

Fanelli, Luca; Alves, Lissandra. *Project: "Support for the transition to an alternative plan of development for the Baixo-Amazonas Region"*, in Cirulli, Simone (ed.), *Biological Agriculture and International Cooperation*. ISCOS. Roma, 2005.

### 3. BRASIL

Project: "Support for the transition to an alternative plan of development for the Baixo-Amazonas Region".

by Luca Fanelli and Lissandra Alves

The project is based on a proposal made by the local non-governmental organisations Ceapac (Centro de apoio a projetos de ação comunitária) and Ceft-Bam (Centro de estudo, pesquisa e formação dos trabalhadores do baixo-amazonas), brought to Iscos by Turin based ngo Mais. It is connected with the *Projeto Tucumã*, a project set up by a group of local organisations in order to promote sustainable development in rural areas. The projects activities included fish breeding based on natural fertilisers and cultivation of medicinal plants. In addition, it was decided to support the third edition of the Family Production's Fair in order to promote sustainable development at a regional level. Ceapac was officially formed in 1987 and legally recognised in 1990. Caepec is an association made up of biologists, agricultural technicians and teachers. The organisation provide farmers associations and families with assistance. Caepec's works with some farmers' associations from the Lago Grande de Curuai region (City of Santarém), some villages close to the Arapiuns and Tapajós rivers (City of Santarém) and the City of Aveiro farmers' trade union. Ceft-Bam was established in 1990 by a federation of movements and associations. It consists of 70 groups belonging to 17 town councils of the region. The directive board, elected by the congress, is the most powerful decision-making body. This directive body is supported by a *conselho deliberativo*, which is made up of one representative from each town council. Ceft-Bam is a non-governmental organisation working in the training sector. Training can be technical (agro-technical techniques and manufacturing courses, for example), political (basic law courses) or general (such as the

Popular University courses or modular courses including Sociology, Statistics, Anthropology, etc). Ceft-Bam is funded through contributions from the affiliated associations and from national and international organisations.

### 3.1. Region presentation

The region of Baixo-Amazonas, in the State of Pará, includes cities and villages very different from each other. Its population is concentrated in the areas surrounding rivers and highways. The forest area is very big, despite its constant erosion. The surface deforested during 1997-1998 and 2003-2004 was about 6000 km<sup>2</sup>, with a peak of more than 8000 km<sup>2</sup> in 2001-2002. Itaituba, as most of the cities in the region, is affected by deforestation. Deforestation is largely caused by the need for land both for breeding (the number of live-stock doubled between 1992 and 2002) and for cereal cultivation (soy in particular)<sup>9</sup>. Most of the families living in the region hold the double residency, rural and urban (*rurur-*

*bane*)<sup>10</sup>. There are about 25,000 farmers' families in total (Santarém has more than 6000 families, Óbidos, Monte Alegre, Alenquer, Juruti, Oriximiná, Itaituba, Prainha have between 3,000 and 1,000 families; Almeirim, Aveiro, Terra Santa, Belterra, Curuá, Faro have between 1,000 and 300 families<sup>11</sup>). The villages of the region are very different from each other. There are villages located in areas rich in forests and those situated in deforested areas; villages accessible by rivers and those accessible by land. One specific category is represented by the *varzea* villages (those flooded between January and June). Another difference is the ethnic origins of the region's population. Some areas, in fact, are largely populated by indigenous people, while others by *quilombolas* (descendants from slaves). Most of the villages are populated by indigenous and Portuguese descendants (in the oldest villages) or people coming from the north-east (migration-flow began during the 1930s). The main activities of the region's villages are the cultivation of manioc, fishing (mainly in winter), hunt-

ing (less and less) and breeding. One of the most important activities in *varzea* is breeding. During the dry season, breeders take advantage of its rich (*varzea*) pastures to feed their animals. Oxen breeding is usually extensive. Over the last few years, however, bee-culture and captive fish breeding developed. In some villages, families produce almost everything they need, buying only sugar, coffee and kerosene. Other families, instead, have to purchase large quantities of goods, such as rice, beans, fish, etc. The quantities of purchased goods and the quantity of products destined for commercialisation vary according to geographical position and the distance from centres. Generally, the quantity of goods destined for commercialisation is limited by difficulties in communication and by the lack of high-demand markets. Only 9% of farmers living in the region sell more than 9/10 of their production, while 26% sell between half and 9/10 of production, and 64% sell less than half of their production<sup>12</sup>. The goods destined for commercialisation are (in order of importance): black pepper, banana, orange, mango and cocoa. The seasonal productions include: manioc, rice, maize and beans.

