

ervaUna Quarterly Report 2006-1

Agroforestry with Medicinal Plants – an Innovation to Rural Development in Southern Bahia, Brazil

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→ Capacity Building

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Resumo

Os trabalhos de compostagem e o projeto feijão foram continuados. O gerente técnico, Fábio Nobre, ensinou os métodos para os novos participantes do projeto. A avaliação das áreas de experiência com feijão-de-porco (*Canavalia ensiformis*) está pronta: Numa plantação de 4 - 5 pés/m² podem ser colhidos em média 30 kg sementes de feijão-de-porco por 100m².

12 famílias da Associação da Queimada Grande começaram com a criação de galinhas caipira para a produção de ovos. Além da melhora na alimentação e renda, o esterco das galinhas vai servir como adubo valioso para a compostagem pois é rico em nitrogênio.

As preparações para o „projeto horta“ foram iniciadas. O projeto horta tem como objetivo melhorar a alimentação das famílias rurais através da diversificação da produção de hortaliça. Com êxito, a Associação de Pequenos Produtores da Queimada Grande e Jacão vai apresentar hortaliças novas na feira de Una em Dezembro 2006.

A associação ONG *pro mata atlântica*, sócio Suiço de *ervaUna*, realizou a sua assembleia geral no dia 10 de Março em Engelberg. Após tratar dos negócios internos da associação, 80 pessoas assistiram uma palestra sobre a Mata Atlântica e o andamento do projeto *ervaUna*. Graças aos doadores privados, a arrecadação de fundos está avançando bem.

Zusammenfassung

Die Kompostierarbeiten und Bohnenpflanzungen wurden fortgesetzt, und die erarbeiteten Methoden vom Koordinator Fábio Nobre an die neu zum Projekt gestossenen Kleinbauern vermittelt. Die Auswertung der ersten 12 Testfelder mit Jackbohnen (*Canavalia ensiformis*) liegt vor: Bei einer Dichte von 4-5 Pflanzen/m² kann im Projektgebiet mit einem durchschnittlichen Ertrag von 30 kg Jackbohnen pro Are gerechnet werden.

12 Familien der Kleinbauernvereinigung haben mithilfe eines Regierungsprogramms mit der Zucht von Legehennen begonnen, welche nebst einer Verbesserung der Ernährung und Einkommensmöglichkeiten mit ihrem Kot einen wertvollen Dünger für die Kompostierung produzieren.

Im Rahmen der Bestrebungen, den Kleinbauernhöfen neue Produkte aufzuzeigen, sind die Vorbereitungen zum «Küchengartenprojekt» angelaufen. Nach einer Vorkultur mit Jackbohnen (im Gang) wird Gemüse angepflanzt, welches die Selbstversorgung der Familien verbessern wird und der Kleinbauernvereinigung im Dezember 2006 zu einem erfolgreichen Auftritt am Wochenmarkt in Una verhelfen soll.

Die Vereinigung *pro mata atlântica*, Schweizer Partnerorganisation von *ervaUna*, hat ihre erste Generalversammlung am 10. März in Engelberg abgehalten, - verbunden mit einem Vortrag über die Mata Atlântica und die Projektarbeit im Süden Bahias, an dem 80 Personen teilnahmen. Die Mittelbeschaffung ist besonders dank privaten Spenden auf gutem Weg.

1 Smallholders' Association

Associação dos Pequenos Produtores da Queimada Grande e Jacão, Una

Community matters and rural life. Energy supply for the Queimada Grande area: Talks with representatives of the federal program «luz para todos» revealed that there is the will, however no time plan, to provide electricity for the rural areas of Una. Water supply and sanitation: The association discussed with local and federal politicians about the urgent need of water supply, the construction of wells and sanitation in the area (where hardly any shower or water closet is to be found; see Plate 4, figure 7). The offers made by politicians have to be seen in view of the elections that will take place in October 2006.

