

Greener neighborhoods, better quality of life and fresh vegetables with an urban vegetable garden

This is what the Mundial Nature and Environmental Education Foundation stands for

About 15 years ago, the NME Mundial foundation started a project in Bolivia working with primary school children and aimed at installing and maintaining square meter vegetable gardens. Our project has gradually expanded to support students' families in the areas of food security, healthy eating and improved quality of life. For a number of years now, we have also focused on improving the environment by installing green areas and fruit trees around their homes, and, if possible, water collection systems. Recently we have embraced the agroforestry technique which introduces the planting of trees within vegetable plots. The trees ensure that the earth retains more moisture and provide shade, and the fallen leaves create a natural compost layer to improve the soil and increase yield.

We operate in the Ushpa Ushpa zone, about 10 kilometers from the center of the city of Cochabamba. This zone is made up of relatively young migrant neighborhoods, with the majority of people coming from the Andean plateau and the mining regions. These people do not have valid property papers, there is no sewerage and the drinking water supply is inadequate. The majority of residents live from day to day and work in poorly paid jobs such as auxiliary construction workers or drivers. The population has one of the highest birth rates in Cochabamba of almost four children per woman of childbearing age.

Our local counterpart in Bolivia, the Alerta Verde Foundation, has implemented a number of projects since 2017 with support from Misereor, a German development cooperation organization. In 2021, Alerta Verde implemented the Misereor project in a neighborhood next to the NME Mundial project in preparation for possible collaboration and in 2022, we duly started a joint project. Both adjacent neighborhoods (Minero San Juan from the NME Mundial project and Alto Litoral from the Misereor project) have become spearheads of the project to which we are now jointly pursuing a follow-up.

Project plan 2023-2026: Urban agriculture and urban agroforestry

In 2021 we met with a priest who manages a number of churches and at three of them we created a communal vegetable garden and an agroforestry plot in 2022. These churches play an important role in the recruitment of new families: such locations bring many families together, and they are influential in showing the importance of trees and demonstrating that it is possible to grow vegetables in the district despite the water problems and the poor quality of the soil.



Below we outline our concrete plans:

3 new schools every year

We will continue to work with 3 new schools every year. The children learn the basic techniques of gardening, and also learn about healthy meals, composting, collecting vegetable seeds and the reuse of materials.

We will encourage the children to put what they have learned into practice at home. During every year of the duration of this project, we want to install an open-air classroom in or close to a school garden so that we can further stimulate integration with other teaching subjects.

Schools from previous years receive support with incidental workshops where



we sow seeds together or discuss a specific theme.

50 family vegetable gardens every year



We will work with 50 new families every year. This will allow us the capacity to continue to support families from previous projects (the families sign renewable six-month agreements). We try to form groups within neighborhoods or even blocks to promote the exchange of ideas, expertise and practical help and the sharing of materials such as fertilizers, crops, seeds and natural pest controllers.

We hope to plant at least 500 fruit trees and shrubs in the neighborhoods annually.

Working with different centers



The various neighborhood centers provide a key role in teaching children how to garden and encouraging families to start their own garden at home. What is more, they produce a significant harvest for the community.

We provide support to these projects in the construction, design and maintenance of a vegetable garden alongside the center users. We are of course open to engaging with additional existing centers in the project area.

Innovation and promotion

Almost every year we find and implement new techniques to develop our work. We particularly focus on innovations that significantly reduce water use.

A recent example of such innovation is the implementation of the agroforestry technique. Before planting the trees, we carried out a baseline measurement of the plots to determine the soil quality in order to be able to measure improvement.

Through the climate working group and the urban agriculture network, we participate in a wide range of existing green networks to share knowledge and expertise. We also enlist the help of volunteers and/or interns who are particularly essential in any trial phase.

General

Unfortunately, the challenges for the people in our target neighborhoods remain as great as ever. There is a lot of poverty and support needs are high. Over and above the increased food security and richer diets that this project will bring, the benefits of gardening to both mental and physical well-being are well documented. The self-confidence of the women who usually maintain the gardens improves because they contribute something tangible to the family and they save money because you don't have to buy what you grow yourself. The plots also help in greening the environment to the benefit of all and the ensuing cooperative working aids community cohesion.

