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	HANS RICHTER, 1929				all information on http://thoughtsandtalks.so-on.be	

ON ECO-TECHNOLOGY AND HANDS-ON WORKSHOPS

My interest in the women Solar Engineers and the Mahila Samiti groups for women's empowerment in Rajasthan comes out of a personal involvement that links art, women empowerment, ecology, technology and social engagement.

When I learned about the Barefoot College project, I was struck by certain similarities between two practices that seem worlds apart at first sight: my own artistic work environment and the practical trainings/workshops in Rajasthan.

Brussels

Okno is an artist-run organization for media, art and technology. Its focus lies on collective technological research projects. Current projects use sustainable energies like solar/photovoltaic and wind energy to weave city communities, mesh networks and public space art projects. Our decentralized DIY workshops are a platform for sharing knowledge to come to poignant results.

Tilonia, Rajasthan

ment of the participating women.

Barefoot College in India uses a bottom up format to train solar engineers. The learning environment is open and decentralized.

Knowledge is passed on in the collective from the bottom up using a hands-on approach.

The village community selects which women will be sent on a 6 months solar engineer training, and every village family contributes a share in the remuneration of the engineers to set up and maintain the village solar system. When I went to Barefoot College for the first time, I discovered that the solar workshops are only a very small

part in a much bigger story concerning the empower-

Now it's my turn to teach what I learned and it feels great. We've put up 5 solar systems in my village, and if it needs maintenance or reparations I take care of it. LEELA DEVI

In the beginning, I learned slowly and gradually, in a practical way. And with the help of Aruna Roy we learned about banking transactions and taking care of our own accounts. She explained how important the 'Right to Information' Act was, and made us understand where we stand in life. From healthcare to general information – she helped us a lot. MANGI DEVI

In the trainings there's a focus on women. Men might easily run off with their new knowledge and start their own business in the city somewhere, whereas the women give it back to the community and first and for all to their family. They invest in a better education for their children. ANNEMIE MAES

ANNEMIE MAES ARTISTIC RESEARCHER

I started with Politics of Change when I was in India visiting the Barefoot project, but it's about so much more: the main focus is on communities that take positive change into their own hands. On people who decide to get up and act, who organize themselves spontaneously, from the bottom up, and who form networks to that change.

Barefoot College

Barefoot College set out 35 years ago in the district of Tilonia in Rajasthan, one of the poorest states in India. A group of middle-class city intellectuals came to Tilonia convinced that there was only one solution to eradicate the endemic poverty and powerlessness of 70% of the population (the barefoot): putting lost skills and economic self-sufficiency back into their hands.

The Barefoot College campus stands as a model for the regeneration of land and people. The functional buildings and houses, constructed out of local low-cost materials, have all running water and are powered by solar energy. They are designed and built by the 'barefoot architect', an illiterate farmer from Tilonia, and by local masons.

Like Mahatma Gandhi, Barefooters believe power resides with the poor. Poor rural people have dignity but no opportunities. Barefoot College works with this human potential to help the villagers rediscover their traditional skills and to learn some new ones, such as the technology of solar energy. Who are the people and what are the initiatives to bring about transformation today?

What are the sources of their vision and inspiration and what are their methods?

How are they going to shape the future?



When we think of transformation we have to consider both the changes in social structures and power relations, and on the other hand the alterations in consciousness, values, capabilities, choices and lives of individuals. Will solutions be found within or beyond the existing social order? Will changes come from the elites at the top or will they be bottom up? RAKESH KAPOOR

Women solar engineers

The solar engineer project has demonstrated that bringing electricity to remote villages through solar energy could also be women's responsibility. Most of the solar engineers come from traditional and conservative societies and they have struggled to fight for their identity. That's why this new confidence in the potential of women is so important.

Initially, the women participated in the training to fulfill a basic need: getting a job and improving the financial position of the family. The training was first regarded with suspicion, but as the results became visible, it earned the trust of rural communities. Especially the are groundbreaking: the women gain self-respect and have secured a stronger position in the family structures. **These rural women have become symbols of a new partnership within the community and are often propagate and elevate women's status**. Aruna Roy, a founding member of the Barefoot College, wanted these rural women (and men) to have more than financial self-sufficiency: they needed political power too. With a collective of social and political activists they started MKSS: 'The Association of Workers and Peasants', a non-party people's association that strives for a fair and equal society. Their ambition is to give the rural poor access to government information, implicating them in the democratic process.

Through a network of grassroots organizations MKSS advocates with refreshing enthusiasm for the position of rural people on a social and political level. It uses the Mahila Samiti (women's groups) to inform women about local politics and economics and to improve their situation actively through education, knowledge sharing and self-government.

The Right to Information Law expresses the people's desire to be part of a democratic framework where their views are taken into consideration in the decision-making process. The goal is to make the governing elite understand that the common man now wants his or her share in governance for a truly participatory democracy.

Eco-feminism

Eco-feminists want to redefine how societies look at productivity and activity of both women and nature. The 'materialist eco-feminists' focus more on the actual economical and political conditions of women in a natural environment than on the mystical link with nature.

Vandana Shiva is an active eco-feminist. With 'Diverse Women for Diversity', she wants to launch a global women's campaign on biodiversity and cultural diversity, echoing women's voices from the local and grassroots' level to global fora and international negotiations.

Women's ecology movements showed how the dominant models of economic development and scientific progress were based on a construction of production and knowledge that excluded women and Third World communities as producers of economic value and as generators of intellectual value. Economic globalization deepens this exclusion and threatens the survival and integrity of local communities.

The use of technologies such as solar energy empowers women to stay off 'the grid', a statement that symbolizes their independence from dominant structures.

Appropriate Technology

Appropriate Technology is tailor-made for a specific community with attention for the environmental, cultural, social and economic characteristics of that community. Appropriate Technology typically requires fewer resources, is easier to maintain, has a lower overall cost and a smaller impact on the environment than high technology. It usually prefers laborintensive solutions over capital-intensive ones.

