Naturland News International

Information for members and interested parties









International Year of Soils

Soil, a finite resource

COCOCA in BurundiNaturland advises coffee cooperatives

Organic intensificationMeeting of the World Advisory Board

Soil atlas 2015
Facts and Figures





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EDITORIAL



The Untited Nations declared 2015 the Year of Soils – Naturland "stewards of the soil" are active worldwide



Dear members and partners of Naturland the world over,

As early as 1996, Naturland focussed its attention on the protection of the soil as a topic in its series of Gräfelfing Papers. The soil is one of the most important fundaments of our existence on this planet. This was again emphasised in the soil symposium, "Source of life or worthless dirt?" which was held five years ago in Munich. In the presentation of his book, "Dirt: The Erosion of Civilisations", Dr. David R. Montgomery, geologist, writer and professor at the University of Washington, issued an urgent warning about the danger of soil erosion throughout the world. "The loss of this important fundament of our existence will be a great problem for mankind."

Everywhere in the world where there are Naturland farmers, they care for their soils, fortify the humus layer and thereby encourage the fertility of the soil. They attend training courses to enable them to incorporate the latest findings of soil research in their work. As models for all organic farmers who treat their soils in a sustainable manner, Naturland farmers and processors stand out as "stewards of the soil".

The campaign "Save our Soils" which was also sponsored by Naturland, culminated in an international conference under the heading "Celebrating Soil! Celebrating Life!" in late June, 2015. At this conference, which was held on the initiative of Volkert Engelmans, eosta (see interview on page 17 & 18), the participants drafted the "Amsterdam Declaration" which appealed for fertile soil to be preserved for future generations, too. This appeal, addressed to world rulers, was accompanied by a passionate plea made by a 20-year-old, Nyakallo Makgoba, and backed by Joszi Smeets of the Youth Food Movement: "Please take care of our planet. Cultivate it, pass it on responsibly, so we may do the same! Please look after our soil!"

For decades now, Naturland farmers have been calling attention to how urgent the matter of soil protection is. This year it is high time to take action, the year that was declared the International Year of Soils by the UN. Especially now, the time has come to create and improve the general political conditions required to encourage the adoption of organic agriculture throughout the world.



Steffen Reese



Chief Arvol Looking Horse, the Sioux spiritual leader in his speech at the conference Celebrating Soil! Celebrating Life!



Healthy soils and fair trade are fundamental to a sustainable future: Naturland at the International Green Week in Berlin



The rotating boulder disc was a super challenge for young and old

Healthy soils are the key to guaranteeing world food security. They make an indispensable contribution to climate protection and the preservation of biodiversity. Where organic agriculture is concerned, soil conservation has always been the focus of attention. Nevertheless, every year some six million hectares of fertile arable land are lost on a global scale. This is why the UNO declared 2015 the "International Year of Soils". At the International Green Week which took place between 16th and 25th January in Berlin, Naturland informed visitors about all the good work healthy soils can do and how organic farmers are protecting this essential natural resource. "Organic – more space for life" was this year's slogan in the Organic Pavilion, where Naturland participated with a campaign area and a joint booth with a total of eight Naturland partners.

Naturland gave visitors to the trade fair an opportunity to learn more about the topic in a playful way. A game of "Soil Memory" demonstrated useful facts for various ages, whilst a bouldering wall gave them an opportunity to test their agility by climbing through various soil layers. In addition an earthworm show case illustrated the great value which intact soil fauna contributes to loosening the structure of the soil. Naturland co-operated with a project community called "Faszinosum Boden" to make the topic of soil a vivid experience. Visiting school classes were able to take soil samples under expert guidance and to determine the quality of the soils with simple experiments.

Organic and fair trade in the north and the south

The second important topic of our trade fair exhibition was the supplementary certification according to the Naturland Fair standards which was introduced in 2010. It is a logical development following on from the social standards which are binding on all Naturland growers and processors. This is because the fair treatment of people, animals and nature can only be considered to exist if farmers can live off the proceeds of their work. This applies both to those living in the north as it does to those in the south.

Besides such standard fair trade products as coffee, chocolate and bananas, other products were presented at the IGW, including Italian pasta, bread, eggs and liver sausage – all of them both organic and fair trade, from both the north and the south.