The Covid pandemic has shown how vulnerable these people are, but also how so many benefitted by being able to eat homegrown vegetables during the strict lockdown periods. Unfortunately, Covid still remains a latent threat. This also applies to the political situation in Bolivia, where differences in ideology are increasing and leading to increasing tensions. Especially for people who live on a day-to-day basis, social unrest is disastrous. Having a degree of self-sufficiency and strengthened community ties can provide some much needed protection against an uncertain world.

Urban agriculture and urban agroforestry: NME Mundial budget 2023-2026

Cost

item	description	2023 2024	2024 2025	2025 2026	totaal
2.	investment > €500)	14.439			14.439
3.1	regular staff	21.523	21.954	23792	67.269
3.2	temporary personnel	262	693	693	1.648
3.3	training	242	242	242	726
4.1	plant material	1.315	1.315	1.325	3.955
4.2	fertilizers	655	693	732	2.080
4.3	tools	559	515	589	1.663
4.4	materials	597	876	705	2.178
4.5	water collection installations	5.215	5.611	5.477	16.303
4.6	garden improvement, decoration, protection trees and plants	756	817	883	2.456
4.7	didactic material	362	840	813	2.015
4.9	activities at schools/centers and community vegetable gardens/church	470	493	503	1.466
4.10	activities family vegetable gardens and reforestation	587	615	433	1.635
4.11	promotion	298	488	137	923
5.1.	agency costs	1.010	758	799	2.567
5.3	communication (telephone/internet)	507	537	570	1.614
5.4	transport	2.282	2.399	2.584	7.265
5.5	evaluation project activities	81	81	81	243
	totals	51.160	38.927	40.358	130.445
Benefits					
	private donations	1.500	1.250	1.400	4.150
	donations funds	32.607	24.701	25.505	82.813
	contribution Wilde Ganzen	17.053	12.976	13.453	43.482
	totals	51.160	38.927	40.358	130.445

Explanation

The above is the budget of the NME Mundial foundation's contribution to the 3-year project.

The budget for the project is € 330.440 of which 60.5% is contributed by Misereor and 39.5% by NME Mundial.

The amounts are in euros and a rate of 7.45 boliviano per euro has been calculated.

The duration of the project is 3 years and starts on August 1, 2023 and ends on July 31, 2026.

Inflation and other necessary cost increases have not been taken into account.

The budget was revised in mid-2023 and was drawn up following an agreement with Misereor and Wilde Ganzen. Wilde Ganzen is a Dutch NGO with a mission to reduce poverty and inequality through community-led activities.

Costs

2 Car purchase, a 4-seater pick-up (Toyota Hilux).

3.1 The team consists of a full-time coordinator, a manager and an employee for the school gardens, a manager and an employee for the family gardens, all agricultural engineers, and a part-time accountant.

- 3.2 Short-term contracts for: cooking workshops, local promoters, construction of wate installations and afforestation.
- 3.3 Participation in meetings (conferences, workshops) to increase professional knowledge.
- 4.1 Seeds (vegetables, herbs, flowers and seedlings) and trees (fruit trees and native trees).
- 4.2 Potting soil, manure and compost.
- 4.3 Tool sets for new schools, centers and community gardens.
- 4.4 Shade nets, agricultural plastic for square meter gardens and anti-bird nets.
- 4.5 Water barrels, rain pipe, materials for drip irrigation etc.
- 4.6 Garden improvement materials (garden fencing, protection of young plants etc).
- 4.7 Lesson brochures, information boards.
- 4.9 Costs of school activities (watering competitions, making salads).
- 4.10 Costs of activities in families and centers in the context of vegetable gardens.
- 4.11 Information signs, various logo stickers.
- 5.1 Audit, office costs, accounting package etc.
- 5.3 Telephone and internet costs.
- 5.4 Car maintenance and management costs (insurance, fuel, taxes, repairs etc.).
- 5.5 Small costs for project evaluations.

Benefits

- Donations from private individuals are based on income from previous years.
- Fund donations are an estimate and ensure a balanced budget.
- Wilde Ganzen provide 50% of our funding.