Capacity building. The State program with courses on chicken breeding (see Quarterly Report 4-2005; Plate 4, figures 1- 3) enabled 12 smallholders of the Queimada Grande to start with chicken breeding for egg production. The association's president, Sr. Lau, with the assistance of the *ervaUna* coordinators developed a chicken run and coop where the hens are kept during the night, which allows the collection of chicken droppings to produce fertilizer. The technical assistance by the government has not been provided so far, and there remain questions of animal health to be resolved.

2 Primary Activity: The Jack Beans Project

This legume (*Canavalia ensiformis*) was distributed to further project participants. The majority of farmers did not sow them because of the dry weather conditions during the first three months of this year. The local coordinator started the preparations for the extension of the jack beans project: The kitchen garden project will be based on this legume as well (see below).

The field data of the first experimental plots with jack beans have been analyzed and the productivity determined. The 12 experimental plots revealed that jack bean production ranges from 0.2 to 1.0 kg seeds per 10 plants. The highest yields (0.8-1.0 kg/10 plants) were reached in full sun at a density of 4-5 plants/m², and in half-shadow (0.7 kg/10 plants) at a density of 2-3 plants/m². In the shade of rubber or cocoa, the yield did not surpass 0.4 kg/10 plants (density: 1.5-2 plants/m²), which is probably due to nutrient competition. The key factor influencing seed production seemed to be nutrient availability on all sites. Dense plantation of jack beans (8 to 9 plants/m²) lowered the yields per plant significantly. In the project area an average of 0.3 kg/m² jack bean seeds (or 30 kg/100 m²) can be expected under non-competitive conditions and at a plantation distance of 4-5 plants/m². Further test fields will be established and assessed in the course of the jack beans and kitchen garden projects.

3 Organic Farming: Composting

The composting activities have been continued by members of the association. One of this compost (Senhor Raimundo; see Plate 4, figures 4 and 5) contained 50mg/kg nitrogen after ripening, which is already a promising quality. The compost produced in September 2005 was used by 5 farmers to manure cocoa as well as the new areas where kitchen gardens are planned. The first tests to assess the value of this compost failed due to geese and pigs who devoured the whole experiment. However, banana seedlings showed a very promising response to our compost. The importance of composting was further communicated by the project coordinator. This prime method of organic farming will be intensified during the course of the jack beans and kitchen garden projects.

4 Diversification: Kitchen Garden Project («Projeto Horta»)

The «kitchen garden project» will enable the smallholder families to improve their self-sufficiency and start diversifying their farms. At the same time, organic farming will be practiced and soils regenerated. In a first step, which has already started, areas of 10x10 m are planted with jack beans, using compost and locally available animal manure as fertilizer. Smallholders will keep their part of the jack bean seeds for further recultivation and soil regeneration. The rest of the yield is sold to the *ervaUna* project, which will further be distributed to new project participants. Once the pre-culture with jack beans has established, a variety of new legumes will be intercropped. These will supply the smallholders' kitchen. The association will present and sell the new products at the local market, which is envisioned for December 2006.

5 Agroforestry and Rainforest Conservation

There were no activities within the period of this report.

6 Medicinal Plants

There were no activities within the period of this report.

7 Ongoing and Planned Activities for the Next Quarter

As long as *ervaUna* cannot officially start – the funds for the project's first phase need to be completely raised, the partner organizations contracted and the visa for the Swiss technical assistants issued (the completion of which was planned for April 2006) –, we are trying to continue the activities of the pre-project best possible. In this situation, the Swiss association *pro mata atlântica* has advanced the amount of Euro

1,800 to secure the ongoing of the activities during the months of April and May. The Brazilian-Swiss technical assistance team agreed on prioritizing the following activities:

Fostering and mentoring the composting activities and the kitchen garden project. The local coordinator Fábio Nobre will be visiting and mentoring the composting activities and the kitchen garden project on a weekly basis. Composts will be set up on 4 smallholdings with the help of neighbors. The composting process will be assessed and composting specialists trained in order to integrate and multiply the knowledge on composting within the project area and share the responsibility for further composting activities among the smallholders.

