## **FLORES: A DIAMOND**

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## Article published in the local newspaper on Flores, Acores, Portugal, December 1992, designed as a "letter" to the inhabitants

Why are diamonds so expensive? Because they are rare. If one could find them behind each house, they would not be so valuable and expensive.

What is the most expensive diamond? The pure white one.

What has this to do with Flores? Flores is a diamond and many people on Flores do not know it. Flores is pure and rare. And it will become rarer by time.

Flores is the most beautiful island of the Acores. Only the landscape of San Miguel is as beautiful as the landscape of Flores, but San Miguel has already been destroyed by "modernization". There are too many cars which pollute the air and there is too much ugly concrete architecture on San Miguel.

Is it only its beautiful landscape which makes Flores rare? Yes and no. Of course the beauty of Flores is exceptional. But there are many places in this world which are beautiful.

There is one other thing which increases the value of Flores and will increase it every year more: its distance from any other landmass, its position in the middle of the ocean.

Is it possible to find a place with clean air on the European continent or any other continent? No, it is not possible. Europe for example is full of dangerous industry and full of cars. Just to give an illustration: A motorway is polluting about twelve kilometers on each side of it.

Because of this pollution people escape for holidays to lonely places like North-Norway. But even there the lakes have no fishes anymore, because of the acid rain, which is caused by the pollution which is carried from industry thousands of kilometers away. The same is true for Canada. Many people therefore try to go to the East. But Russia is an environmental catastrophe. The centralized governments in the former East Block didn't care, if the people in their countries got sick from pollution, as long as the government was sitting safely in its capital. As a last solution people therefore try to catch some clean air in a holiday in the Third World. But even the Third World gets more and more dirty. If Third World countries have industry, then they don't have money for environmentally sound installations, the population is not educated and uses insecticides, herbicides, dangerous paint, etc. without care and rich countries dump their toxic waste in Third world countries. There are no clean places to be found anymore. And this problem does not become smaller, it becomes bigger and therefore Flores becomes more rare and valuable. It will be able to market itself as "The island like a pure diamond."

Flores is far away from industrial pollution. Even radioactivity after the explosion of a nuclear power plant in Europe or America might not reach Flores. If there are not too many cars on the island, then their polluting effect is not so big. There is no dirty industry on Flores. All this is purity.

This purity has to be protected, otherwise the diamond will be less valuable. The best would be only to allow electric cars (as is done on the island of Helgoland in the North of Germany) and donkeys, horses and cows for transportation and work on the fields. Then biological methods for crop protection should be used, no chemical insecticides, herbicides and fertilizers. Then toxic paint should stay away from Flores. (Just at the moment the EEC tries to support a toxic wood paint, with the argument that poor countries like Ireland and Portugal can only afford this cheap product. It is paint which contains PCP, Pentachlorophenol. This has been forbidden in Germany in 1987. About 20.000 people in Germany got sick of it and had to leave their polluted houses. PCP causes cancer, kidney- and liver damage, head-ache, depression, increase of white blood cells, breathing problems and stomach problems. It is used to kill worms and fungi in wood. There are other and safer products to do that, but they are more expensive. Flores has to be careful, not to accept destructive products just because they are cheap. This is cheaper today but more expensive, as soon as people and animals get sick.)

Flores can be proud of pure air. It can be proud of more: of pure architecture. San Miguel has already lost its architectural beauty. Flores still has villages of exceptional architectural integrity. Many stone houses with their black walls like pieces of art are still there. There is still a lot of hand work to be seen. Hand made stone walls, hand made roof tiles, hand made window glass, hand made windows, hand made kitchen ovens, hand made wooden walls inside houses, wooden interior decoration and so on. Fortunately aluminum windows and plastic furniture in ugly "modern" cement-block-architecture have not yet polluted Flores too much.

Flores is a diamond of purity. It is in the hand of its population, to protect it or destroy it.

Agriculture and houses are too subjects which I would like to look at closer:

## AGRICULTURE

There is a lot of talk about so-called "modern" agriculture. If we say modern then we imagine vast stretches of land covered with wheat or other mono-cultures in Australia, the USA and many other countries on which big machines are used by a very small number of people. Modern agriculture works like a factory. And a factory is actually the example which modern agriculture is supposed to follow in order to be economically feasible. In a factory one can earn more money by increasing production by automation. Ford with his cars was probably the first to make this principle known. This principle works like a miracle: If I need ten men to produce a car in several weeks or even months then I only have to put some more machines and I might only need one man to make ten cars in one day. My example is of course fictitious. But this is the principle: I use more machines and less people and I earn more money.