Naturland flies its flag in the "Wir haben es satt" procession

Naturland made the contribution which organic agriculture makes world-wide towards food security and climate protection come to life for the general public interested in the presentation on our stage in the Organics Pavilion.

Berlin - political hub

The IGW offers, furthermore, an opportunity for an exchange of political opinions. Naturland welcomed many politicians to its booth, including the German minister of agriculture, Christian Schmidt, and the EU commissioner for agriculture, Phil Hogan.

This year, too, Naturland joined in the procession "Wir haben es satt" which took place at the same time as the IGW, a movement which demands that a stop be put to agriculture and the production of foodstuffs on an industrial scale and calls for the support of family farming.



The various types of soil sediment at different rates in water

Naturland at the BioFach in Nuremberg

"Naturland – mover and shaker. Locally and globally": this was the slogan of the Naturland exhibition from 11th – 14th February at the BioFach 2015 in Nuremberg. This slogan exemplifies the role Naturland plays as a driving force for innovation in the organic industry. From the certification of the first organic coffee co-operative to the development of organic aquaculture and making the connection between organic and fair trade in the north and the south: again and again Naturland acts as a ground-breaking pioneer and in this way also encourages others to adopt changes.

At the joint Naturland booth in pavilion 6, close to 60 German and international partners and guests demonstrated how

products of 33 Naturland partner enterprises bear the Naturland Fair logo.

Making their first appearance at the joint booth at the BioFach were two Naturland Fair partners, who at the same time are representative examples of the diversity of Naturland Fair. Canaan Fair Trade (olive oil, fine foods) guarantees over 1,700 smallholders a stable income in Palestine. The company "soziale Milchwirtschaft" belonging to the Lobetaler Bio-Molkerei dairy, as the second example, is part of the Hoffnungstaler Werkstätten, which is also certified to the Naturland Fair standards, and provides job opportunities to people with disabilities in Brandenburg.

Naturland farm in Brittany, of which the organic algae from the Atlantic is sold by a Naturland fine food retailer, among others.

Naturland was also represented with a series of contributions to the congress programme and on the stages at the joint Naturland booth. Among other activities, Manfred Fürst (Naturland International) presented the principles of organic beekeeping at the panel discussion "Organic Beekeeping – Its Standards and Regulations". Friedrun Sachs had a discussion about the benefits derived from fair trade together with Thomas Hoyer, general manager of The Fair Trade Cooperative dwp eG, Christoph Harrach, the founder of Karma Konsum and Andrea Bischof of the



Naturland congratulates GEPA on its 40th anniversary and expresses its thanks for 28 years of fruitful co-operation

Naturland continues to motivate the organic industry. In addition to these there were a further 100 Naturland partners represented in other pavilions at the trade fair. A total of 15 of the partners at the joint booth were also certified to the Naturland Fair standards. The successful development of Naturland Fair is an example of how Naturland remains on the move.

Naturland Fair – an important pillar of Naturland

More organic can only be acquired by paying farmers a fair price. By introducing certification to the Naturland Fair standards, organic and fair trade in the north and the south were united under one logo for the first time in 2010. Today 40% of the international Naturland farmers and as many as 60% of their German colleagues supply their products wholly or partly within fair trade structures. Over 650

Besides this, two of the original Naturland partners celebrated anniversaries at the BioFach: the fair trade company GEPA has stood for fair trade for 40 years, 28 of which have been in close co-operation with Naturland. For 35 years now, one of the co-founders of Naturland, Karl Egger, has pursued organic agriculture at his estate La Selva, in Tuscany which produces organic fine foods.

Naturland in the special interest area Naturland Fish and Seafood and its contributions to the congress

The diversity of rigorously organic products from Naturland aquaculture and sustainable fishery (Naturland Wildfish) on which specialist shops can draw today was at the focus of the newly established special interest area Naturland Fish and Seafood. Here information was also provided about the concrete projects behind these products. One example is a

Swiss development organisation HELVE-TAS Swiss Intercooperation. Hans Holland, a Naturland farmer from the German state of Baden-Wuerttemberg, and Salomo Barend, general manager of the Naturland rooibos tea co-operative, Wuppertal, in South Africa presented their view and



In the Naturland Fair panel discussion, a closer look was taken at the benefits of fair trade





At the Naturland booth in pavilion 6, close to 60 partners demonstrated how Naturland is motivating the organic industry

experiences of fair trade. Great interest was shown in the presentation made by the general manager of Naturland, Steffen Reese, during the panel discussion "Bio 3.0 - the way to more organic in Germany, Europe and the world". Together with Bioland, Bio Suisse, BioAustria and FiBL, Naturland is working on future prospects for organic agriculture.

