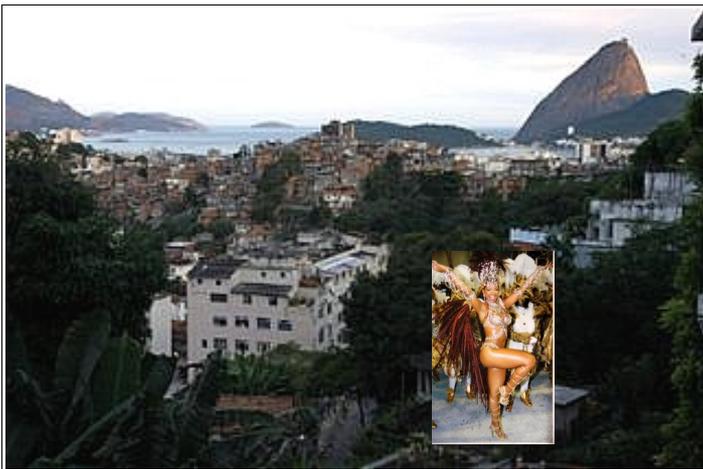


## Brasil 17.2.- 28.3.09

From Manaus, the hot, humid and busy harbour on the Rio Negro (which there converges with the Amazon river) we flew to Brasilia, where we were picked up at the airport and brought to IPEC, a permaculture training centre, 1,5 hours south of there.

The way leads through miles and miles of pastures and fields. The grass is short and the trees are suffering the constant bite of the animals. All over South and Central America we have seen the pattern of overgrazing. From the Amazon up to heights of 5000m. The animals change, the people change, but the pattern remains. For meat production we destroy so much, sacrifice forest and jungle, diversity and life, expose earth to erosion, to the overheating from the direct sun, to be carried off by wind washed away by rain. We take into account that we harvest floods, loss of fertile land, loss of biodiversity, loss of shelter and balanced weather. Oxygen levels sink, CO<sup>2</sup> levels rise.



stored in the red clay soil.

Unlike the Alentejo in Portugal, where the distribution of water is similar, during the rainy season here the temperatures here are high, similar a German summer and the growth of the plants is enormous. In Alentejo, during the rainy season you can have heavy frosts, and trees do not grow or have leaves. As soon as it gets warm enough for the vegetation to grow, the rains cease and water becomes scarce.

### Synchronicities

And life keeps being the miracle evolving that we witnessed so much already. We have an appointment to work with a group called Terra Una, who knows Forum a little and would like to learn it to use it in their meetings and for building their community.

In Rio we have been offered a beautiful apartment in Copacabana, 100m from the famous beach in between of luxury hotels. We can use the apartment as long, as we like. It presents us with a wonderful base to rest, digest and enjoy Rio.

The workshop at IPEC was during Carnaval. Imagine, being near Rio in the time of Carnaval and having to do a workshop! Not being able to see anything of it! We surrendered to this fact, enjoyed the workshop and the people and consoled ourselves by saying that it would be horribly expensive, and unsafe, and you could not see much from the seats ...

Then we hear that in a couple of days after we arrive in Rio there is another parade of the best (!) Samba group of the year. Again we are so close and... have another workshop scheduled with the group of "Terra Una"!

The next morning we go to the internet to find out that they want to cancel the workshop because suddenly it does not fit anymore and they are busy and they would like to see us later.

Perfect for us. More than perfect. Sometimes it really seems that we just need to formulate, or know, what we want and need, and then trust that life will take care of us. Surprisingly often it works! So we go, buy an expensive ticket for and see the final Carnaval parade all night. It was an unforgettable event beyond time. When we return to the apartment, the sun just raises at 5:30.

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So that we can eat meat. Of course this is just one side of a many faceted gem. One side of the picture, but an important one that also includes the others.

