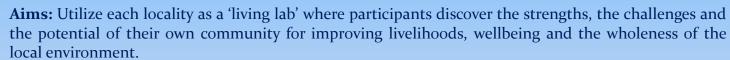


PROJECT DESCRIPTION

The Mobile Living Lab provides hands on experiences in Education for Sustainable Development for children and youth in rural communities. Participants begin by conducting in-the-field empirical observations of their local environment, after which they return to the Living Lab and, dressed as scientists, they engage in age-appropriate experiments and problem-solving activities designed to provide them with awareness, knowledge, skills and values designed to instill a love of, and a lifelong commitment to sustainable development in their communities and beyond.

Strategies: Empirical observation where the immediate environment becomes the 'living lab' where children assess their environment, explore the sustainability sciences and propose possible solutions to problems the have discovered by observing their surroundings.

Regional Challenges: Water scarcity, degraded soils, poorly equipped schools and poorly-trained teachers within areas relating to sustainable development, lack of awareness about sustainable development and what individuals and communities can do to improve their localities on the path toward inclusive development for all.



Project Activities:

Children & Youth: Empirical observation of their locality, as well as hands-on experiences as scientists and problem solvers who gain awareness, knowledge, skills and agency to strive for the transformation of their communities for the good of the people and the natural environment.

Adults: The Mobile Living Lab attends to development-related programs *on request from community leaders*, i.e. water shortage, lack of gainful livelihood opportunities, degraded soils, community gardens, cooperatives, etc.

We first listen to community members and, upon their request, we journey with them as they advance toward the resolution of concerns they have expressed. This often means that we develop a short course or a workshop designed to help enable the community on the path to resolving their concerns and advancing toward sustainable development.













PROJECT OBJECTIVES

- ° Work with communities toward sustainable development in areas of concern to them
- ° Facilitate human development within the areas of Education for Sustainable Development, Sustainable Agriculture, Small Business Operations, Environmental Restoration & Sustainable Usage, Sustainable Economic Development.
- ° Provide hands on experiences for children where their community becomes the 'living lab' in which they discover strengths, challenges and the potential for advancing toward sustainable development.
- ° Children discover their own agency in the process of change for themsleves, their families and their community.
- ° Give children the experience of working as 'lab scientsts' who study topics related to the UN Sustainable Development Goals, i.e. water, soils, flora, fauna, sustainable food production, waste management, recycling, and renewable energy, among others.
- ° Instill in children the awareness, knowledge, skills, attitudes and values designed to lead them toward a lifetime commitment to sustainable development, environmental wholeness and human wellbeing.

Stage: In planning

REFERENCE MATERIALS

Mobile Living Lab, Demonstration Site and Education for

Sustainable Development Learning Centre

° Construyendo un Chihuahua Sustentable













PROJECT PROPOSAL & STRATEGIES



The Mobile Living Lab project provides two major options for engaging children, adults and communities in Education for Sustainable Development.

- 1) The Mobile Lab is driven to communities where we work on development-related issues which are of concern to the community members themselves, i.e. sustainable agriculture, small business development, water capture, renewable energy, soil restoration, etc.
- While on site, we offer hands on experiences where the children observe their own community in order to discover its strengths, its potential and areas which can be developed on the path toward sustainability.
- After doing 'empirical observation' of their surroundings, children become actual scientists in our *Mobile Living Lab*, where they study flora, fauna, soils, water and renewable energy in an authentic environmental science lab.
- 2) Development-related courses and trainings are offered at our *Sustainable Development Demonstration Site and Learning Centre* in Santa Isabel, Chihuahua in topical areas that are of concern to the community members.
- Children observe and interact with the surroundings at our demonstration site. They expérience working with our crop cycle, our water capture & purification system, our renewable energy sources, sustainable architecture, and the farm animals living on our site, among myriad other activities.
- After interacting with the surroundings at the demonstration site, the children dawn lab coats, goggles and gloves to become actual scientists in our *Living Lab*, where they study flora, fauna, soils, water, renewable energy sources, a seed bank, a worm farm, waste management, composting processes, etc. in our Environmental Science Lab.



CHALLENGES

- ° Having the funding required to carry out this work
- ° People often manage to take bits and pieces of our lab equipment, making it difficult a) to keep everything functioning in spite of the missing pieces and, b) to be able to afford re-purchasing that which we have been able to acquire only with great sacrifice in order to offer this experience to communities throughout the borderlands.
- ° Due to the insecurity in our state, it is at fairly high risk to ourselves that we travel in our marked Mobile Living Lab to remote communities where organized crime may be in charge of the region.
- ° While experiencing our Demonstration Site proves inspiring to countless individuals, finding the funding and the vehicles with which to transport people to our site is a considerable challenge.









PROPOSED TIMELINE

The services of the Mobile Living Lab and of our Demonstration Site-Learning Centre are ongoing.

Whenever we have the funding and many times, when we do not, we carry out the activities described above.

We strive to have enough funding to conduct these lifechanging experiences throughout the México-US borderlands presently and on into the future.

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Solar	Wind	Geo	Hydro	Bio	Tide