This principle works well in many cases, but only to a certain extent. It worked well in the beginning of industrialization. It worked well in the first years of car production. Because cars are very simple machines. They are not at all complicated. But we have to be careful when we want to produce more complicated things. Already a potato is more complicated than a car. A car doesn't have to grow, it doesn't need sun light and so on. A potato is part of a big system around it which has to work, if the potato is to grow well. If human beings throw atomic bombs thereby creating black clouds to block the sun light no potato can grow anymore. This is of course a very drastic example of how human beings have the capability to destroy their very life basis. There are many less drastic examples of this destruction potential:

Agricultural machines work best, if they can move freely. This can be achieved by asphalting roads and by creating big plane areas of land which are not interrupted by bushes, trees, rivers of walls. This has been done in many countries. The result: These vast stretches of naked land are extremely vulnerable to wind and rain. The wind blows the top soil away and rain washes it away. Any hot summer or any big rain can create a catastrophe. Because bushes, trees and walls protect the soil. The children of those modern farmers might not have a farm anymore. The lesson we learn: Nature is a complicated machine and if we take some aspects out and change them in an isolated manner then we might disturb the balance of the whole system.

Insecticides and herbicides are another example. They are supposed to help "modern agriculture" to attain high production yields. This is actually achieved in many cases, but only for a limited period of time and at a high cost: Many of these chemicals are responsible for the extinction of numerous species of plants and animals. All these extinct species carry genetic information which we might need later. Penicillin for example was found, because a fungus produced it. What if farmers would have eradicated this fungus? We would not have Penicillin today. A farmer might say: "I don't need so many animals and plants, especially if they eat my crop." He is wrong. Because too many missing species make his crop more and more vulnerable. He might kill useful animals and plants, too. And other animals which were feeding on the extinct insects die out and these animals might have had a beneficial effect.

And another negative aspect of chemical insecticides and herbicides: It is not good for the health of the consumer to eat the residues of the chemicals which were applied. Not only the vegetables themselves carry those residues, these residues get into meat which is consumed, too. And the milk of a cow which ate grass which was contaminated with chemicals will carry these chemicals and the people who drink the milk will store them in their body. Chemicals which are consumed by animals are often stored in their liver and in fatty tissue. Therefore it is not advisable to eat too much liver of those animals. And of course chemicals are stored in the human liver and fatty tissue as well. Therefore a person who consumed a lot of contaminated food can literally poison himself by melting down his fatty tissue during a quick slimming trial.

Therefore many people in this world look for a change. In Germany some city people choose a farmer in the neighbourhood of their town. They ask him not to use chemicals and guarantee to buy his products, if he abides by this. The city people visit the farmer regularly in order to buy things and in order to have an eye on his production methods. They pay him higher prices than he would get from a shop. Like this the consumer lives healthier and the farmer doesn't have to expand his production with "modern" methods.

There are therefore more and more farmers who stick to so-called biological methods, because they get higher prices for products without residues of chemicals. And there is a lot of research going on about biological methods of protecting crop. One thing is clear: Mono-cultures have to be avoided, because they make the production very vulnerable. Poly-cultures keep a healthy balance between all the plants and animals. The traditional way of agriculture on Flores is therefore preferable.

Fertilizers as well are dangerous, if used in too big quantities. German consumers don't like dutch tomatoes. They are called plastic tomatoes or water tomatoes, because they don't have any taste. Dutch producers reacted already and tried to improve their product by using less fertilizer and less chemical treatment altogether.

Medical doctors used to say that people who eat a balanced diet don't need to take vitamin pills. But many doctors changed their mind in the past years, because it was found that in many cases grains and vegetables today don't carry as much vitamins and minerals anymore as they used to in former times.

Just lately people who wanted to buy land in East Germany found out that vast areas lost their traditional fertility, because they are over-salted due to too high application of all kinds of chemicals. Over-salted soil is not only a problem in East Germany, but in many areas of this world, be it in Egypt or India. It is always the same: In the beginning the results seem good, when a farmer puts a lot of fertilizer. He is happy. But after some years his land loses its former value..

Heavy machinery is another problem. Because air is very important for the fertility of soil. Heavy machines press the air out of the soil. The soil dies. Animals and light weight machinery is the solution. The light agricultural machinery used on Flores is therefore of suitable dimensions.