The Barefoot Women's approach to technology is as much about social inclusion as it is about unhampered knowledge sharing. Starting from scratch, the homo ludens discovers new tools, tapping into the creative potential of technology.

Because the workshops operate with simple, appropriate technology, focusing on practical understanding of solar systems, even illiterate people feel comfortable with the appropriation of these new technologies. - This bottom-up approach also guarantees a truly distributed access to energy.

In the West we generally take a corporate approach to the renewable energy sector. The result is a number of top-down models for 'green ener gy' distribution - a landscape where a lonely ecologist quickly gets lost. The high technology used in the West is off-putting for non-professional engineers, which makes it hard to dive into the heart of the matter: understanding how the stuff works, and making it work yourself!

That's why organizing workshops about this technology is so important. Even if it's only a handful of crazy artists experimenting on their rooftops with solar panels and home-made wind turbines: we fools have the task to enthuse a small but interested public with the 'artworks' we make. One day, off the grid is where the action will be!

Working with solar energy instead of being connected to the grid is a deliberate social choice. Solar energy is available to anybody and nobody can take a copyright on it. BHAGWAT NANDAN

The power of social networks and communication technologies is able to magnify the impact of such local efforts, linking up and joining hands with similar initiatives in other parts of the world. RAKESH KAPOOR

> We try to spread awareness about women-related subjects and make people think about them very sincerely. If possible we would like to take a step ahead and form women's groups in as many villages as possible. We help the women think about village politics and even help them to get into the local council. RAMI DEVI

The world-renowned scientist and environmental- ern 'education' systems that ist Vandana Shiva started focus almost exclusively on Navdanya, a participatory research initiative to provide direction and support to en- from the praxis of lived life. vironmental activism. Nav- Overcoming this separation danya is actively involved in is one of the key challenges the rejuvenation of indige- for the creation of a better nous knowledge and culture. and transformed future. It creates awareness on the RAKESH KAPOOR hazards of genetic engineering and defends people's knowledge from biopiracy and food rights in the face of globalization.

Modern western society has completely disassociated thinking doing and hoin thanks to the nature of modthe individual learner and have senarated the learner

Politics of Change wants to position itself as a platform for collaborations and partnerships. Collaborative knowledge building and transmission is at the core of the project. The research focuses on employing and deriving today's and future's technologies in a new and surprising way. The connection between art and science, between analog and digital media is explored continuously. The results of the research processes are made public through films, workshops, artistic interventions and presentations.

ON METHODS AND NETWORKS THOUGHTS AND TALKS ON **POLITICS OF CHANGE**

Collaborations arise between groups that are aware of the actions and solutions needed to build a more balanced society, contributing to sustainable changes to social and ecological structures. People with a critical view on the use of technology in our wasteful consumer society, people open to knowledge sharing.

A workshop can be a valuable tool for engaging in collective artistic research. The different angles and inputs reveal the full complexity of the issues in discussions. Each participant comes up with tools that can be used in a collaborative way. Discussing practices became the focal point of conversation and examination, a self-reflection on how we work and how we can or want to work. Because with each shift in practice, new questions arise

Let's focus on north/south/east/west collaborations. What can we learn from innovative approaches in non-Western societies? What creative interventions can be transformational? Which processes enable individuals and communities to live in a more sustainable way?

If we consider knowledge production as a collaborative process, we also have to consider how a research process can become a true partnership with full advantages for all the partners involved.

The Brussels' PoC-workshop discussed gender and activism in the cultural field, examining the technical tools we use to document what we do and to spread the word.

The participants in this open dialogue came from different fields: writers, filmmakers, anthropologists, journalists, visual artists, economists and researchers.

Participatory tools for action:

discussion platforms, workshops, artistic and social networks, alternative economic formats / micro finance, women's groups, artistic databases, lectures and presentations, mailing lists, interventions in public, social and artistic space.

Collaborative creation and open-source technology could become tools to transform ourselves and our society into more participatory projects. Cultural diversity is a valuable resource for alternative models and innovative approaches.

Keywords for action and interaction:

Networks, bottom up, horizontally organized, hybrid field, fluid boundaries, open ends, organized in a disorganized way, flexible, feminism, identity, grid, sustainability, women, independence, empowerment.

Seeing a room full of women behind computers is sometimes more effective to change perceptions than a discussion about the topic. MARTHE VAN DESSEL

 I think the challenge for women today is to define ourselves as multiple belongers. We need to find a hybrid field to work and live, with fluid boundaries and open ends.

ANA VALDES

After working as an anthropologist, I started writing for a newspaper. In the newspaper I have 400 000 readers everyday, as and anthropologist only 2000 people were listening to me. It was like a megaphone. ANA VALDES

> Today Scheherazade would tell different stories: stories about rape, about war, about Diaspora, about exile. This is my attempt, to connect stories of women from different parts of the world. ANA VALDÉS

l collect stories. When we have a story, we can choose whether we want to transmit it one on one, or one on a thousand, one on a million. ANA VALDES

ANA VALDÉS, **ACTIVIST AND WRITER**

OF INSPIRATION ? was a turning point in my life and career. We didn't have anything to read or write so all communication was oral. That's why we started telling each other stories. After my four years in prison, I wrote everything down. Going through all these memories again and putting them to paper was a tough but interesting process. I believe in self-governance and a decentralized society. We don't need to **be represented.** The civil society needs to be strengthened and the exist-

what are your sources In my twenties, I was jailed and tortured for joining a guerilla group. This

ing structures renegotiated. The mega-society we live in today, with all the ecological problems, is unsustainable. I'm committed to sustainability, also politically. And how can you achieve sustainability when the structures are old-fashioned?

I don't call myself a feminist. I prefer to use Rosi Braidotti's concept of fragmented identities. Every minute, each different environment provokes different identities.

DO YOU CONNECT TECHNOLOGY I'm a feminist in the moment I raise awareness on feminist subjects, but AND ACTIVISM? another moment I'm something else. I'm performing an identity, depending on the discussion or the group I interact with. The first time I was in Gaza, people didn't need me as a woman, a journalist or a writer, but as a foreigner to protect them. Palestinians asked me to sleep in their house at the border because they were afraid of soldier's raids. The only thing they needed was my foreign passport, my identity as a foreigner. They didn't care about the fact that I was a woman or an activist.