"Meet and greet" at the Naturland booth party

Another highlight was again the traditional

booth party, "Blue Night", on Thursday evening. Frauke Weissang of Terra Bio in Italy, in her capacity as a member of the Naturland World Advisory Board, invited all the international members to a drink beforehand. The visitors took this opportunity to exchange their news about current developments in organic agriculture. The party itself was a worthy setting to congratulate GEPA on its 40th anniversary and to express thanks for 28 years of valuable co-operation. Members, partners and friends of Naturland enjoyed each

and food for this event. Our guests rewarded this generosity with their donations which this year are to go to a smallholders' project in Cameroon to provide advisory services in the field of organic cocoa cultivation. The Southwest Region of Cameroon has so far been an area of conventional cocoa cultivation. KONAF-COOP, a co-operative with a good 350 members, attributes great importance to conversion to organic agriculture. How-

other's company to live music and with a

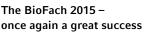
renewing old ones.

delicious buffet, making new contacts and

We should like here to reiterate our thanks

to the partners who provided the drinks

ever, further training courses are required (ref. Naturland News International II_2014). This donation is intended to provide smallholders in remote villages with training courses in conversion to organic and with assistance from a local advisor.



Many Naturland partners, guests, visitors and interested parties visited the Naturland booth in the four days of the trade fair. Farmers from Germany and abroad, government officials and politicians all paid us visits to hold discussions, make new contacts and renew old ones. And they all left with the clear message that Naturland is an important player in the organic industry. Naturland, mover and shaker – locally and globally.



The traditional booth party, "Blue Night", provided an opportunity for an exchange of professional and private news

Naturland pays tribute to long-standing international partners

At this year's BioFach in Nuremberg, the Naturland Association paid tribute to 15 international members for their long-standing commitment. These enduring memberships are a symbol of trust, sustained mutual interest and appreciation and show that organic agriculture is not only ecologically but also economically sustainable.

25 years ago the Samabeong Tea Estate in Darjeeling was converted to organic agriculture. This signalled the commencement of organic tea cultivation in India. This year, two further tea gardens man-

aged by Tea Promoters India (TPI) will have been with Naturland for 20 years and four more for 15 years. Also with the association for 15 years is the Small Organic Farmers' Association (SOFA), which cultivates tea and spices in Sri Lanka, and the coffee producers Santa Cruz y Las Nubes and Nueva Esperanza.

Ten years ago Kourellas S.A. in Greece, Carrier Gérard in France, BioUganda in Uganda, the Ambootia Organic Tea Estates Mullootar and Monteviot in Darjeeling, India and Sociedad de Productores Orgánicos de la Selva Lacandona in Mexico converted to organic agriculture under the Naturland logo. The Greek farmers produce various types of cheese from sheep's and goats' milk, Carrier Gérard produces fruit juices, BioUganda sells both fresh and dried pineapples, bananas, jackfruit, mangos and papayas, and the Mexican growers produce coffee.

Naturland offers its warmest congratulations to its long-standing members and thanks them for their valuable co-operation.



Kourellas S.A. in Greece converted to organic with Naturland ten years ago



A total of seven tea gardens belonging to TPI are celebrating their anniversary with Naturland this year



SOFA, a smallholders' co-operative in Sri Lanka, has been a member of Naturland for the past 15 years

Naturland at trade fairs

The Naturland year kicks off with a series of trade fairs. Besides the largest food fair, the International Green Week and the Bio-Fach, which is considered the place to be for all those involved in the organic movement, Naturland demonstrates the wide range of the topics it covers in a number of other important trade fairs.

Organic and fair trade, the two central pillars of a method of farming practice sustainable for both mankind and nature, were the focus of Naturland's exhibition at the trade fairs Faire Welten from 20th to 22nd March in Mainz, Fair Handeln from 9th to 12th April in Stuttgart, at the Milano Fair City from 28th to 31st May in Milan and the Fairhandelsmesse Bayern from 10th to 11th July in Augsburg. What was good to see in every case was the great continued interest in organic agriculture and fair trade and also that the Naturland Fair logo has been well received by the market.

