

OURO E CIDADANIA

UNESCO – Montevideú

UFPA – Belem

No. 883.785.3

**Projeto piloto dentro da chamada:
Contribuição da mineração em pequena
escala para a superação da pobreza na
América Latina e no Caribe**

**Special training for
small scale gold
miners in Pará and
Amapá (Brazil)**

*Armin Mathis, Eva Grelo and
Bernhard Peregovich*

NAEA/UFPA – Belém/Pará/Brazil - 2004





SURINAME

French Guiana (FRANCE)

Oiapoque

Boa Vista

RORAIMA

AMAPÁ

Macapá

Equator

Belém

Manaus

Santarém

Altamira

Careiro

Itaituba

Marabá

AMAZONAS

PARÁ

Carajás

Araguaina

Humaitá

Cachimbo

Boca do Acre

Porto Velho

Tocantins

Orinoco

Rio Negro

Rio Amazonas

Rio Madeira

Rio Tapajós

Rio Tocantins

Rio Xingu

Rio Purus

FAZENDA CANAÃ
GARIMPO CANAÃ
PLG-DNPM
Nº 852.219 À 852.254/92
LICENÇA DE OPERAÇÃO (SECTAM)
Nº 560/2002



GARIMPO CANAÃ - PARÁ

LOURENÇO - AMAPÁ



INTRODUCTION

- After the peak of small scale mining (garimpagem) in the Tapajós region, which began in 1958 with the discovery of secondary gold in the “Rio das Tropas” in the municipal district of Itaituba, this situation changed in the nineties. Above all as a result of increase of oil price, decrease of gold price and exhaustion of rich and easily mining alluvial surface gold deposits, small scale mining turned unprofitable in large parts of Amazônia. For lack of basic knowledge in systematic exploration methods, simple accounting and administration even in small scale mining conditions, many miners couldn't manage going on working profitable and gave up or run at a loss.

OBJECTIVES

- An UNESCO project, specially designed for small scale mining communities and associations was carried out by a team of experts from NAEA – UFPA, focusing on accounting, exploration and environmental aspects. Theoretical and practical teaching was given in cooperation with the local mining association AMOT in the Tapajós region at garimpo Canaã and with the co-operative COOGAL in Lourenço – Amapá. Lessons in accounting provided information about any costs for gold exploration considering the day-to-day routine and the circumstances in the garimpo. Lessons in basic exploration and calculation processes enhanced the miners understanding for selective choice of a potential area for profitable mining. Lessons in environmental aspects, finally, made them aware for needs in avoiding harmful impacts to nature as their own and only habitat.

TRAINING PROGRAMM TOPICS

- 1. EXPLORATION
- 2. ACCOUNTANCY
- 3. ADMINISTRATION
- 4. ENVIRONMENTAL ASPECTS

Methods

- - The base of the training will be the miners' practical experience
- - All of the examples should be originating from of their daily routine and aim at the direct use
- - All of the stages will be executed as activities together with group and instructor

1. EXPLORATION

- - To teach to the participants the basic concepts of geology and formation of auriferous deposits.
- - To show simple techniques of elaboration of a sampling plan
- - To execute a sampling campaign
- - To estimate the expected gold returns of a certain area

1. EXPLORATION



2. ACCOUNTANCY

- - To elaborate together with the participants a simple system capable to supply any information on the costs involved in the extraction of gold
- - To qualify miners and owners in doing a basic accounting of cost of their productive activities
- - To train the participants to use that system in their daily routine

2. ACCOUNTANCY



3. ADMINISTRATION

- - To detect the gaps in the organizational process of the work in the cooperative or association
- - To carry out measures capable to overcome the detected deficiencies
- - To elaborate a strategic plan that defines mission, goals, actions and projects for the future performance of the entities

3. ADMINISTRATION



4. ENVIRONMENTAL ASPECTS

- - To elaborate simple measures to reduce negative environmental impacts due to mining
- - To train the responsible in recognize and observe indicators or factors that show the current conditions of the environment
- - To develop the implementation and effectiveness of simple techniques for recovery of areas degraded by mining activities.

4. ENVIRONMENTAL ASPECTS



DISSEMINATION OF RESULTS AND ONGOING ACTIVITIES

- A leaflet, illustrating and explaining these teachings and instructions in an easily understandable way is to be distributed to miners in other mining sites by the corresponding miners associations
- Workshops and meetings hold periodically at mining sites and seats of miners' organisations should brush up and disseminate the gained experience