> We must be flexible enough to adapt ourselves to the need of our environment.

l've been a political prisoner. Sadly enough, that's an experience shared by many all over the world. l discovered jail as a common platform. Before you would say 'You look familiar, do you come here often?' Now you would say 'Did we go to the same jail?' ANA VALDÉS

I think the challenge for women today is to define ourselves as multiple belongers. We need to find a hybrid field to work and live, with fluid boundaries and open ends. ANA VALDÉS

always wanted to learn and become someone. I was rather old when I joined the solar department. They never forced me to follow their training but they gave good reasons why one should study and get an education. Now I feel very confident in this new job. I am excellent in working with electronics and I don't want to go back to my previous job. l even started going to neighboring villages and explain them the concepts of solar

lighting. I help villagers to repair their systems

NAJMA NIGAM

BHAGWAT NANDAN, **HEAD OF THE SOLAR** DEPARTMENT

We wanted to set up a rural technological centre. A campus built only on green technologies.

DESCRIBE YOUR RELATION We started to develop the solar section in 1988, funded with the royalties from the book The City TO YOUR COMMUNITY of Joy. We were told about the advantages of photovoltaic solar panels to bring electricity to remote villages. We wanted to set up an open concept that everybody understood, so we started with trainings. The purpose was to inform all the rural people and tell them how we could up grade our standards of living together. I started to learn about solar systems: understanding photovoltaic panels, the batteries, produc-

tion and maintenance. That time I was teaching science and math in the night schools, and the project gave me the opportunity to learn about new techniques. I got more and more interested in the matter. Today I have trained more than 400 Barefoot women solar engineers.

The government has been supportive early on and together we have organized a lot of projects. It's very important for the government that we have sub-centers in 8 states and that we develop this initiative via these smaller centers all over India. The focus is on rural areas.

Working with solar energy instead of being connected to the grid is a deliberate social choice. Solar energy is available to anybody and nobody can take a copyright on it.

The regular companies can reach cities and towns but they have problems to supply the remote areas with electricity. Together we agreed that Barefoot College was better positioned to work on these difficult areas.

We go to the villages and with the village committee we agree in a contract that they should select 2 women and send them to Barefoot for a full training. Once they go back to their village they will in turn explain the people of the village about solar energy. Another contractual agree ment is that every family has to pay a small monthly sum for hire and maintenance of their systems.

The solar systems are restricted to the basic needs: reading, writing, some household tasks When a village is already connected to the regular grid, people are not prone to make a 20.000 rupees investment in a photovoltaic system. So we work only in areas where there is no electric itv at all.

Concerning the ecological factor, people are well aware that they need to be careful with nature. The government used to subsidize a lot but now they can't afford it anymore. People are waiting again to be subsidized before they make the investment.

When we started with the trainings we discovered that women were really interested. An explanation could be that women work with electricity in their daily life, at home, in the kitchen. So why not involve more women in the solar department, we thought, and teach them about electricity, about resistors and AC/DC streams.

We have to support the women that follow the trainings because they come here for 6 months and they leave their family for a while. We have to take good care of them. They come all the way from Africa and South America.

The trainings have an empowering effect on the women. A lot of DO YOU HAVE EXPERIENCE these women are under men's domination. They keep the women WITH ALTERNATIVE FORMS in basic positions to control them. Bringing them here makes them self-confident. That's one of the reasons to start this project. Barefoot College wants to give a platform to these women, to discover their strengths and give them confidence

OF KNOWLEDGE PRODUC-

In the beginning, they might feel not very comfortable but once back home they really get more respect and they become more independent. We want to work with people that can make a change in the world. And these women can.

Bunker Roy, our Director, visits all the candidate villages interested in the trainings, nationally as well as internationally. After a screening, we decide collectively. If you see what a difference a solar system can make for a community, you know it's worth the time put in these trainings.

One day, I would love to bring all solar trainees from different villages all over the world together to share their experiences and stories.

Despite the growing contribution of renewables to the national power kit, about 21% of the villages in India remain non-connected and not all households have power in the electrified villages. Various NGOs have shown that decentralized. off-grid power generation through biomass-based gasifiers and solar photovoltaics offers a long-term solution to rural electrification. RAKESH KAPOOR



These rural women don't want to call themselves feminist, they don't want anything to do with a bureaucratic feminist organization. They just want to take their fate into their own hands, and they are fed up with being under the yoke of men. That's why they got together and organized themselves. ANNEMIE MAES

focused.



The diversity for change includes a large number of dispersed visionary individuals who are evolving new and innovative approaches and methods in their own unique ways, initiating and catalyzing change even if these initiatives are often small or locally

NAJMA NIGAM, SOLAR LIGHTING ENGINEER

From the villagers I heard about a project providing work to illiterate women. When I first came here I was scared because I never went to school. But I needed more money to raise my children.

I followed the complete solar training. First I had to make sockets, then circuits for the lanterns and later chargers. Now I'm able to make and repair solar lanterns and fix regulators. They asked me to stay as I was doing very well and the work is increasing day by day.

I always wanted to learn and become someone. I was rather old when I joined the solar department. They never forced me to follow their training but they gave good reasons why one should study and get an education. Now I feel very confident in this new job. I am excellent in working with electronics and I don't want to go back to my previous job.

I even started going to neighboring villages and explain them the concepts of solar lighting. I help villagers to repair their systems.

The people of my village are respecting me more than before. I installed systems in the temples and in the mosque of the village. For private houses the investment is too expensive, people are waiting for the government to give subsidies before they start to install systems in their houses.

When I arrived here I was not aware of solar energy but now I'm really interested in it. I understand the importance of the natural resources, and what the benefits of working with alternative energies are. If solar energy would not be used we would get into problems with nature. Spreading awareness about these ecological issues is certainly an important part of our training. Rajasthan is a very dry area and we have to do what we can to help nature.

