Anita Roddick, Founder Body Shop
Take it personally. It’s one of my mantras whether it’s thinking about the story behind what you buy, how you travel and use energy but that’s what I like about Hands On. It’s that it does get people taking it personally. Witness the huge numbers writing in to find out more and who then act upon the information.

Well in this week’s programme there’s quite literally plenty more food for thought. We highlight several stories about projects that safeguard the environment, do the poor a power of good and have the potential for replication here and overseas, so keep watching to see what you can do.

NARRATOR
Orissa, Eastern India. The fertile land and temperate climate should be good news for farmers, yet these forested hills are home to some of the world’s poorest communities. Most rely on their orchards and livestock to survive and while harvest surplus could be a source of income, these small scale producers have little bargaining power in the market. Now a new scheme is helping them to compete.

Niraj Subrat, International Development Enterprise, India
There was an area which was very difficult, traders, the processors were not coming to this area.

People from this area were not going out, a lot of problem of terrain, transportation, communication and all these things were there. Still we wanted to prove that when in this kind of situation a post-harvest project can take place and these people can be linked to the markets and they can earn better profit.

NARRATOR
Although India has a vast rail network and good trunk roads, many tribal people live in remote areas where getting to market is difficult.

Malati Raita
I have just walked 14 kilometres.

I brought 60 kilos of turmeric. I can get higher prices from elsewhere but it’s too far to travel.

NARRATOR
Having travelled long distances to the markets, most sellers don’t want to carry goods all the way home so they’re forced to sell at whatever price they’re offered.

International Development Enterprises, IDE India, supported by the UK Department for International Development, DFID has found that processing produce is the best way for farmers to make a profit. It adds value and because it’s processed, the goods can be sold further afield.

Niraj Subrat
We organised and managed the skilled development of tribal women particularly, because they were involved in the collection and cultivation and sale of this produce.
We scan technology around us and find out what is the most suitable for these tribal women to comprehend, adopt and use so these women get trained in value addition.

**NARRATOR**
The women pool their harvest and work together in cooperatives which sell the finished products to benefit all the members.

**Jamaki Nayak**
I have some land which we use for shifting cultivation with cashews, pineapples and oranges.

Before we were selling to the distant market and not really getting a good price.

Since joining this project and learning about the technology, I'm now earning better money.

**NARRATOR**
Once these horticultural products have been processed and packaged, they still need a reliable market. IDE has not only sought out individual shop owners. It's also co-ordinated with OMFED, the biggest dairy cooperative in the world. OMFED will sell the produce in its shops nationwide.

Some of the women now earn five times more and their income is no longer dictated by the seasons.

**Jamaki Nayak**
With my new income I was able to repay my 1,000 rupee loan to the group and am now able to spend money on my children’s education, health, medicines and for household use.

**NARRATOR**
Nigeria, West Africa. Small farmers here have grown cassava as a staple food for hundreds of years and Nigeria is now the world’s biggest producer, but in Africa industrial processing of cassava is still limited. Now industry’s exploring the many possibilities of this versatile crop and demand is soaring.

At the same time disease-resistant varieties are boosting productivity, giving farmers a chance to generate serious income.

Cassava came to Africa from South America. It’s a tough crop ideally suited to African conditions.

**Dr Alfred Dixon, International Institute of Tropical Agriculture**
Drought, flood, in disaster like cereal crops will always go down but cassava will always stay there. That’s why we say cassava is Africa’s food insurance.

**NARRATOR**
But in the past viruses like cassava mosaic disease have decimated crops.

**Dr Alfred Dixon**
Because it affects the leaves, it automatically affects the photosynthetic apparatus of the plant and once the photosynthesis is affected you can have yield loss in the roots.
NARRATOR
The International Institute of Tropical Agriculture, IITA, based in Nigeria stays one step ahead of the mutating virus by breeding disease-resistant varieties popular with farmers.

Farmer
The IITA variety has given me joy from within.

NARRATOR
Traditionally cassava is powdered and heated with water to make fufu, or mashed sieved and fried to make gari.

Dr Alfred Dixon
Gari is very good.

NARRATOR
By processing in rural areas using methods developed at IITA, value is added to the crop bringing much needed cash to remote villages like Ayima Yong in Cross Border State.

Prisca Agbor, Odika One, Cassava Women’s Association
It has helped us to alleviate our poverty level from this cassava something we use it in feeding or children and then also we the level of women here has been promoted.

NARRATOR
This simple machine helps women sieve the mashed cassava before it’s dry fried on a wood fired hot plate to mass-produce gari.

Cassava flour is replacing wheat in bread, cakes and pastry. The Nigerian government recently decreed all bread must be made with 10% cassava. This saves 40 million dollars a year in wheat imports, makes bread cheaper and boosts demand for cassava.

Jok Ekeledo, Kaka Confectionery
It becomes cheaper for us to get the bread. Initially they talked about ten percent, five percent. We went as far as twenty, thirty percent of the flour.