But agricultural machines and cars in general have one big disadvantage: they depend on fuel and they pollute the air. The Golf war showed to the world the fragility of this dependence on a substance which comes from very few and mostly politically instable regions in this world. It would be wiser to find a source of energy which is more decentralized. Donkeys and horses get their "fuel" from the grass around them. They are therefore a wise solution to this problem. The same applies to the problem of air pollution. Donkeys and horses don't pollute the air. People on the Acores laugh, when they hear the word air pollution, because their islands are still considerably clean and the drawbacks of pollution are not felt so accentuated like in places like Los Angeles. It is not wise to laugh. One should just remember, how whaling one day was halted. People who said before that: "Oh, whaling will always stay", stopped laughing. The same will happen to the motor. Because the combustion motor is an experiment with the air which is as destructive as over-fishing is to the sea. The global climate changes. Los Angeles set already the limit around the year 2000 for zero exhaust emission. Motor constructors got a lot of headache.

Another advantage of donkeys, horses and cows as help in agriculture: They can walk on narrow pathways. They can climb steep hills. Tractors are not so flexible.

The big slogan today is not anymore "mechanized agriculture", but "sustainable agriculture". Sustainable agriculture means simply that we have to look first, if a certain method will still be useful for our children or not. If a certain method is very good today, but our children will find a destroyed world because of it, then we better stop this method, as much as we might like it today. Sustainable agriculture means that we have to learn to be aware that nature is a very complicated machine and not as simple as the factory, where Mister Ford made his cars. Therefore we cannot just apply the same philosophy which says: More is better. It is dangerous to think that more machines are better, more fertilizer is better, more insecticides are better and so on. We destroy the balance of the big and very complicated factory nature, if we do that. This balance is very fragile. We have to learn to see that there is a "too much".

Some examples: There are farmers in tropic areas of the world who burn pieces of jungle, use the land for agriculture until the soil is exhausted and then go on and burn the next piece. As long as small groups of farmers did this, this was not too big a problem. But today too much tropic forest is destroyed by farmers and by wood cutters. The global climate is in danger, because it depends on the big tropical forests. The world community urges countries like Brazil, Indonesia and Malaysia to stop destroying their forests. But of course these countries find it very convenient to earn money by selling precious tropic wood or selling meat from animals which graze on vast areas which were forest before. And tropic forest cannot regenerate once it has disappeared. Very poor vegetation grows later, because the soil of tropic forests is very thin and poor.

Another example: Vast stretches of land in Italy were covered with forest about two and a half thousand years ago. The inhabitants used wood to cook their meals and heat their houses. This was not a problem until the Roman Empire grew bigger and more and more wood was used. Today many Italian mountains are naked. The soil has been carried away since no trees protected it anymore.

There is a point to be mentioned in this respect which is important for Flores. It is not a very good policy to plant too many trees on the plateau which dry the soil by taking out water with their roots. The moss which covers the plateau is very important, because it keeps huge amounts of water. If the moss is replaced then the rain can wash the soil from the mountains. There is a similar plateau in Belgium, the Ardennes. There too trees were planted which dried the moor. Some years ago people stopped this. They founded a society to save the Ardennes, bought most of the land and cut the trees, leaving the moor to its original state.

Another example which touches the Acores: Whaling. As long as small communities kill few

whales this is not a problem. The problem arises only, when the factory principle of profit maximation comes in. Big factory boats killed more and more whales which in the beginning was very profitable to the owners of the ships. They used bigger machinery and fewer people to kill much more whales than the people of the Acores could kill with their small boats in many years. Some years ago an observer would probably have said: "Look, this owner of a big whaling boat, he is a clever guy. He earns a lot of money. This is the right way. Everybody should be as clever as he is." What was the result after some years? The owners of the big whaling boats destroyed the very basis of their business. If there wouldn't have been international regulations to forbid whaling there wouldn't probably be any whale anymore today to hunt. Those people who bought a big factory boat in the beginning are rich people today, they don't care. The only ones who really suffer are the ones who came later and thought: "Oh, this factory boat owner earns much money, I should also buy some expensive machinery to be able to hunt more whales." Such a guy has a lot of debts today and no whales anymore. And the Acorians suffer. Whaling was an integrated part of their culture. They didn't kill too many. Their killing kept a balance between the available number of whales and their profit. Their methods where therefore suitable to go on for generations, while the big factory boats worked well for probably thirty years only.