LIPIKA BANSAL, RESEARCHER EDUCATION AND TECHNOLOGY

l am Lipika Bansal. I was born, raised and am currently based in Amsterdam and I am of Indian origin.

I studied International Communications and Science and Technology Studies, where I looked at the influence of technology on society.

I work with Waag Society, a media lab that develops technology for social innovation within the domains of education, culture, healthcare, sustainability and society. We also organize seminars and workshops. I do background research for these domains and develop small projects mainly related to developing countries.



DO YOU HAVE EXPERIENCE WITH ALTERNATIVE FORMS OF KNOWLEDGE PRODUCTION? The FabLab in Pabel, near Pune, started four years ago. It's part of the Vigyan Ashram, a training school for agricultural and technology students.

> The Fablab is entirely geared towards utilizing the limitations in the social community to their best advantage. Students come from all over India, and when they return to their villages they can establish their own business and live self-reliantly. They learn how to build houses that can withstand cyclones and earthquakes, they use biogas to cook and use a bicycle to pump water.

> The students of the FabLab design sustainable products that the villagers need due to the lack of electricity, other sources of aid and technology. For example, the lab has produced a water boiler alarm to conserve gas. When the water is 55°C, it is hot enough to take a shower. Also solar panels are used to charge batteries, so if the power fails, everyone can switch to LED lamps and lanterns. The lab offers a platform to the local community to develop their ideas.







LEELA DEVI, **SOLAR LIGHTING ENGINEER**

My and my husband's parents arranged our marriage long before my husband started his further studies. The education-level difference between us was never a point, but now I can discuss problems with my husband. He's very supportive. If there is something I don't understand, he explains me.

WHAT IS YOUR POSITION IN YOUR FAMILY ?

Every woman can stitch but I wanted to do something completely different. And solar energy is very different! In the beginning I never thought I would never be able to understand it, but now I feel very comfortable and I like doing it.

I'm a student and a teacher and a teacher and a student.

Now it's my turn to teach what I learned and it feels great. I teach the Bhutanese girls in sign language and we work with the color codes for the resistors and capacitors. That's the easiest way to start. But sometimes they even don't understand the names of the colors. Than we have to point to the clothes we are wearing to explain the Hindi or English word, and they learn us the Bhutanese word in return.

Up until now I didn't have the opportunity to travel abroad to my students' countries, but of course I'm very ihterested in their homeland and their habits and once I would like to go and see.

technology they use 'ap- propriate technology', it's not high tech. The point is to nake use of the energy that is widely and cheaply available - the sun. The purpose is not to train the women as highly skilled engineers. After all, it's a training program for illiterate people. The purpose is to teach practical skills that can be implemented in the community. ANNEMIE MAES

Barefoot College calls the

We've put up 5 solar systems in my village, and if it needs maintenance or reparations I take care of it. -I would love to learn about the solar cookers too, but as teacher and trainer for the solar workshops I have a lot of work. We have many students, so there is no time for me to follow an extra training for the moment. But if they need help at the solar cooker section, and if I have the time, I go and give them a hand.

can say that I'm educated now. This is the biggest change for me compared to before.

Once the women get a paid job they become independent and that's the argument Barefoot uses to convince women to come here. The number of women increased a lot the past 5 years and the women ratio will even grow if there are more jobs available. The college staff motivates them and explains that men and women are equal and both of them can do these jobs.

SHYAMA JOGI, **SOLAR COOKER ENGINEER**

I decided to come to Barefoot because of the jobs. I started the training at Barefoot in the solar photovoltaic section. There were also people from Afghanistan and Ethiopia and even Korea to follow the training. In the beginning I was reticent about my participation as I thought welding and construction was nothing for me, I considered it too difficult for a girl. But they convinced me that women can what men can do.

TO WHICH MEDIA DO YOU HAVE ACCESS

women it's about getting a job. It's about getting self-esteem, respect, about finances and security. But it could be any job, as a teacher or a nurse... it's not especially about solar energy. So we might not share immediately a passion for green technology. But we do share an experience: what it is to be a woman, to be independent and to take life into your own hands. ANNEMIE MAES

Very early on I discovered that for these rural Barefoot College didn't promise me an absolute security. They only offered me the possibility to learn. After that it's up to yourself. If you are good, you can get a paid job and even go for more trainings. The monthly fee offers a greater financial freedom for my family. There was also the possibility to live on the campus and to raise my child inside an interesting community. A lot of different people live and work here, and there is no discrimination of caste or sex. Men and women work on an equal level, and I have much more freedom than I would have in the village. also learn a lot from all foreigners I meet here.

I'm very happy I'm doing this, it makes me feel special.

From time to time I follow a workshop to improve the cooker-technology, to adapt it in a better way to our proper needs. We even started our independent solar cooker company for production.

One day, resources like gas, petrol and kerosene will run out but sunlight never will. The initial investment is rather expensive, but afterwards one can make profit. We don't waste natural resources as wood. Solar cookers also improve our lives in a healthier way, with less lung diseases as asthma, less time-consuming daily activities as making a fire.

I would like to continue learning about these alternative possibilities that makes life easier. I'm not bound to go somewhere else, as I'm perfectly happy here in the community. And the campus offers the possibilities to learn more as regularly new people are visiting and new ideas are tested out. This specific mix of people offers a fertile cultural basis for my kid to grow up and to assure him a prosperous future.

What more do I need?

VASU SRINIVASAN, **FACILITATOR AT BAREFOOT COLLEGE**

Barefoot College has changed a lot compared to 36 years ago when we started. What is applicable in Tilonia - its overall vision - can be replicated anywhere else. In this country and abroad, but it needs a change of mindsets.

We are organized in a disorganized way. We have small committees for different topics. We have the housing committee, the water committee, the salary committee. Salaries can $g\phi$ up and down, depending on your performance. You have also the possibility to evaluate yourself. Poverty, teamwork, gender are all issues coming into play for evaluation. Points are added up, but nobody can get more than 100 U\$. The organization is set up as a community so obviously there will always be somebody to run it. The options are open.