As for land distribution, there are many properties owned by family farmers, together with huge properties (often illegal) and midsize - *fazendas* (500-2000 ha).

In the so-called "*terra firme*" areas, the practice of "cut and burn" - cutting and burning forest areas or areas where vegetation has re-grown (called *capoeirinha*, *capoeira* o *capoeira alta*, according to the number of years) - is quite common. Crops cultivation is possible for two years. After this period, farmers have to wait for other ten years before restart cultivating on the same areas. Thanks to the incentives provided by non-governmental organisations, the inhabitants of some villages have integrated cultivation with the manufacturing of products made of wood, terracotta, straw, natural rubber and seeds. Most of villages don't have educational and medical services.

### 3.2 Nature is endless, but it is becoming stingy

Fish-breeding with natural fertilisers in the village of Anã  
A group of women from the village of Anã, city of Santarém decided

<sup>9</sup> Cfr. João Paulo CAPOBIANCO, *Apresentação do Plano de Controle e Prevenção ao Desmatamento*, Seminário Nacional sobre o PPG7, Santarém 21-24 June 2005.

<sup>10</sup> IBGE, *Demographic Census 2000*, [www.ibge.gov.br](http://www.ibge.gov.br).

<sup>11</sup> INCRA, FAO, *Novo Retrato da Agricultura Familiar. O Brasil Redescoberto, Brasília 2000* e <http://www.incra.gov.br/sade>

<sup>12</sup> Ibid

to set up breeding activities. The village of Anã extends along the Arapius river for 1.5 kilometres and inland for 500 metres. The village borders on some *fazendas* devoted to cattle breeding. Santarém is about 45 kilometres from Anã. There are 68 families in the village, making a total of 300 people. Although many people leave the village for the city, the number of inhabitants is increasing. The members of Anã's families are used to live in different places. This is the so-called "*living places diversification*", which is quite common throughout the region. It means, in example, that a mother and a father live in the village, whilst their children live in other cities or villages. Wilkerplines, in a research on Ituqui island, identifies three different family's nets: the net within the village, the net between villages and the urban-rural net<sup>13</sup>. According to the authoress' point of view, the urban net is the most important: during trips to the city, the *varzea* inhabitants stay with the urban family, helping out with every-day chores. At the same time, they

can have access to services and information that would never have been available without living in the city<sup>14</sup>. Florentino, describing the "pioneer city"<sup>15</sup> of the Trans-Amazonian, talks about *transterritoriality*. Transterritoriality means that families move from city to countryside and vice versa over the year, according to their needs. Transterritoriality is a strategy of family subsistence, aimed at maximising disposable income and resources. Elderly people and children live in the countryside; while the teenagers and the other older sons live in the city to work or study. This model can vary according to family choices and personal preferences. The villagers' diet is based on fish and manioc flour. Manioc flour is produced by families or bought from other villagers. Men fish with canoes and nets. The catch is partly consumed by the family itself and partly sold. Some families produce rice and beans in small quantities, and are often unable to provide for their annual needs. Hens and pigs are bred for consumption or for sale. There is a contrast between tradi-

tional and modern eating habits. On one hand, the internal production of flour, which needs a lot of man-power, is becoming less economically sustainable day by day, compared to products such as rice and bread. On the other hand, fish are in danger of extinction because of indiscriminate fishing and river pollution. The provisioning of high-protein food, such as fish and game, is entrusted to men. Men are used to working in the near *fazendas*, while women take care of the house and the courtyard. The courtyard is often a reserve of plants' variety<sup>16</sup>.

For this reason women learn to recognise and cultivate different plants. In the village there are forms of collective jobs, called *mutirão* or *puxirum*. A *puxirum*, in most cases, is held by a family for extraordinary jobs, such as building a house. The *puxirum* is attended by members of the same family and, sometimes, by acquaintances.