We have to learn that we are part of a big system, called nature, which we cannot manipulate like Mister Ford could manipulate his car factory. If we try that then we destroy the very life base from which we live. If we poison pest insects with dangerous chemicals, then we poison ourselves too. Because the poison enters the food chain and reaches us. We have to be aware of the cycle we live in.

Everywhere we can observe the destruction which is brought about by neglecting the fact that we are part of a big system. The problem of modern rubbish is another example. We cannot just use one-way plastic containers for everything. Because there is no "outside" on this world, where we can throw our rubbish. It always comes back to us: If we try to burn modern rubbish then the fumes of burning plastic contain dioxin which poisons the very air we breath. If we don't burn it, then it poisons our land.

We will have to say good-bye to many modern things which we today believe to be very necessary. Because they represent a too dangerous experiment with nature and leave a polluted and empty world to our children. Many big whaling boats had to say good-bye. They didn't want to disappear. Their owners didn't want to give their lucrative business up. They forced their own disappearance because they use short-sighted methods. We have to keep this example in mind and remind ourselves again and again that wanting profit and maximizing profit through modern technology sometimes collides with reality. We better think, before it is too late.

In the beginning I said that the equation "more machines and less people equals more money" works when we produce cars. This is not completely correct even there. Because after some years of car production it doesn't work so well anymore, as I mentioned above already. Mister Ford would be very astonished, if he could see how nervous the managers of car factories are today. They ask scientists to find solutions for the traffic jams which hinder free movement instead of helping it and for the air polluting car motors. But the answers of the scientists are still too shocking, so the managers of those car factories don't dare to publish them.

The farmers of the Acores have to be careful. Still the EEC is subsidizing farmers. But there is a

world-wide campaign against the EEC going on, led by the United States, forcing the EEC to cut subsidies, because the EEC destroys the world market with its cheap subsidized products. There will be a time, where the cows of the Acores will be of much less value than today. Why? Because milk and meat will not fetch so high prices anymore without subsidies.

The people of the Acores have to understand the following: Are there mass products in today's agriculture? Yes. Cows can be held in huge stables where they are fed, cleaned and milked by many machines and few people. Wheat can be grown on huge areas which are treated by big machines and a few people. This mass production uses, as I said above, many shortsighted methods which bring about a lot of long term destruction. But it is still done and pushes prices down for these products.

Can small farmers on the Acores compete with milk coming from such huge milk factories? No. They can only compete as long as there are subsidies, but not any more without subsidies. If the Acores were to try to compete without subsidies, then one single huge stable on each of the nine islands would be enough, probably ten people would find work there and the rest of the farmers would be jobless. Is it therefore intelligent for a small farmer to try to make a small imitation of a big cow factory? To build bigger stables, to invest in more machinery? No. He will never be able to produce as cheaply as a big cow factory. He will just stand there with a lot of debts after the subsidies are cut and without profit. Of course he could hope that the subsidies stay as long as possible. But, even if subsidies still stay for some time, it would be more intelligent for a farmer to look a little bit further into the future and to find out, what he can do profitably, if the subsidies are cut and he has to stand on his own feet.

What can farmers on small islands do, when they all want to earn money and don't want to become jobless? They have to look for products which cannot be mass produced. Milk, meat and wheat are examples of possible mass production in agriculture. Therefore small farmers will never be able to compete on a really free market and they have to forget this subject. They can still produce milk for their private consumption and their neighbours, why not, but not as a money earner for the future. They have to concentrate on products which are too complicated for mass production. Products which need too much complicated care and therefore always will be rare. Like hand made products which are more expensive than mass products because they carry individuality which makes them unique and rare. If many people want to earn money in agriculture they have to forget investment into main stream mechanization. They have to find products which need many human hands and not many machines. Otherwise the people make their hands and thereby themselves superfluous.

Mechanization normally puts people out of traditional jobs at a certain moment. Either by destroying the very basis of the business like in whaling or by being so successful that only very few people are needed to work in such a business and the products become too cheap to compete with. I am not an agricultural consultant, so I don't know which products could keep small farmers in business on the Acores even when EEC subsidies diminish. Milk and cows on a mass market obviously not.

Is it possible to get milk and cows out of the competition of a mass market? Yes. One example: cheese. If milk is pasteurized it loses its special taste. Cheese from pasteurized milk has the same basic taste all over the world. It becomes a mass product. Cheese from pasteurized milk is

flooding the world market and fetches very low prices if it is not subsidized. How could the price be increased? By not pasteurizing and thereby protecting the aspect which makes a cheese individual and thereby rare. Acorian cheese could be found on the shelves of gourmet shops to high prices instead of competing with mass produced cheese in normal supermarkets. I am not a cheese expert, but I know that there are ways to work hygienically without pasteurizing.