Kitchen gardens will be prepared with 17 to 25 families. The plots will initially be cultivated with jack beans.

Recultivating the association's community field. The recultivation of this eroded area will be continued by planting Jack beans in the rows between already established plants (see Quarterly Report 4-2005). To enhance soil fertility, the compost produced during the pre-project will be used. Two field days are planned for this activity.

Completion of project formalities. Owing to organizational changes within the FUNPAB foundation, Itabuna, the project contract and official invitation for the Swiss technical consultants could not be signed so far. Linde Nobre, invaluable local *ervaUna* consultant since the very beginning of the project, has been appointed legal representative of the *ervaUna* project management. With the support of the president of FUNPAB – Fundação Pau Brasil, she is trying to complete the project formalities within the month of April.

8 Problems and Setbacks

During the first three months of 2006, rural flight was going on in the Queimada Grande area. One of our pioneer farmer women, Ana Maria with her little daughter Caro, has moved to the town of Una, leaving her brother alone with their parents' smallholding.

The motorcycle, the project's first vehicle, enabling the coordinator Fábio Nobre to reach the remote farms, needed several and in part costly repairs.

9 Administration and Information

The association "Vereinigung *pro mata atlântica*" (Swiss NGO) held its first general assembly on March 10 at Engelberg. The young association, founded in October 2005, has now 28 permanent members and dozens of friends and donors. The accounting, carefully performed and donated by TRB Unternehmensberatung AG, Mr. Josef Suter, CH-Birmenstorf, was revised by Dr. Heidi Rodel, CH-Basel, and the activities of the board were approved. The annual report and annual accounts are available on request and will be published on the web in May.

After the official business matters, Barbara Suter and Richard Bolli presented a vivid slide show on the Atlantic Rainforest and the rural situation in the South of Bahia. A special focus was thrown on the *ervaUna* field work that has successfully started in summer 2005. The audience of 80 "friends of *ervaUna*" was impressed by the state of progress, took a lively interest in the project, and many asserted their continued support.

10 Financial Report and Donor Relations

The *ervaUna* project proposal was submitted to several Swiss cantons (state districts / cantonal lottery funds). The cantons of Schwyz and Nidwalden have donated CHF10,000 and CHF3,000, respectively. Private donations raised by the Swiss NGO «*pro mata atlântica*» have added the unexpectedly high sum of CHF20,000. Among the many private donors are the 200 inhabitants of the Swiss village of Kehrsiten, where children singing at every home («Sternsinger») collected more than CHF2,500 in the week of Epiphany. Thus, by 31.3.2006 the funds successfully raised surpassed 85% of the amount necessary for the project's first phase, or USD 200,000.

The photo plate 4 on the following page is an integrative part of this report.



Plate 4. Activities and rural life in the *Queimada Grande* area of Una, January to March 2006

1.-3. The chicken breeding program (Programa Avicultura) has been started by 12 smallholders of the *Queimada Grande*. Chicken runs at the farms of Senhores Pedro Paulo (1) and Lau (2), and chicken coop (3) where chicken are fed and kept during the night. 4.-5. The *Associação dos Pequenos Produtores da Queimada Grande* has widely adopted organic composting. Several methods are being tested on farm: Two different composts at the farm of Senhor Raimundo. Compost components are, for instance: stems of cut banana trees (4), grass, palm fiber and fresh cow or horse dung (5). 6. Senhor Raimundo preparing a field for the production of pumpkins. The planting is arranged along the contour lines, and organic material is accumulated in order to stabilize the slope. 7. Sanitary conditions are very poor in the *Queimada Grande* area. As a rather luxurious examples, an air-conditioned rural water doset is shown. Pictures kindly taken by Linde Nobre.