NARRATOR
Cassava can also be refined to make starch for the pharmaceutical, food and textile industries. This starch mill can process 300 tonnes of cassava a day and with the raw material in short supply, large scale cassava farming is taking over.

Cassava is planted by simply cutting a length of the stem and putting it in the ground.

Paul Okpul is a state assembly member who’s returning to the land to grow cassava as an alternative source of income.

Hon Paul Okpul, Delta State House of Assembly
This is Niger delta region that has so much oil but so much poverty in contrast.

We just got blinded by this black gold.
I have personally believed that we can give the oil companies a run for their money because the oil companies don’t provide sustainable wealth. But this is sustainable, this is part of us. The traditional farmers are beginning to have some value for their effort and we are going to also make it become a more profitable venture.

NARRATOR
Mekong Delta, Vietnam. Memorials of the seven and a half year war with the US are everywhere, but a more recent conflict between the countries has left the local fish farmers floundering.

The United States imposed higher tariffs on the Vietnamese catfish imports in 2003 to protect its own six hundred million dollar catfish industry but not to be defeated, Vietnam’s catfish farmers are biting back.

The heart of fresh water catfish country is Vietnam’s Mekong Delta. This farmer was raising two popular varieties, Tra and Bassa at the height of the trade row.

He’s riding out the storm by moving into the more lucrative organic market.

Tran Huu Hau
Breeding organically is more risky. Investment is higher and we can’t give the fish any medicines or antibiotics.

So we have to leave them to die if they get sick for example.

But the price for organically farmed catfish is more stable and I can profit between two and two and a half thousand dong per kilo.

NARRATOR
Tying bunches of lemon grass around the pond is a traditional way to keep fish healthy. Oxygenation and limiting stocks also helps control infection.

Three years ago this farmer made a good living growing catfish in a pond but lost everything. He survived by diversifying and producing other species in cages beneath his family home.

De Le Xuan Sinh, Can Tho University, Vietnam
Now the catfish farmer in the Mekong Delta tried to follow the way that can be, bring something better for them but also better for consumer.

Pham Minh Vi
I farmed catfish for eight years but because of lower profit I’m stocking other species like silver barb but if the price of Bassa rises I would farm it again. It depends on market conditions.

Pham Thi Hong
Of course we as breeders have been effected as it’s prompted people to turn to alternative species such as red snapper, common carp or tilapia, so my family has had to change our stocking breeds too.
NARRATOR
Not putting all their fish in one basket in these difficult times has proved a prudent move by the fish farmers of the Mekong. Anton Immink is visiting from the Aquaculture Programme of the UK Department for International Development, which has been assessing the economic role of catfish and other aquatic resources in Vietnam.

Anton Immink, DFID, Aquaculture Programme
Diversification into catfish farming has allowed people who were going out of business to stay in business and continue to make a profit.

NARRATOR
Those still in the catfish business are exporting more to the European Union and with avian flu scaring consumers away from poultry, business is good.

Dr Le Xuan Sinh
Due to the concern about the bird flu, there will be very good potential for aquatic products including catfish produced in Vietnam in the near future.

NARRATOR
While neither side can declare victory in this skirmish, efforts by Mekong farmers to open up alternative markets should bring an upturn in their fortunes.

Budapest, Hungary. Since the end of communism the city has embraced the free market economy and investment has poured in. Capitalism has brought benefits for many but not all. One problem is homelessness, but now business profits are being used to help those less fortunate get back on their feet.

Dr Arpad Gajdatsy, Crisis Hospital
The Communist time what they wanted was for everyone to have a job, so everyone was working, everyone had some income and a place where they could stay, even though they were really poor.

When Communism ended, the people had no work and they would have to leave because the companies were closed and they couldn’t support themselves.

NARRATOR
While the switched-off free market economy has helped some, others have found themselves left out in the cold.

Nigel Thorpe, Vodafone Hungary Foundation
The state withdraws from a lot of areas where it was active in the Communist period. Where it was normal to spend money, they don’t do it any more or they’re spending much less.

NARRATOR
State-owned housing has fallen into disrepair and many people aren’t even eligible. Behind the stunning architecture that attracts tourists, Budapest has around 25,000 homeless.

The homeless depend on temporary accommodation like the Crisis Hospital but not having a permanent address often affects their chance of getting work.
Zoltan
Maybe employers should take homeless people who wish to work into more consideration.

Priority should be given to homeless people who would like a job. They would then earn money this way, wouldn’t have to rely on benefits.

NARRATOR
Now a scheme from the Dear Tores Foundation supported by the Vodafone Hungary Foundation is breaking the vicious spiral and helping those who’ve dropped out get back into society.

Nigel Thorpe
The old state-run system didn’t really allow people to become, to become too desperate. It was a big cushion and it offered quite easy income for quite a lot of people. That’s gone, that’s gone, it’s gone for ever but the real issue is getting them back into housing and into work and into a social situation which they can sustain for a long, a long period.