Progress made with organic fish, too

A growing demand for organic production was also evident at the trade fair Boston Seafood in Boston, from 15th to 17th March. Whilst references to sustainability, either general or with the specific indications MSC or ASC, were to be found in previous years, this year, for the first time, the presence of the label ORGANIC was increasingly visible. This year, however, organic production was also accorded a prominent position in the talks. This development was not quite so evident at the European Seafood Exposition (ESE) in Brussels from 21st to 23rd April. Naturland presented the topics of organic aquaculture and wild

fish from sustainable fishery with certification to the Naturland standards in a contribution to the ESE conference programme.



Eveline Lemke, Minister for Economic Affairs of the German state of the Rhineland Palatinate, at the Naturland stand at the "Faire Welten"



Naturland's assembly of delegates passes amendments to the standards

At their meeting on 21st May, 2015, Naturland's assembly of delegates agreed to revisions in the Naturland standards in various spheres. Amendments were made in the areas of social responsibility, production, processing, beekeeping, aquaculture and Naturland Fair. The new standards 05/2015 can be found under the following links:



www.naturland.de/de/naturland/richtlinien.html www.naturland.de/en/naturland/naturland-standards.html www.naturland.de/es/naturland/normas.html

The World Advisory Board discusses the global challenges encountered on the organic market

Once a year the Naturland World Advisory Board meets just prior to the Naturland assembly of delegates in Gräfelfing. This year the participants discussed the challenges confronting and the opportunities offering themselves to organic agriculture in various regions of the world with members of the Naturland team.

Reports from South America were made by Silvia Arispe, Edward Mulondo reported from Africa, Dr. Mathew Hubby from India, Peter Niedermeier from South-East Asia and Frauke Weissang from Europe. They also analysed the situations met on the German, the European and respective organic markets of their home countries. The main connecting theme running through all the reports was always organic intensification.

Organic intensification

Organic intensification is a form of land and resource management which makes intelligent use of available natural resources

such as water, soil and light. Giving due consideration to specific local circumstances, the system achieves great total productivity without resorting to the use of synthetic additives. An important aspect of this concept is that no residues are created which cannot be used within the system.

Dr. Mathew Hubby, general manager of Peermade Development Society – PDS presented a vertical farming as a model of organic intensification. In such cases, for example, nutmeg trees are grown underneath coconut palms, and under them, in turn, banana plants flourish. Underneath these, close to the ground, vegetables and pineapple are grown and pepper plants climb up the coconut palms. This community of species guarantees great biodiversity and makes the system less vulnerable to detrimental influences. For the farmers this diversity means added security in cases of harvest failures and price fluctuations for different crops. Other examples were discussed, as well as the possibility of adapting them to other systems.



The World Advisory Board advises Naturland on questions concerning organic agriculture globally

The World Advisory Board offers Naturland its advice

An important item on the agenda was also a discussion of the topics to be dealt with at the Naturland assembly of delegates on 21st May. Frauke Weissang, Dr. Mathew Hubby and Edward Mulondo were attending as the international delegates and Silvia Arispe and Peter Niedermeier participated in their capacity as members of the World Advisory Board.

The World Advisory Board advises Naturland on matters concerning the promotion of organic agriculture and also with respect to certification to fair trade and social standards throughout the world. Silvia Arispe from Peru offers advisory services to the smallholders' co-operative COCLA and assists Rainforest Trading, an export business, in marketing coffee and cocoa. Edward Mulondo, the founder and general manager of BioUganda, a project in Uganda, exports dried fruits such as pineapple, mangos and papayas. Dr. Mathew Hubby is the general manager of PDS Organic Spices. PDS produces spices and tea to Naturland Fair standards. Besides contributing reports from South-East Asia, Peter Niedermeier, the general manager from Binca Seafoods, which operate the Nguyen Thi Dung farm in Vietnam where organic pangasius are produced, represents issues concerning international aquaculture farms. Frauke Weissang runs an agricultural business in the Marches in Italy which is a member of the Terra Bio co-operative. Unfortunately Alexandru Deac from Romania was prevented from attending this time. He became a successor to the post of international delegate and thus a member of the World Advisory Board.