We have a strong bond with the trainees from other countries, they are a real part of the Barefoot Family. After the training they go back home, in Afghanistan, in Ethiopial in Bhutan, and register themselves as associations. They function on the same principles as the women's groups. The Barefoot Solar Engineers can become a global organization, as we have the global rainwater harvesting collective. This approach is part of the training. It's a sustainable process.

In the future, we will work more and more with Africa. The Ministry of External Affairs of India recognized our trainings. Now these African leaders come here to check out our program on solar and educational trainings.

The selection procedure of the women is very important for us, and is -if possibledone by their own community. Abroad we work with local NGOs. An NGO with a good, transparent track record is important, and good is very relative. We can only watch that their credibility towards the poorest of the poor is ok, and that they have respect for gender, because that's very important for continuing this work. It's these local NGOs that take over and continue our work in the women's native countries. Many of these come here to visit multiple times, we have meetings and discussions on how to go on afterwards. And we visit them over there also.

A lot of the countries we worked with are conflict areas. And if the solar model can work there, it can work anywhere in the world. Afghanistan, Ethiopia, Sierra Leone. Hopefully our footprints will grow in different parts of the world, of course with the support from different organizations. The bottom line really is: if this approach can be replicable in different eco-zones, hilly, mountainous, tribal, coastal, plains, semiarid, then you can say that the model works. And that can change the mindset of the policy makers, the planners, the economists.

HOW MUCH DO YOU EARN A MONTH ? HOW DO YOU DEAL WITH OWNERSHIP ?

The training is just the beginning, and after that everything depends on the initiatives of the women. Some go faster than others. For example in Andhra Pradesh, in Southern India, we have a Barefoot Solar Engineers association initiated by 4 illiterate women that followed our training. They went back and started a technology park at the National Institute of Rural Development. Now the Ministry of Welfare has given them the responsibility for the Solar Electrification of 20 villages. The women implemented it all themselves.

A lot of politicians like India. Because India is an 'arty' democracy. You can do any thing here. You can shout and you can always get away with it.

diately the ladies closed down the whole festival and went to court. The

officials asked us why we had had come there. After a lot of questioning

When the judge finally took a decision he decided it was not a rape. We

women realized that the officials supported the boy and that they wouldn't

Then we came together and decided to fight it our own way. We talked it

out, got hold of the boy and made him sit on the donkey. In front of the

whole village we blackened his face and put a string of shoes around his

neck to show that this boy is not a good person. That's our way to fight

The court structure is a hierarchic one. Only the judge takes the final deci-

sion. In our group all members collaborate on the same level. We discuss

the issue in depth. We look at it from all possible angles. We talk to friends

and family from as well the victim as the offender, we search for proofs and

The government can't do anything against our actions. We don't consider

it as taking the law in our hands. In India we have the freedom of speech

and we can freely talk about what is disturbing us. We punish only the

people who actually deserve it. We don't fight men, we fight crime. That's

A court cannot prevent us from acting because together we are a huge

number of women and they can't keep our mouths shut!

do anything to help us.

we decide on the verdict together.

iniustice.

our motto.

RAMI DEVI

Their appropriate, distributed and DIY approach towards technology is worth the attention of a larger public. The Barefoot project can be seen as exemplary and making it public can sharpen awareness about the use of technology and the conservation of ecosystems in our worldwide society.

WHAT ARE YOUR MOST PERSONAL PREJUDICES ? Last month a 13 year old girl was roughly raped during a festival. Imme- WHAT IS THE MOST ACTUAL PROBLEM IN YOUR SURROUNDINGS ?



development programs for their village. On the main campus, saplings are carefully watered through a 'drip' system, designed with local materials. Lengths of hose are run from tree to tree and a small devise attached to the hose permits drops of water to be released. Once a tree's roots extend deeply enough, it is removed from the drip system.

RAMI DEVI, **WOMEN'S GROUP** COORDINATOR

to which media do My name is Rami Devi and I'm about 35. I don't profess a specific religion. Praying YOU HAVE ACCESS? all day wouldn't bring any food to my stomach. I don't believe in blind fate anymore. One can't grab god and force him to put food in your mouth. So for me there is first work and than god.

I changed a lot over the past few years. Earlier I would not have been able to sit here on this bed, facing the camera. I would have been sitting on the floor with my dupatta over my face. But today I can sit like this, facing you and speaking my mind out freelv.

I work for the Barefoot College with the women's group in of Tiloniya. I am also the field coordinator for the surrounding villages. I work with the village women and I try to share my thoughts with them about violence on women. Our women's group is completely independent. We take our own decisions and fight injustice.

In the field center there is a weekly meeting. A second meeting on higher level is held monthly at Barefoot College. Two women from every village group gather there in a larger group. Around 120 women discuss important problems during these monthly meetings. The individual domestic problems are resolved on village level. Important general problems are discussed and resolved during the Barefoot meeting. These problems are related to labor, water and energy distribution or employment.

We try to spread awareness about women-related subjects and make people think about them very sincerely. If possible we would like to take a step ahead and form women's groups in as many villages as possible. We help the women think about village politics and even help them to get into the local council.

Compared to some years ago women became very brave now. Ten years ago they still kept their mouth shut about private issues but now they come running for us to help if there's a problem. They are not scared to talk anymore.

At the very beginning of the groups our men protested against our actions because in a lot of these villages you still have the purdah-system and women are not supposed to leave the house. The men thought we were unnecessarily creating all those issues but when they understood our main motto they agreed to our actions. They realized we are only fighting injustice and not men per definition. Now they are even proud of us and they understand that we women can get things done where the government lacks in action.



anything to do with a bureaucratic feminist organization. They just want to take their fate into their own hands, and they are fed up with being under the yoke of men. That's why they got together and organized themselves. ANNEMIE MAES

These rural women don't want to call

themselves feminist, they don't want

I understand that the women in these groups don't want to receive funding from a central organization. If you have a project you are passionate about, would you want to he hureaucratized by some central organization? They would dominate the whole process, from the selection to the training to the multiplication. If you centralize it in a bureau in Delhi, how is it going to multiply among the people? ANA VALDÉS

[Vasu Srinivasan continued]

Lots of people in the 21st century are influenced by Gandhi, the ideas on reconciliation and non-violence are important now for people. The Barefoot approach is to try some of the simple ideas of Gandhi. An example: you don't need to work with high technology. Decentralize and demystify photovoltaic technology and give it in the hands of the illiterate women. It's a reconciliation where all these things can come together.