NARRATOR
Giza and Csilla Horvaths used to live at the Crisis Hospital. They even got married there, but thanks to the Dear Tores programme they secured work as cleaners and can now afford to pay rent for their own apartment.

Csilla Horvath
It’s peaceful here, we are more peaceful and more free. There are no restrictions. We can come and go freely so from this point of view it’s better. But on the other hand we have to pay rent and we are poor.

NARRATOR
It’s not perfect. It’s a small apartment and it’s a struggle to pay the rent but here at least the Horvaths have a home.

The Himalayan kingdom of Nepal has long been a magnet for foreigners and the income generated by visitors is vital to the country’s economy.

Most Nepalese living in rural areas see little of the income as it’s concentrated in the capital city but by updating their traditional skills many villagers are now bringing foreign cash and development to the countryside.

Traditional handicrafts are allowing centuries old techniques that as Tara has found out, turning these skills into cash isn’t easy as a lack of consistent quality leads to few sales.

Tara Maya Suru Hagar
I can send the children to school. It’d be easier of sales were good.

We should make then attractive right from the beginning. The sisters in our village have not made them properly. If they were more attractive, buyers would want them at first sight and they would sell well.
NARRATOR
For others the challenge has been finding a market for their products. Now TRPAP, the Tourism for Rural Poverty Alleviation Programme managed by the UNDP and supported by DFID, is providing training for producers and marketing the products to tourists.

Ramhari Dev Kota, TRPAP
The rural tourism programme is designed to give local people the maximum benefit out of tourism.

NARRATOR
The programme is having a real impact.

Lal Bahadur Biki
I’m making bamboo handicrafts now. We use locally available raw materials, bamboo and nigola bamboo and so on.

Eighty percent of the materials used to make bamboo handicrafts can be bought from the local market.

NARRATOR
Lumbeini in the southern plains is another poor rural district but as the birthplace of the Buddha it has a rich heritage which attracts pilgrims and tourists offering more opportunities.

Shiva Shanker Kunil
We already make money from this and nowadays when we have spare time after our domestic work, we make statues.

We can make some money, we take the statues to TRPAP and to the Lumbini flower shop. There are other places as well and gradually we are building a market.

NARRATOR
The finished products are destined to be shipped all over the world as souvenirs.

Radjner Poudel
The impact of rural tourism in Nepal is quite appreciable and it should be promoted to reduce poverty.

NARRATOR
Cambodia’s capital Phnom Penh lies on the Mekong. Not just a beautiful scene, the river provides transport and income for the city’s one million population.

Now another nearby stretch of water polluted with the city’s sewage is offering unlikely economic opportunities for the three and a half thousand families living around its shore.

Most people living on the lake are informal settlers who’ve fled the city in the 1970s during the brutal reign of Pol Pot.

They earn a living cultivating aquatic vegetables, in particular water spinach or Morning Glory as it’s commonly known, a favourite in all Asian cities on the Mekong.
The nutrients that feed this vibrant green harvest are not from artificial fertilisers but from human waste present in the water.

Phnom Penh is one of four Asian cities being studied by the Papussa project.

**Albert M Salamanka, University of Durham, UK**
The objective of the project basically is to understand aquatic productions systems around cities in major, in South East Asia.

For as long as Beung Cheung EK Lake remains to be a sewage lake and the supply of sewage from the cities unhindered, then Morning Glory production can thrive.

**NARRATOR**
The scale of Phnom Penh’s Morning Glory production can be estimated using the institute’s satellite imagery.

**Man**
This is the main area of Morning Glory production and is approximately 200 hectares.

**NARRATOR**
Surveys conducted by Papussa show average household income from Morning Glory is between ten and twenty dollars a day.

**Keth Sophy**
I'm involved in Morning Glory production every day from seven in the morning until four in the evening.

I have five children and I earn enough to support my family.

**NARRATOR**
While the rewards can sustain a family, harvesting the vegetable rain or shine has its drawbacks.

**Yim Phat**
The skin on my hands and feet gets irritated by the waste water.

I eat it both fresh and cooked but it tastes best when fresh. I've never suffered from diarrhoea or stomach problems, even when I eat it raw.

**Dr Chan Vicheth**
In case they want to eat it raw they should wash it and clean it properly.

The most common problem is you know eczema, the dermatitis. Different workers got different problem like construction worker they also suffer from allergic contact dermatitis, not just the different substance which is cause of the problem.

**NARRATOR**
But Morning Glory is high in nutrients and its taste and versatility make it popular.
Sok Daream, Royal University of Agriculture, Phnom Penh
The customer know the soft of the Morning Glory but they still buy it to cook noodle put in a soup. Some customer use it for something like fermented sauce.

Srun Lim Song, Inland Fisheries Research & Development Institute
The aquatic plant production, its very mutual benefit allows income to the nature to the lake because this one help to consume the phosphorous and nitrogen from the sewage system.

Albert Salamanka
People tend to react with ……..to all things that has something to do with waste or waste water. I think it has to be weighed with whatever opportunities available for a household. Well then maybe a skin problem is liveable than having nothing to eat.