

**FIRST REPORT**  
**Field Trip 01 (28 - 31/05/2015)**

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At a moment where part of the global community questions itself about the future of the planet, or, more specifically, about the maintenance of modern society's profligate way of life, to propose and implement sustainable solutions, that are adapted to local realities, tends to revert into benefits for the planet and for a society with greater intergenerational justice. In this regard, a combination of adequate technological, productive, socioeconomics and environmental alternatives has the potential to change the present reality. Although these changes are punctual, they may, in the future, trigger a more sustainable form of use of the natural resources.

Grounded in this premise, a group of institutions (University of Brasilia, dryGrow RTE and the "quilombola" community of Lajedão dos Mateus came together to implement a research project with the aim to change the socioeconomic and environmental reality of a region located in Brazil's semiarid region. (Figure 01). The main objective of the project is to implement an Experimental Productive Unit (EPU) where the principles of stonemeal technology will be used, that foresees the use of remineralizers with agricultural input for the production of cactus for fodder and multicrop farming systems that will produce food for the families and the animals. It is expected that the result of this project may foster the inclusion of quilombolas' farmers.

Figure 01 Location of Lajedão dos Mateus Community



The trip to implement the research and extension project in the Community of *Lajedão dos Mateus* began in the end of May 2015. After a two-hour flight, from Brasilia to Salvador, it was necessary to range over 500 km by car until the municipality of *América Dourada*, situated in the state of Bahia, northeast Brazil. The access to the community of *Lajedão dos Mateus* is difficult because the roads are narrow and unpaved. Despite the initial difficulties, it is can be seen that farmers are excited and happy because they will participate in a project that will bring benefits to the community.

Figures 02, 03, 04 and 05 show an overview of the community and of the first activities of selection of the cladodes of cactus, the boundary of the design of the plot of the experiment and the planting of two varieties of cactus (that were donated by a local public institution). The results of the production will be evaluated in blocks with four types of inputs mixtures (Figure 02). For the evaluation, it will be considered the production results as well as the change of the

profile of the soil's fertility after one/two years, which will provide indications of which is the best way to produce cactus in that region.



Figure 02 – view of the community



Figure 03 – Selection of the cladodes of cactus



Figure 04 – Design of the EPU



Figure 05 – Cactus Plantation

Figure 02 – Design of the EPU