Decentralization Equality **Collective decision-making** Self-reliance

That way you find out that the ideas of Gandhi are so simple. Wherever there's violence, there's no other answer than reconciliation. Of course conflict is different for the people who are in the middle of it. And when you can do things in the worst scenarios as in these conflict countries, you can do it anvwhere.

Sometimes we have conflicts with the energy sector and then you realize that you are successful. Of course we have the enthusiasm and approval of some experts but they still work for the conventional grid. Real decentralization will never be part of the thinking of this country in the next century! Let's be clear about that.

Rajasthan, as a very dry area, will be touched seriously by the climate change. Therefore it's very important that all of us are aware to work with clean and green energy. It's the small and distributed approach that can make a change on world level.

But our first problem is water. Clean drinking water. That's the most important thing to take care of, other things can come later. For these women water is ecology. To walk some kilometers to have water that is not polluted makes sense. They have their own view on ecology.

Students of the Barefoot College emerge as potential partners for the development of their communities. They learn skills to support themselves and to facilitate sustainable community development. The integrated, non-formal education process demonstrates the link that non-formal education can have with sustainability. ANNEMIE MAES

> Barefoot engineers have constructed Geodesic domes in Raiasthan and other Indian states. The domes are an alternative to using wood for the construction of homes and meeting centers. ANNEMIE MAES

LORE VANDEWALLE, **RESEARCHER IN DEVELOPMENT ECONOMICS**

I started to rethink the whole idea of microfinance. It's not about the finance, the main issue is that those women want to sit together. It's the reason to leave their house. They can say to their husband: "if you want money tomorrow, you'll have to let me ao to the aroup" This way they can get out of the house.

LORE VANDEWALL

I'm part of an academic research group investigating micro-finance in India. We want to find out what kind of women join micro-loan groups, who sticks to it and who drops out. For instance, is it typically people from the lower castes that quit the groups?

The first year and a half the women save money. Most loans in that phase are small amounts to pay for things like a doctor. A little more is spent on family occasions like a wedding or a funeral. After a while, the women can take on a larger loan. The money is used as an investment: to set up a little shop or to buy a motorbike.

Women provide fast and cheap access to loans with this system, which gives them a better position in the family and the community. In their new position it's easier for them to address problems in the village, like infrastructure problems or the need for a well, and take them to the 'panchayat'. This gains them a lot of respect, credibility and trust in the community. But there are downsides to the micro-loan system too. Sometimes tensions arise in the family because the unemployed husband might get frustrated at his wife's new independence. There are women that leave the group in such cases

DO YOU ENCOUNTER GENDER- Another problem can be the loan itself: when the investment fails, paving it SPECIFIC PROBLEMS ? back becomes a burden. I know about a village where a disease killed most of the goats bought with micro-loan money. Since they couldn't breed and sell the animals anymore they had a hard time paying back the loan. On the other hand, the system gives them opportunities they wouldn't have otherwise.

> I love the criterion of 'objectivity'. I can't just use my findings to prove my own prejudices or perspective but have to take my data to their logical conclusion. Artists on the other hand can be more creative. Not that they have to take a stance, necessarily. They can just let the material speak for itself and trigger a reaction with the public.

> Maybe it's better to open up the field of discussion than to say "This is how it is" That's what's so interesting about art: there is no need for 'proofs' and 'results' for the project to be a success

> > Anthropology is an interesting tool, but to limit it to academics and universities and present it at conferences doesn't turn me on that much. I find it difficult to label it and to put it into a drawer, saying 'this is art, this is anthropology I was through talking about victimhood, women and power, rape... but I wanted to talk with women about happy things, cooking and their kids and their husband and their perfume and their seduction and their sexuality. Why not? KLARA CHASTAN

IS THERE AN OBSTACLE WHICH KEEPS YOU FROM PURSUING YOUR INTERESTS ?

IS YOUR WORK LOCATION SPECIFIC ?

In our research we want to show that it's important to work with local women, to train them to repair and maintain the pieces themselves This makes the project truly sustainable. We want to investigate the impact of technological trainings on lives of these women LORE VANDEWALLE

MAGAN KAWAR, SOLAR LIGHTING ENGINEER

I belong to the Rajput-caste. The Rajput kings and queens were very rich, but there are also poor Rajputs.

My husband learned about Barefoot College through a village politician and he came here to have a look. He really liked the College approach and decided to stay. I followed my husband to Barefoot.

I got a lot of reactions from my village people because I wanted to get out of the purdah-system. Rajput woman are supposed to stay their whole life behind the purdah-curtain and are not allowed to see or meet other people.

I work on the campus for 18 years now. I went myself to Bunker Roy, the director, and told him I wanted to work between people, even though I come from the Rajput purdah-system. When I came here I was not educated and I thought I never would be able to learn about solar lighting. It was my husband who pushed me to go on with it. It took a lot of time and it was very hard work but I'm glad I took the step. I see myself as an example. If I can get out of the purdah-system, then others can too.

DOES TECHNOLOGY AFFECT YOUR In the beginning, everybody thought it was a fool's thing to work with illiterate SOCIAL ENVIRONMENT? people. But now many people from different countries come to Barefoot for the 6-month's training we give them. I never thought it would have such an impact. Nobody else is concerned about the destiny of poor rural women, but Barefoot encourages them to follow trainings and to learn a job. Part of their success is that they make women independent.

> I would like to go from village to village and explain the women how important it is to get an education. I would like to motivate these women to start working. I don't want to do what everybody is doing. I want to be different and therefore I'm interested in technology, because I think learning about technology can help me a step forward to make my life easier and more fulfilling.