The World Advisory Board: Dr. Mathew Hubby, Frauke Weissang, Edward Mulondo, Peter Niedermeier and Silvia Arispe with Steffen Reese, the general manager of Naturland (from left to right)

He handles Sandyfruits in the Carpathian Mountains, which harvest wild berries and nuts.

The next meeting of the World Advisory Board is next spring. In the meantime information is exchanged by telephone and email.

Naturland in Burundi COCOCA – nucleus of a national coffee project?

In the African state of Burundi, the knowledge of sustainable coffee cultivation has almost disappeared. CO-COCA, a fair trade coffee co-operative, is receiving support from a coalition between the Fair Trade Cooperative dwp eG,the German state of Baden-Wuerttemberg and Naturland to help the cooperative to convert to organic and fair trade.

Burundi is one of the smallest but most heavily populated African states. It borders on Ruanda, Tanzania and the Democratic Republic of the Congo, and shares one of the world's largest lakes, Lake Tanganyika, with Tanzania. Burundi is one of the 10 poorest countries in the world. Shoes, be they only flip-flops, are considered luxury goods in rural areas. Because of its high population density and the lack of cultivable land, Burundi's forested area is suffering the highest percentage of depletion in the world. The civil war, which raged for 12 years, has also left its mark.



Making a start: Tito Bazimba grows beans, coffee, bananas and shade trees in mixed cultivation on his field

The landscape is hilly and relatively treeless and during rainy season the people of Burundi are often confronted with landslides, losing their houses, roads and, of course, their valuable soil.

COCOCA – working together to establish fair cooperations

Burundi has a high plateau running from north to south, two rainy seasons and moderate temperatures of between 14°C and 25°C. All these requirements are ideal for the cultivation of coffee. This is why very many coffee farmers and coffee co-operatives can be found here.

In 2012 COCOCA was founded, to unite the individual co-operatives and to offer them assistance with quality management, marketing and sales. As an umbrella organisation, COCOCA has a membership of 15 co-operatives. dwp eG in Ravensburg, an importer and Naturland partner, has given two of these co-operatives (Mboneramiryango and Nyarunazi) invaluable support to enable them to qualify for fair trade certification in 2014. The next goal of dwp eG is to help





Participants drawing maps of their farms

Mboneramiryango and Nyarunazi to convert to organic cultivation. Thomas Hoyer, the general manager of dwp eG, was able to win over the German state of Baden-Wuerttemberg for this project. Baden-Wuerttemberg has had a partnership with Burundi since the 1980s to help them establish trading relationships in which the focus is on sustainable development, where the interests of the people in both countries are protected and where democracy is strengthened. Baden-Wuerttemberg is giving the project financial support and dwp eG is distributing a "partnership coffee" which is already certified to fair trade standards and subsequently is to be converted to organic.

COCOCA – nucleus of organic agriculture in Burundi?

In August, 2014, Anne Hessenland, Naturland's representative in Tanzania, went to Burundi for the first time to visit COCOCA and the two co-operatives mentioned above. She was warmly welcomed by members of COCOCA.

She noticed that in the hilly landscape, hardly any forests, trees or shrubs are to be found and that many measures designed to conserve the soil as part of farming practice were being ignored. Few farmers know how to create terraces and implement other measures designed to conserve the soil. The coffee plantations are small and farmed as monocultures. The farmers see for themselves that coffee cultivation needs to be improved but still do not know how. They are therefore grateful for and open to conversion to organic agriculture.

In a further meeting in March, Anne Hessenland trained the farmers of the Mboneramiryango and Nyarunazi cooperatives in organic coffee cultivation and introduced COCOCA to the internal control system (ICS). Under this system the members of the co-operative inspect each other's farms or else local internal inspectors are appointed and trained. During the annual tours by external officers, the head offices of the cooperative and a selection of growers are

inspected. This system, which was coengineered by Naturland, reduces inspection charges and is a prerequisite for the certification of grower groups in developing countries to organic standards. Directly after this training session, an ICS team was created. The participants listened with interest and attention. They asked many questions and a relaxed and constructive atmosphere pervaded the discussion rounds.

A farmer from the co-operative sprung a surprise on the participants. He took a group of 50 with him to his farm. He had already put the concept of mixed cultures and shade trees in the coffee plantation into practice, since he remembered how his grandparents had managed the farm. This allowed all the participants to see where the principles of organic farming would take them.