Here, too we arrived during the rainy season. The dry season lasts 6 months, where the trees need to survive on the underground water and the water



**Ecocentro IPEC 17. - 24.2.** (<http://www.ecocentro.org/>)



Today IPEC is an approximately 30 ha big green food forest oasis in the middle of pasture and agricultural land. There they have a rainy season, with lots of rain and half a year nearly without any. The earth is red and clay and presents a beautiful color for the buildings. The soil seems still fertile enough to allow trees and plants to grow unbelievable fast for European standards. We have been shown trees with a diameter of about 40 cm being only 10 years old (see picture!). I could not believe it. All of what we see grew in only 10 years and less! In ZEGG, Germany and in Alentejo, Portugal, which I know and where I have been planting many thousands of trees, this would have taken 50 to 80 years to grow at least.





As nearly everywhere in South America, where colonialists exploited and cut the forest and wanted cattle for meat, grows an imported African grass which consequently is called "Colonial Gras". It reaches 2,5 m and grows faster, when cows eat it. Some enzymes they have cause this reaction. The only way to get rid of it again is to shade it out through trees and forest. When IPEC was started 1998, there were a very few trees, some palms and a small house. Today it is a rich forest with fruits, flowers, ample wildlife and insects, and many beautiful and interesting buildings.

André Soares and his partner Lucy Legan started with a lot of enthusiasm. Their dream of an ecological demonstration and training Centre (like CAT in Wales) materialized in such a short time. Many voluntary hands have worked on it (the landscape, design and the houses), quite a sum of European and Brazilian State and Private money and nature supported it.



They also build a wonderful Guest Center with earth bags around a pond and a big guest kitchen and diner with delicious food. IPEC seems to be a perfect venue for EDE courses, Permaculture trainings and a wonderful spot of light in the global web of change. There is so much to see in adequate natural building methods, applications for ferrocement to build economic and ecological rainwater catchment tanks and very

beautiful and odourless compost toilets; good, ecological solutions for roofs; innovative, low cost ideas for solar warm water heating; and lots of examples for permaculture application in landscape design.

It is important to know that in Brasil (and all parts of South America we saw), though very sunny and warm, nearly all the water is heated electrically still.

Recently IPEC is using all of their acquired knowledge to design an ecovillage higher up on their property. More and more people who get to know them ask if they can move there and build a house. I think, soon it will start and it will change a lot as it turns the ecological training centre into a "lifeboat" like David Holmgren formulates it.



## TIBÁ Intuitive Tecnology and Bio-Architecture ([www.tibarose.com/ing/home.htm](http://www.tibarose.com/ing/home.htm))

The architecture center of Tibá was founded about 20 years ago by Johan van Lengen, a dutch architect. It is about 3-4 hours from Rio by bus and on 650m. This allows that the nights are cool, while the days are still hot.

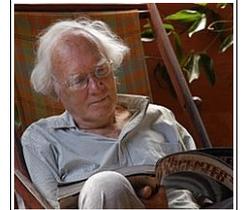
### How blessed the tropics are!

How much easier life is here. No need for insulating, solid walls etc.; double or tripple glazing windows, food preservation, heating systems; Water pipes and tanks on the ground instead of burried 1m deep. How much less money, labour and energy is needed here to build, eat and live. Buildings can be build, that in Germany would freeze to pieces due to the water in the bricks. Here they get wet and dry, following the sun, rain and the seasons. That is it.

This makes me envious, thinking about why so many people want to live in difficult climatical zones like Germany. I know why, I love the seasons and I love the winter, too! But it is just so much easier to live with a small or even no footprint here in the tropics. Whatever we do in Germany, being super ecological and all, we can never achieve the sustainable lifestyle that here is so easy.

☺

Very early on Johan wrote a book in Portugese which now appeared in English called: "The barefoot architect". It gives lots of low tech and easy to apply examples of architecture for non-professionals. Still it is professional in itself. I think, whoever wants to start an ecovillage can find perfect examples here to start planning and executing.



Even though it is written for the tropics, even we in Germany can find usefull examples for low tech and low carbon solutions.

Many solutions, easy to copy, are to be seen on the site in a day to day use setting.





Soon after Johan and his wife Rose have found the place 20 years ago and started the architecture center, they started planting trees following permaculture principles and Agro Forestry techniques. In recent years they started planting bamboo with over 20 kinds of fast growing and big bamboo from all over the world.