WHAT ARE YOUR AMBITIONS FOR THE FUTURE ?

KLARA GAIA CHASTAN, **ANTHROPOLOGIST**

As an anthropologist I did fieldwork in Sudan around sexual violence. I asked these women if they had some incense I could burn in my house. One of the women told me she made her ϕ wn, even in the camp. Burning incense is a very female habit, closely linked to family life. It's a ritual, a form of protection, of cleansing, something very intimate.

In the refugee camp she showed me an iron cupboard full of incense pots: powders, scented creams and oils... She asked me to sit down, take off my shoes and put some musk on my hands. Her smile because she could share this moment spoke volumes.

From that day on the ice was broken. We did a radio program with several women sharing these intimate moments, preparing the ground for more painful topics.

Objective observation is difficult when you are in a complex environment. I did fieldwork in Mali for 3 years, living in the area I researched. This had a major impact on my work and my personal life. At the same time it gave the people the opportunity to understand their personal situation in a different way. Somebody who came from the outside, spoke their language and was interested in their situation gave value to their environment.

In the past I often worked as a journalist because I felt the academic world is too self-contained. And I find it wonderful to spend time with artists and observe how they pull a thread from something I would make difficult and complex, in a form that I would never think about.



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KRISTIN PREVALLET, WRITER AND POET

I am in India, in a small village, where an ashram has been built for women and girls to learn about their right to be educated. As with all the houses in the village, the ashram is made out of clay. Slogans are painted onto the walls to help boost the revolutionary spirit of the place.

"Lack of knowledge is the cause of fear" "You can kill the body but never the spirit" "Work is worship"

The ashram also serves as ground zero for a group of poor farmers attempting to seize land from the wealthy, large landowners who live in the cities. The farmers have successfully seized 20,000 acres. The man in charge of this struggle was educated in Deli, and his philosophy of land ownership is derived not from Mark, but rather from the true democracy established by tribal systems-particularly the Iroquois constitution, which historically is the document on which America's constitution is based.

"Lack of knowledge is the cause of fear"

The man's wife is a native Indian – a tribal – who doesn't speak Hindi. Everyday she picks rice from the field and grinds it into a fine powder to make chapatis, which she sprinkles with gram powder made from ginger, garlic, curhin, and oil. The gram powder is their main source of protein. There is one white ox that is shared by all of the villagers, and this ox plows the land, irrigates the fields, and haus building supplies from hut to hut.

"You can kill the body but never the spirit"

"Work is worship"

From his small hut in the northern state of Bihar, with his small plot of land plowed by a single ox, this man is aware of the creeping forces of industrialization. He sees the foreign owned factories that loom far on the horizon, and he hears the radio broadcasts of how India is being marketed to western investors. He detests Marxism as much as he detests Capitalism.

From his tiny ashram in the middle of the least developed state in India, he sees how the city and its influences are gradually infecting the village.

Although the village grows all of its own food and builds its houses from the clay of the land, it cannot support its own economy. The men have to work as rickshaw drivers in the cities, bringing their money, and their outside influences, inside the village system. He believes the village is an organized system, and the city is chaos.

He sees the chaos that is entering the village, and he has fought it with torches, machetes, rifles, and knives. He sees that the village system, the vast organism of many small farms all living and working communally to survive, is being swallowed by a bigger system that would remove the people's rights to live and work off of their own plot of land.

He sees the network of lights and cables as it gradually overtakes the landscape of his village. His neighbors to the left are sure that there is no place on earth that is farther away than Pakistan.

SARJÚ BHANWAR, HANDICRAFT DESIGNER

I was 13 when my parents arranged my marriage. Now (some) girls can choose themselves whom to marry. I have 5 daughters. They all studied and completed their MAs. Some of them did further studies in Computer Science.

My husbands dream was to see his daughters happy. Most of his time he has spent outside of India. He traveled a lot to England, Germany, He wanted his daughters to come up for themselves and be as free as he was. In villages it's often not accepted that girls leave the house, but in our house it was very different. My husband was very supportive and he really wanted his daughters to become great individuals.

As for me, a lot of women are very happy that they are part of the Barefoot Project. They gained a lot of self-confidence and are mentally a lot stronger now than before.

They have their own bank account and can spend their money as they like. They save for the future of their children. We don't select according to qualifications. We take on illiterate women too and focus especially on the very poor. Working with sewing machines could improve the production, but it would also mean a lot of women would lose their jobs. We like to sit together and do the work manually, from weaving to woodblock printing to stitching and cutting designs. Everybody has some part of the job to do.

We follow Gandhi's philosophy in the way that he promoted the khadi industries. The Barefoot staff attaches a lot of importance to Gandhi's principles.

The Barefoot model especially focuses on the rural areas. We would like to have such institutions also on district or state-level. But I think it's not immediately applicable on communities in the cities. People over there have a lot of jobs and already have a better security. But in small rural villages people can only live a better life now due to models as the Barefoot one. So it s really important that villagers spread the word about the benefits of it.

DO YOU NEED SPECIFIC EQUIPMENT TO EXECUTE YOUR JOB

SHELBATRA JASHARI, FILMMAKER

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The gun in this case is

a camera. Through a

camera a woman gets

empowered because

she can share what-

ever comes up to her

mind to the world and

history, immediately

or when the time is

right for it.

To me, politics of change have to do with being consistent in word and deed, being loyal to who you are, what you stand for.

Somehow I have the feeling that through discussions during this year of the rat (being 2008) I have lost a lot of my clear-headedness, and a lot of my patience with the world around me.

It is also the year during which the province where I was born in, namely Kosova, declared itself independent, and when in the multi-cultural city Brussels I was made to silence myself, because so to speak I should sense shame, and somehow felt that I have nothing to say about this matter (during 2008), namely independence or empowerment of a country or about the European Union and it's trendy cultural politics.

I'm running through time and thoughts here, while I quote one of my favourite filmmakers on the matter, 'sculpting through time' using several different questions in order to empower women is of importance.

Not everyone is born empowered, some of us simply get born, and have a personal trajectory through empowerment.