Organic coffee a great opportunity for Burundi

At the end of her trip, Anne Hessenland and Boniface Habonimana from COCOCA, who is the person in charge of commercialisation and also acted as translator, had a meeting with InterCafe, the interprofessional coffee trade association of Burundi in Bujumbura. Other participants were the World Bank, BOAM (Burundi Organic Agriculture Movement) and the National Confederation of coffee growers of Burundi (CNAC). At this meeting all the parties conceded the necessity of improving coffee cultivation in Burundi and gradual conversion to organic farming. They agreed that a concerted effort must be made. This could, therefore, turn out to be a national Naturland organic coffee project.



Members from Mboneramiryango and Nyarunazi after three days of training

Soil Atlas 2015 – facts and figures about arable land, land-use and soil

The soil as a habitat

The soil is at our feet. We walk and stand on it and - the soil is the basis of innumerable products which we need in our everyday life and for the majority of the food we eat. What is amazing is how negligently we treat this important asset.

Where industrial-scale agriculture and intensive farming are the norm, the poor quality of the soils used for agricultural purposes can remain hidden for a long time. High-yield high-performance seed produces large harvests, and the addition of mineral fertilisers restores the lost nutrients to the arable land. This works well, at least for a certain length of time. Since what is called the Green Revolution in the 1960s, agricultural practice in many industrialised, emerging country and developing countries has been based on technologies which make intensive use of chemicals and energy, such as large machines, irrigation, pesticides, synthetic fertilisers, hybrid seeds and sometimes even genetically modified seeds. One of the reasons why these methods only work for a certain time is that, in industrial-scale farming, the soil itself is not regarded as the habitat of innumerable micro-organisms with its own self-regulating properties, so it does not stimulate and maintain these functions, such as by active support of humus formation and by applying green manure. The soil is not fed and kept healthy, since the focus is on the plant. The consequences are depleted and eroded soils. These soils are poorly structured and can easily be denuded by wind and water. During heavy rains soils low in humus are slower to absorb water than well-structured soils and cannot store it as long.

Besides this, there are socio-economic problems: in many cases farmers in southern countries have to fight against barriers preventing access to fertile land, against foreign countries grabbing land to produce foodstuffs, fodder and energy, and against the serious climate changes which cause floods and drought.

Soil Atlas 2015 - facts and figures about arable land, land-use and soil

These facts and more than these are to be found in the Soil Atlas which was published in early 2015 by the Heinrich Böll Foundation, BUND (Friends of the Earth Germany) and Le Monde Diplomatique. It contains collections of essays and illustrations which throw sociogeological light on the topics of arable land, land-use and soil and identify current trends and developments in the

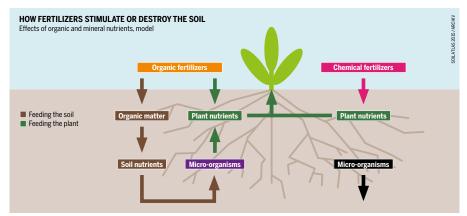
global level.

The findings of this soil chronicle correspond in great measure to the work done by Naturland, and are especially reflected in three key topics:

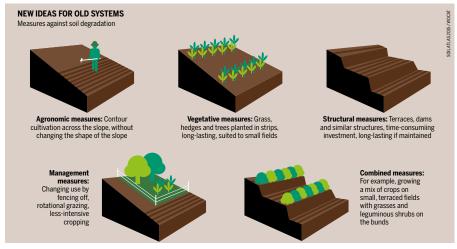
The prominent position held by organic agriculture in protecting soil quality as the basis of biodiversity and climate regulation. Whether farmers are aware (e.g. by being certified organic) or not (due to a lack of economic resources, e.g. for agro-chemicals) that they are operating in conformity with a form of organic agriculture is, in the first instance, of secondary importance to the actual added value they contribute as described in the Soil Atlas. What is important is that they know how to maintain and enhance the fertility of the soil.

composition of the soil and in land-use at Concern about the inequitable use of land and resources at global level. Smallholders produce 70% of the world's food. However, their access to natural resources such as land and water, appropriate technology, to consulting and market is in many cases very limited. Naturland supports small farmers throughout the world and among other things, organic certification provides access to new markets.