The *free riders*, those people that invite others to work in their own land and don't return the favour, are excluded.

If the family which has organised a *puxirum* is not able to return the help received, it can pay in nature

or money<sup>17</sup>. Houses are simple, made of mud or wood, with roofs of straw or eternit. There is no running water. The hygienic services consist of a pit in the courtyard, placed around 20-50 metres from the house. For personal hygiene, people wash themselves in the river. Drinking water is also taken from the river, except when the village has a well. The village doesn't have electricity; a generator produces energy for some houses and the community saloon, while the school uses solar energy.

"What belongs to nature doesn't have an end, but it becomes difficult!" These few words clearly express the way of thinking of Anã's inhabitants. On one hand, they are concerned with the decrease of natural resources, but on the other hand, they cannot conceive that these resources can ever run out. In the words of the village's inhabitants, the past is described as an era of abundance, whilst the present is not.<sup>18</sup>

The decrease of available fish led to the idea of breeding fishes in captivity or half-captivity. The first experience started in 1999 and finished in 2002, when it was abandoned. Similar activities were undertaken in the villages Arapius

<sup>13</sup> Antoniette WINKLERPRINS, *Entre as cheias: solos e agricultura na planície de inundação do Baixo Amazonas, Brasil*, typescript (University of Wisconsin), Madison 1999, chapter 3.

<sup>14</sup> S. NUGENT, *Amazon Caboclo Society: An Essay on Invisibility and Peasant Economy*, Berg Publisher, Providence-Oxford 1993, p. 170, cit. in *Ibidem*.

<sup>15</sup> Laurence Granchamp FLORENTINO, *Localidade fragmentada e novo vínculo social local. Uma análise a partir das relações campo-cidade na Transamazônica (região de Altamira - PA)*, «Agricultura Familiar. Pesquisa, Formação e Desenvolvimento», vol. 1, no. 2, 2000, pp. 33-34.

<sup>16</sup> Cfr. Antoniette WINKLERPRINS, *Entre as cheias* cit., chap. 5.

<sup>17</sup> Interview with Alexandre Godinho, 7 July 2004.

and Tapajós, but they did not have success too.

Breeding in captivity depends on many external factors such as, for instance, the high investments and the quality of fertilisers. In addition, most of the ready-made fodder is usually produced by multinationals and sold at high prices. A large part of the earnings are re-invested in *input* so that it is possible to gain profit only through mid- or grand-scale production. To cope with this problem, the project financed by the European Union supported the production of natural fodder. The beneficiaries were a group of women, called Musa (Dreaming Women in action), engaged in the fish-breeding activities based on the use of natural fodder. The project also provided the materials necessary for fodder production. The work was organised in a collective form.

The expectations of group members vary significantly. Those who consider their own job as a way to provide their family's subsistence look at this experience as a solution to the worrying decrease of river's fish. Those who aim to obtain investments in the rural area consider the project as a source

of income.

Women belonging to the first group don't consider collective work a limitation, while those belonging to the second group are more in favour of individual work.

In the village of Anã this project helped families to cope with their economic difficulties. The project's continuation depends on many elements: the conciliation of the group members' goals; the integration of these goals with the aims of the community; the solution to fodder production related problems and the setting-up of a suitable commercial strategy which can lead to consistent profits. In order to guarantee the continuity of the project, a second three-years project was set up, financed by the Foreign Ministry and implemented by the same local partners and by the Italian non-government organisation Mais.

### 3.3. *Conquista of medicinal essences*

#### Traditional medicine in a suburban area of Santarém

The Conquista Group of medicinal plants' (Gcem), has a long history

beginning in 1989, when the first medicinal plants were cultivated by the Verbiti Fathers. Some of the group's members come from villages in the regions nearby, while others have moved from more distant areas.<sup>19</sup> They came to the district between 1988, when the district was established (it was created after an invasion<sup>20</sup>), and 1993. The group's members have different work experiences. Most of them have worked as housekeepers and continue to do this job occasionally.