Some of us need men to get empowered, some of us need women, some of us need friends, some of us need no one but their own mental space, some of us need visions, some of us need poetry

And some of us humans need films and theory and references and historical sources and www.

Godard: histoires du cinéma : a girl with a gun

Traditional representation of women can be a way of empowering women as well. The woman alone, a dancer in a solo, the stand-alone complexed woman in the manga 'ghost in the shell', the amazone in south-american mythology and in greek mythology ... the 'virgiina' in Balkan tradition, it's all women standing alone, empowering themselves without the help of a man, but by being a woman.

Acceptance and carriage of children and womanhood, as a stand alone, can also be empowering.

'The day I became a woman' by Marziyeh Makhfmalbaf ends with a symbolic old lady getting driven through different shops, buying all a woman needs for her wedding list and finally the image thus becomes a still life of her being carried away to the sea. Let's not silence any woman, I'd say, all women can be empowered in their own way, through their own trajectory.

Politics of Change : dialectic methodology

The gun in this case is a camera.

Through a camera a woman gets empowered because she can share whatever comes up to her mind to the world and history, immediately or when the time is right for it.

I am a young woman of a generation where activism and feminism are often far to be searched for

Very often while talking to western-european girls of my age and generation, on the question concerning feminism, most of them don't feel any connection to the termi nølogy.

Sometimes I don't either. Every -ism has started to freak me out lately, to be honest, and every box just makes me feel utterly ill. Formats are made to sell ideologies, and I am not sure I am the right person to participate in such a delirium as formatting.

I must admit that to me politics of change means questioning yourself and the world around you.

Questioning until you are so empty that only you yourself remain, and the remnants of vourself and your personal life and experience empower you out of displacement. All I can do is reflect, and this without quoting a million theoreticians or philosophers on my choices, although if I would have the time, I probably would quote. And I would take the time to read anyone and anything I can get my hands on.

Listening to, recording, photographing, transcribing women and men around you can be a formula towards empowering yourself.

I guess in a way this is also why I chose to program Mania Akbari's film 'Twenty fingers', where throughout 7 sketches in different vehicles, a woman and man in contemporary Iran discuss their relationship.'Talk to him' could be a possible fiction

Maybe this is a fiction... Maybe I am a fiction, or a science-fiction

Everything starts with education. At present I am responsible for the educational section of the night schools. Some children have to help on the land or take care of the cattle during the daytime. Till now, night school students haven't been taught as thoroughly as day school students. We want to give them a similar educa-

We have about 10 people in the committee who go and see the parents to convince them that education is a must and if they can't afford to send their kids to day schools they should at least send them to night schools Girls should get themselves educated too, but I'm sure that the upcoming generation will not hesitate any more to go to school. We teach them how to read and write, but also how to vote and why democracy is so important, so that they know what decisions to take later. MANGI DEVI

In the villages there still is a lot of discrimination against lower castes or against women. As I'm from a lower cast, the other villagers don't allow me to eat with them. They even don't let me sit next to them. They are really jealous because I educated myself and I became an independent lady. I wonder where all this fuzz about high and low castes comes from. After all we are all the same human beings.

The difference between the village and the college is enormous. At Barefoot there is no difference between men and women. With 5 women we have our own cooperative for the production and sales of the solar cookers that are bought by other communities. They were installed for use in community kitchens in Sikkim and Assan, and also in Raiasthan.

Max Pinckers – Annemie Maes – Olivier Meunier – Vasu Srinivasan – Bunker Roy – Rami Devi – Bhagwat Nandan – Billy Bultheel – Sara S'Jegers – Lipika Bansal – Vandana Shiva – Helena de Groot – Mira Shiva – Monica Solé – Shelbatra Jashari – Sandra Estébanez – Shaina Anand – Marthe Van Dessel – Wendy Van Wynsberghe - Jono Van Belle -Radha Kenis – Mangi Devi – Yogesh Kulkarni - Mira Kalbag -Dhananjay Gadre – Kristin Prevallet - Sanjay Bhangar - Sebastian Lütgert – Jan Gerber – Ram Niwas – Ram Karan – Shehenaj Bano – Shyama Jogi – Bata Bhurji – Sarjú Bhanwar – Norti Devi – Kamla Devi – Sita Devi – Negi – Laxmi Kandikhal – Lore Vandewalle – Ana Valdés – Klara Chastan - Goedele Verleysen -Leela Devi – Magan Kanwar – Nathalie Fougeras – Najma

> Nigam – Laxman \$ingh – Aditi Shinde – Sanjeev Shankar – Aruna Roy – dr. Skbhattacharya - Gopal Gat - Mava Gobhurdhun – raghav fm – Ratan Devi – Magrite Akesh – Loda Oketcho – Peruthi Sangalari – Maria Izajirizah – Catherine Niratsejmana – Rose Akumu – Anna Auma – Camba Seni – Maria Lucas – Martha Lilla – Jeanette Mosabyeyo – Patricia Malekeer – Kani Sani – Francine Sani – Abeba Ebiyo – Abrehet Akulu – Lemelem Solomon – Nemburice – Lucia Seria – Maria Tchialles – Bhanwar Lal – Bartaku – Nandu Kumari – Malevika – Joeri Bultheel – Tiago – Mr. & Mrs. Singh – Billie Boets – Kamal – Urvashi Puri – Hiren Panchal – Nikhil Kuralkar – Sarah Kesenne – Mr. Deshmukh – Sampara Siddarth – Vidya Anand – Jhony Joseph – Jasna

BarefootCollege.org – Navdanya.org – Fablab Pabel, Vagyan Ashram – Okno.be – Cuisine Interne, Constant vzw – RéseauCitoyen.be – Pad.ma, Chitrakarkhana.net – Fablab Delhi, Netaji Subhas Institute of Technology – Waag Society – Institute of Education, Pune – Vooruit.be – Fo.am – Happy New Ears – Gynaika. be – Pixelache – Arti-India – MKSSindia.org – apostrof.wordpress.com – so-on.be – with the support of the Flemish authorities

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