Now they are finding out its qualities and uses and start teaching them. Bamboo probably is the building material for the future in these climatical zones. Maybe not only for building, but also for humus generation, food, woodfibre, paper and clothes.

At Tibá today you find a beautiful forest with fruits covering what once were pastureland. Again we are very surprised and envious when we see the dramatic growth rates of the tropics. Around you can still see how it looked, when you go to the neighbours. In Brasil it seems normal to “clear” a building lot; e.g. cut everything that grows, before you build. People from Tibá are looked at and smiled at as “tree lovers” just because they plant so many trees.



**IPEMA - Instituto de Permacultura e Ecovilas da Mata Atlântica**  
[\(www.ipemabrasil.org.br/\)](http://www.ipemabrasil.org.br/)



We went south to Ubatuba, wonderful beaches and endless forested islands. Near Ubatuba is IPEMA. It was founded 1994 in the house of Marcelo Bueno who was inspired by getting to know “La Caravana” the mobil ecovillage, and started to teach Permaculture. 1999 it found its location on a land that has been abandoned for 20 years. In 2004 this land was bought by a group of 8. They have about 60 ha of land, of which about 50 ha are in a state park.

The remaining 10 ha they can build on, cultivate etc. All the land is forested today and beautiful – being at one of the many rivers which flow all year round is a little paradise experience. The rivers are clean, flowing over granite rock formations in the jungle. To me it is the only place this time of the year I could enjoy the Tropics and feel cool enough to relax. It is like paradise. Pictures of Gaugin in the South Pacific come in mind.



Relatively few people live on the land, some around and they are starting their “Ecovila Corcovado” now.



In contrast to IPEC they live very basic, with some PV and some turbine electricity in a hot and humid climate of



tropical rainforest. And so far they were less fortunate with financial support. There seem to be two Permaculture scenes in Brasil. One is within the affluent world and one is in the Do-it-yourself “less is more” minded world with little financial means.

One economic idea they have is to produce “Açaí” which is part of a small coconut, high in protein and rich in vitamins. Normally all the Açaí comes from the North of Brasil. Here, in the Mata Atlântica they have a palm tree with a very similar fruit which could fulfill the demand locally and offer a source of income here.



When we came it had not rained for almost a week and for them and the plants this obviously was a long time. Plants – usually adapted to frequent rains all the year round – showed severe signs of drought. For us it feels hot and it is difficult to imagine to work there physically or mentally. Normally it rains frequently, almost every day. Their annual percipitation is more than 3000mm.

IPEMA has the policy that all the waste (also from goods they buy) stays on the land and – whenever possible - is recycled.

They have dry toilets and now start a cooperation with the local government to build dry toilets for the famous beaches of Ubatuba. They also have a water toilet with a small demonstration purification plant behind to show that also this is possible wherever needed. They build with bamboo and earth, little cement and almost only recycled material like used telegraph posts.



They have many roofs made of recycled toothpaste tubes!



This seems to be a cheap solution for roofs, but where are all the toothpaste tubes collected? Still I doubt their usefulness as to me it is plastic garbage that I buy to put on my roofs and one day I will have a problem getting rid of it again. It is recycled and seems to be a good solution for many as many alternative places use it. For me it is a bit like using car tires to build houses or even stuffing them with plastic garbage.

Brasil has more than 7000 km coastline, most of it beautiful beaches. A Jeweler told us in Rio that 70% of the worlds gems come from Brasil. Why is this country so poor, when it s so rich in natural (also human) beauty, minerals, sweet water, prescious gems, foods, medicines and diversity. A Jeweler (from Germany) said, that since the colonization began with the Portugese, Brasil is poor up to today, because of continuous exploitation.

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## Workshops – IPEC - IPEMA

At IPEC we did a 4 day ZEGG Forum workshop with some staff and visitors. We touched a lot of world view like Spiral Dynamics, Systems Theory, Collective Intelligence, Deep Ecology and Permaculture. On the other hand we used spiritual experience and exercises, some of which we learned in our



training with Thomas Hübl in Germany. And of course all the 30 years of experience that flew into our Forum today. It was touching, interesting and a deep experience also for us.