Other women worked in the agriculture sector during their childhood or youth. Some of them work as health agents for the City of Santarém. In general, their husbands don't take part in the activities, although at times they help in repairs and in agricultural work. Traditionally, the cultivation of medicinal plants was considered women's work. The Gcem, however, has one man, the husband of a participant, amongst its members. He is often entrusted with very important tasks.

The choice of this man was based on the prestige and trust that he

was able to gain over time - as he has been president of the district for many years.

The group's members range from eighteen to seventy years of age. The participants' involvement varies from person to person, but all of them are committed to the project. The employment of experienced technicians was necessary only for the first few months of the project. The greatest support was provided for activities such as: the crop area renovation, the setting-up of a laboratory for the production of medicine and the acquisition of machinery.

The group produced medicinal plants that were sold at the Fair of Family Production which took place in October 2005. The group is also engaged in activities related to differentiated waste collection. The collected waste is sold to the city's recycling enterprise, so that the group can make a further, although limited, profit.

The main goal of the group is to develop a profitable activity which is helpful for the community. It was decided that part of the profit would not be used, hence remain-

<sup>18</sup> About a lost golden age, cfr. Bernadete BESERRA, *Antigamente e hoje: relações de trabalho versus cidadania*, in A.A.V.V., *Brasil. Norte e Nordeste. Estudos em ciências sociais*, Andocs - Inter-American Foundation, Rio de Janeiro

<sup>19</sup> These informations have been collected on June 12<sup>nd</sup> 2005, interviews to: Maria Zita Martins and Silva, Maria Zuma Serdera de Sousa, Deusimar Martins de Lima, Antonio Gomes, Margaret Duarte Nogueira, Raimunda Clélia de Santos Messias, Dejanira Flavia Alho..

<sup>20</sup> In Brazil, the word "invasion" (invasão) means "place illegally occupied by houses" (cfr. *Dicionário Aurélio Eletrônico. Século XXI*, 1999) It refers to urban areas, while the word occupation «ocupação» refers to rural areas. The word is used here without any negative connotations.

ing at the group's disposal, while the rest would be split according to the job done by each member. The land used did not belong to the group, but it was lent to them by the diocese. The members have many challenges to cope with. Aside from the different expectations, another problem is the difficult relationship between traditional medicine and industrial medicine.

While the first is based on an integral approach, the second focuses on the diagnosis and on the search for a direct solution to each problem.

### 3.4. Involvement for development<sup>21</sup>

#### Female producers of *tapioca* from the village of São Benedito

São Benedito is a settlement 54km from the town of Itaituba, in the State of Pará. The village now known as São Benedito is located on the border of the Amazonian National Park. This area was plagued by land conflicts and was conquered after struggles led by village and trade union leaders. São Benedito belongs to a

group of villages known as Glebe Itaituba: the first village is São Jorge, followed by São Benedito, São Pedro and São Miguel. The project, financed by the European Union, "arrived" at São Benedito through the village's Association of Working Women, whose main activity is the production of manioc starch, here known as *tapioca* or *goma*. The initial goal was to support the group in the improvement of the production: the first step was to undertake a pre-study to find out the negative impacts of the project. The study, named "Strategic Environmental Evaluation", was carried out through questionnaires and on-field-visits.

The study analysed the village's dependence on natural resources and its relationship with the ecosystem. It also analysed the possible environmental impacts of the starch production, setting possible strategies of production diversification. It is "necessary to understand why some behaviour is preserved, and to find a compromise between cultural habits which protect the environment and the profit coming from the use of natural resources."<sup>22</sup> The strategic environmental evaluation was followed by market

research. The main goal was to understand if the group would be able to reach other and better markets outside the city of Itaituba, if the improvement in the production would be appreciated by consumers, if the product could be diversified in order to meet different tastes and if the product direct sale would be profitable. The association of working women from the village São Benedito was established in 1988.

The president of the association said that, when she saw a neighbour cultivating *tapioca*, she had the idea to involve some women in production of *tapioca* to sell. They didn't have any raw materials, so they got the manioc from the region's farmers through the "half" system, which is partially still used: the owner of the raw material receives half the profit while the producer gets the other half; the latter, however, has to pay the transport costs of the raw material from the place of production to the workplace.