Milk as well could become a special and expensive product, as soon as it carries special characteristics: milk without chemicals. All products which were produced in an environment without chemicals fetch high prices in health food shops. This applies not only to the full milk, but to the butter milk, too, which, to my astonishment, seems to be used only as animal food on the Acores. Butter milk is very healthy for human beings. It is a product which is consumed a lot by health conscious people. If in addition this butter milk carries a certificate that it has been produced with so-called biological methods without chemicals, then it fetches an even higher price.

The Acores could market themselves as a symbol of purity which means no chemical residues in food and they could become the supplier of health food shops. Of course it would be necessary to create a good test system to secure that the products really don't contain chemical residues. Because it is not sufficient to just say that. A credible and reliable control and certificate is important. This might be a solution, because more and more people are afraid of chemical residues, especially since more facts become known which show their dangerous health threats. People will eat and drink less and less products with artificial colouring, artificial tastes and pollution residues. Pure food has a bright future.

I lived the biggest part of my life in North-Germany. I would like to explain to you how Europe is seen there in respect to food: Denmark and Holland are associated primarily with cheese. They made a lot of publicity which succeeded in connecting the name of their country with this product. The publicity always used the same images: a girl in a national dress, a cow, green background, and so on. The intention is, to give the impression of purity. In the past their cheese was a very good product and therefore their reputation was good too. Lately the product has diminished in quality, especially the highly processed cheese is called "plastic-cheese" by german consumers. Good quality and purity is not anymore the first association in German minds, when they hear the word Holland or Denmark. The Acores should fill this gap. They should build themselves up on the European market as a symbol of purity. They have to use the only association which is present at the moment in German minds: the weather forecast. When we tell people that we will spend some time on the Acorian islands, then they look at us trying very hard to remember what this could mean: "The Acorian islands". Then, after some effort, they remember the weather forecast. They say: "Ah, the high pressure front from the Acores! I thought that this was just the middle of the Ocean, I did not know that this means that islands are existing there!" This is the state of mind of most of the Germans. The Acores are utterly unknown. Why do the Acores not use their potential? They are far away from pollution. They are very green. They are associated with high pressure weather. All this is the perfect basis for becoming a symbol of purity. I imagine the following television publicity: In front of beautiful water-falls of Flores or the lakes of San Miguel a cow is saying: "I make the high pressure fronts and I make cheese. The purest cheese you ever tasted, because around me there are thousands of kilometers of ocean and no nuclear power plant and no chemical industry. The grass I eat was not treated with chemicals. If you want pure food then buy cheese from the Acores."

This is the way for the Acores: away from a market of mass products to a market of specialties. Of course this only works, if there is a credible control of pollution and farmers are well informed how to avoid toxic chemicals in agriculture and if the farmers get sufficient information about biological methods. Pollution producing agricultural machines should be replaced by donkeys and horses. A farmer working with his donkey can be marketed as a symbol of purity, a farmer with his tractor giving of clouds of exhaust can not be marketed as a symbol of purity! Acorians have to think in terms of handicraft and art, not in terms of mass products.

By the way: When I talk about higher prices which can be asked for special products, then it is important to keep in mind that this doesn't mean exorbitant prices. Many people on the Acores seem to have the tendency to ask too high prices, if they feel that there is an interest for their product. By asking too high prices, one destroys one's chances to earn money.

Other alternatives for agriculture could probably be ananas as it is grown in San Miguel. But ananas is already mass produced in Africa, so probably it is not a suitable product for small farmers. In Egypt there are a lot of small farmers and they have the same problem. Many started with silk production, something which needs a lot of manual care, but this is probably not suitable for the Acorian climate. Many fancy fruits fetch high prices. Of course no mono-cultures should be introduced, a variety of ideas could be realized and the traditional products should not be neglected. Phantasy is necessary. Not blind mechanization like it was done by those people who admired the big whaling boats, who therefore borrowed a lot of money to buy a boat too and who only have debts today.

Blind mechanization can also destroy one other source of money which is tourism. Tourists don't come to visit huge wheat fields or huge cow stables. They only come to visit, if they find a landscape which is not destroyed by agricultural industry and if they are not poisoned by exhaust from agricultural machines and agricultural chemicals.

The conclusion: Long term thinking and phantasy is necessary, not short term thinking and blind mechanization.