Bottleschools

The non-governmental organization *Hug It Forward* established a concept called *Bottleschools* to solve or help improve two main problems in Latin America:

- 1. Lack of education and educational infrastructure especially for poor and rural areas (UNESCO 2014)
- 2. Reducing the amount of waste in 2012 160 million tons per year (Hoornweg und Bhada-Tata 2012) – produced in Latin America and the Carribean

These goals are achieved in the following way:

Bottleschools are built out of so called "eco bricks" which consist of plastic bottles filled with inorganic waste such as foil or thin packaging. To form a wall the bottles are surrounded by chicken wire and later on stabilized with cement.

BUILDING A BOTTLE WALL

Community members stuff the plastic bottles with plastic bags and other insulating trash. More plastic bags fill in the gaps Chicken Wire The bottles are bound between layers of chicken wire, which are attached to a metal frame Cement Up to three layers of cement mixed with sand are applied to the outside of the bottles. with paint adding the finishing touch.

Image Credit: Eric Baker/The Oregonian

Figure 1: Bottleschool Wall

By using eco bricks the waste collection in communities increases thus leading to a cleaner landscape. Furthermore the collected waste is free of charge leading to a cheap solution for poor areas of Latin America. According to the Hug It Forward website one classroom only costs about 6500\$ (Bracken-Lobb 2013).

Hug it Forward is a grass-roots organization. Grass-roots organizations focus on involving everyone of the affected community in the project in order to create new workspaces and to help members of the community improve their skills. The goal is to enable the community to run and maintain the educational facilities without being dependent on external help.

All in all Bottleschools provide a cheap and sustainable opportunity for improving the educational situation in poor and rural parts in Latin America also keeping in mind to strengthen the community.

Bibliography

Bracken-Lobb, Jack. Hug It Forward. 2013. https://hugitforward.org/ (Zugriff am 6. November 2017).

Hoornweg, Daniel, und Perinaz Bhada-Tata. What a Waste: A Global Review of Solid Waste Management. Washington: World Bank, 2012.

UNESCO. "Regional Report about Education for all in Latin America and the Carribean: Global Education for All Meeting ." Muscat, Oman, 2014.