Today São Benedito's *tapioca* is recognised as a product of quality. The success of the women's group made it possible to purchase differ-

ent machines, and many husbands gave up their salaried jobs to work on their own land. In this way they could produce the raw material required and increase the family's income: a secondary activity has now become the main source of work for most of the people involved in the project.

The profit on the product sale goes to the person who provided the raw material and, given that each member gives her contribution on rotation-basis, everyone has the possibility of earning money. Thanks to this system of work division, the association could finance the construction of the village's new church.

The association's members are currently attending a training course, in order to learn new skills related to *tapioca*'s production. Today 56 families live near São Benedito. Their survival is based on the consumption and the sale of the so-called *lavoura branca*: rice, beans, corn and manioc. The use of Crop rotation is common.

The exploitation of non-wood forest resources is low and it is limited to the use of *açaí*, *bacaba*, *buriti*, *copaiba*, *andiroba* and *uxi* destined

<sup>21</sup> This title is based on the similarity, in the Portuguese language, between the word "involve" (*envolver*) and the word "develop" (*desenvolver*).

<sup>22</sup> T.C. MARCIN, *Integrating social sciences into forest ecosystem management research*, "Journal of Forestry", Nov. 1993, pp. 29-33, in Andrew M. CROBER, *The ecosystem approach ecosystem management*, A Senior Honours Thesis Submitted in Partial Fulfilment of the Degree of Bachelor of Environmental Studies, June 1999.

for consumption. No craftsmanship activity exists. Some farmers have bovine, pig and equine livestock as well as courtyard birds. Many inhabitants of São Benedito have salaried jobs in the near *fazendas*; some are public employees working as health officers, teachers or assistants in the village school. Another source of income is social security.

People's diets lack protein, because animals are few and represent a source of income for the family; fish is scarce because of the village's geographical location. The great challenge is to support horizontal development through the diversification of opportunities, as well as to contribute to vertical development through the strengthening of the association and the improvement of production techniques.

The future goal will be to optimise land use and, to decrease the destruction of forest areas for agricultural use, and to restore degraded areas.

### 3.5. Conclusions

The three projects involved three groups of women. This is an important result because it was achieved not through an intentional choice to favour female groups,

but through their spontaneous participation. Gender plays a different role in each of the three projects. In every case, women preferred to get involved in activities that allowed them to remain in their own village and homes.

This was very important in the case of the São Benedito group, where female activity was not isolated, but was connected with men activities.

Another important aspect was the integration between private and collective forms of work. The balance between the two elements lies in a compromise depending on external factors, such as the technicians' explicit or implicit beliefs, the necessity to work as a group or not, and the responsibilities that each member wants to take. Each group had to find autonomously its own organisational solutions.

A third aspect is the relationship between profit and social goals. Each of the three projects aimed at providing profit for the group members, taking into account the community interests: it is very hard to find an equilibrium between private and common interests. It is extremely important that the activities providing for the projects' sustainability and profitability also preserve its social goals. Today the Amazonian area has to face many problems,

such as modernisation. The uncertainty of this challenge makes the future of the area unpredictable. The Amazon, the post-modern *far-west*, is a land in constant evolu-

tion populated by people in search of their identities. The challenge is to promote change whilst preserving biological and social diversity in the area.

**BRASIL**

Arquidiocese de Belém, *Arquidiocese de Belém. Pastoral da Saúde, Sacerdotia popular. Saúde...*, s.l. s.d., Belém, 1992.

Beserra B., *Antigamente e hoje: relações de trabalho versus cidadania*, in A.a.v.v., *Brasil. Norte e Nordeste. Estudos em ciências sociais*, Anpocs - Inter-American Foundation, Rio de Janeiro, 1991, pp. 41-66.

Capobianco J. P., *Apresentação do Plano de Controle e Prevenção ao Desmatamento*, Seminário Nacional sobre o PPG7, Santarém, 2005.

Costa A., *Formação agropecuária da Amazônia. Os desafios do desenvolvimento sustentável*, NAEA, Belém, 2000.

Cprm - Companhia De Pesquisa De Recursos Minerais. Superintendência Regional de Belém, *Situação do espaço municipal de Santarém*, Belém, 1997, (CD-ROM), p.4, cit. in José Carlos Matos PEREIRA, *Importância e significado das Cidades Médias na Amazônia: uma abordagem a partir de Santarém (PA)*, Dissertação de Mestrado, Belém, 2004.

Delgado C.L., Nikolas Wada, Mark W. RoseGrants, Siet Meijer, Mahfuzuddin AHMED, *Fish to 2020. Supply and demand in changing global markets*, International Food Policy Re-

search Institute, WorldFish Center, s.d., 2003.

Fossier R., *Il lavoro nel Medioevo*, Einaudi, Torino 2002, p. 162.

Gonçalves V., *Levantamento de mercado de produtos florestais não madeireiros*, IBAMA Promanejo, Santarém, 2001.

Granchamp Florentino L., *Localidade fragmentada e novo vínculo social local. Uma análise a partir das relações campo-cidade na Transamazônica (região de Altamira - PA)*, «Agricultura Familiar. Pesquisa, Formação e Desenvolvimento», vol. 1, n. 2, 2000.

IBGE, *Censo Demográfico 2000*, [www.ibge.gov.br](http://www.ibge.gov.br)

INCRA, FAO, *Novo Retrato da Agricultura Familiar. O Brasil Redescoberto*, Brasília, 2000, in [www.incra.gov.br/sade](http://www.incra.gov.br/sade)

Marcin T.C., *Integrating social sciences into forest ecosystem management research*, «Journal of Forestry», nov. 1993, pp. 29-33, in Andrew M. Crober, *The ecosystem approach ecosystem management*, A Senior Honours Thesis Submitted in Partial Fulfillment of the Degree of Bachelor of Environmental Studies, 1999.

Nugent S., *Amazon Caboclo Society. An Essay on Invisibility and*

*Peasant Economy*, Berg Publisher, Providence-Oxford, 1993.

Pereira Farias S., *Periferização e ocupação urbana: estudo de processo de formação do bairro de Conquista, na cidade de Santarém*, Tese de Bacharelado em Geografia na Universidade Federal do Pará, Santarém, 2001.

Petrere M. Júnior, *Setor pesqueiro: análise da situação atual e tendências do desenvolvimento da indústria da pesca*, Provarzea, Manaus, 2004.

Roubach R., Eudes S. Correia, Sergio Zaiden, Ricardo C. Martino, Ronaldo O. Cavalli, *Aquaculture in Brazil*, «World Aquaculture», Março, 2003.

Sandroni P., *Novissimo Dicionário de Economia*, Best Seller, 1999.

Sereni Murrieta R.S., *Dialética do sabor: alimentação, ecologia e vida cotidiana em comunidades ribeirinhas da Ilha de Ituqui, Baixo Amazonas, Pará*, «Revista de Antropologia», vol.44, no. 2, 2001, p. 43.

Viana M., *Envolvimento Sustentável e Conservação das florestas Brasileiras, Trabalho apresentado no Seminário Alternativas de Manejo Sustentável dos Recursos Naturais no Vale do Ribeira, realizado no período de 15 a 19 de junho de 1999 na Ilha Comprida*, 03/2000.

Wilder R., *Protection of Traditional Medicine*, «CMH Working Paper Series», n. WG 4: 4, 2001.

Winklerprins A., *Entre as cheias: solos e agricultura na planície de inundação do Baixo Amazonas, Brasil*, (University of Wisconsin), cap. 3, Madison, 1999.

**MALI**

Cissé M. C., Dembele K., Kebe Y. G., Traore M. N., *Mali, le paysan et l'état*, Mali, l'Harmattan 1981

Coulibaly C., *Politiques agricoles et stratégies paysannes au Mali*, Editions le cauri d'or, Mali, 1997

Compte rendu du colloque tenu à Edmonton (Alberta), *Séchage des produits alimentaires*, 1981

CMDT/SNV, *Diffusion des Technologies au Mali Sud, Projet, 1994 Identification Technologies Alternatives*, PITA Koutiala, 1994

UNIFEM, *Rôle des femmes dans l'élaboration des Technologies du cycle alimentaire*, 1995

UNIFEM, *Transformation des fruits et légumes*, 1989