> The importance of the human factor. Above all it is mankind which can exert either a positive or negative influence on changes in the soil, depending on the cultural, technological and economic methods it practises. It is therefore imperative to educate people about the effect of their actions and to enable farmers to treat the soil in a responsible manner.



How fertilisers revitalise the subsoil - or destroy it



Regeneration of soils: what farmers can do Copyright: Creative Commons (CC-BY-SA) – Heinrich-Böll-Stiftung, BUND, IASS und Le Monde diplomatique



The way we manage our soils plays an essential role in their future and in the stability of our environmental systems. Naturland underwrites the appeal made in the Soil Atlas of 2015:

The soil forms the basis of the existence of humans, animals and plants. It is best conserved by modern organic farming which is adapted to local conditions, uses a diverse mixture of tried-andtested methods and, by implementing a closed ecological system, restores to the soil what it needs without resorting to the use of synthetic fertilisers.

The Soil Atlas can be downloaded free of charge: www.boell.de/en/2015/01/07/soilatlas-facts-and-figures-about-earthland-and-fields

Soil conservation is climate protection

In the light of population growth and given the fact that we would starve without fertile soil, mankind is treating the basis of its food and existence pretty shabbily. In the past 40 years, about one third of the world's entire fertile arable soil has been lost to erosion. It should be borne in mind that fertile soil is not only crucial to world food security. Healthy soils play an essential role in climate protection, too. Organic agriculture is a pioneer and a role model for agriculture in general when it comes to protecting and preserving fertile soils.

Soil degradation and climate change

The soil is a natural resource in great danger. In recent decades, mankind has interfered with this complex system more drastically than ever before. The list of sins committed against the soil, especially by conventional agriculture, is long: forest clearance, conversion of grassland and meadows into arable land, monocultures, a lack of ground cover, over-fertilisation, pesticides and compaction of the soil by heavy machines. The consequences are a decrease in the content of organic substance (humus and soil fauna), soil erosion, salinization and desertification due to incorrect management. The results are degraded, infertile, ruined soils.

It is often little known that the progressive degradation of soils also fuels climate change. Soils are the most important terrestrial carbon sinks. In the soil an enormous amount of carbon is sequestered in the form of organic substance. This carbon which is sequestered in the form of humus is however only partly stable and its increase and decrease have an influence on the amount of carbon dioxide in the atmosphere. The loss of



Compacted soils leave no room for roots. (Source: Prof. Dr. Günter)

organic substance means the release of the greenhouse gas CO₂. Even small losses of organic substance in the soil can therefore have a great effect on the atmosphere and thus on global warming. Soil erosion is considered one of the major causes of CO₂ emissions in the world.

Soil conservation and climate protection

Conversely, greater humus formation means better sequestration of CO₂ and is therefore climate protection in practice. Naturland farmers all over the world nurture their soils and encourage the formation of the humus layer by such measures as diversified crop rotation, the cultivation of legumes, agroforestry systems and planting mixed crops, green manuring and applying organic fertilisers containing manure and compost, permanent ground coverage wherever possible and in many other ways. To organic farmers, the soil is much more than just a means of production. They have to feed it so that the soil can in turn feed their plants and animals. Conserving and nurturing the living earth and encouraging the fertility of the soil are therefore of crucial importance to them. Tests have confirmed that soils farmed organically can reduce soil erosion and thereby also emissions of CO₂. They likewise confirm that soils managed organically have a higher humus content and higher rates of CO₂ sequestration (UNCTAD/WTO, FIBL: Organic Agriculture and Climate Change, 2007). Under organic farming practices, up to twice as much CO₂ is sequestered in the soil as in conventional agriculture (Beste, Andrea: Öko-Landbau: Der lange Kampf um bessere Böden. In: Bodenatlas, 2015, pp. 34 – 35).

Other contributions of organic agriculture to climate protection

Besides the contributions it makes to the formation of humus and the sequestration of CO₂ in the soil, organic agriculture benefits climate protection in other ways, too. The manufacture of synthetic pesticides and fertilisers, especially of nitrogen, consumes a lot of fossil energy. Organic agriculture saves energy by eschewing synthetic chemical fertilisers and pesticides; the energy consumption on organic farms is between 30% and 50% lower than in conventional farming (FIBL: 90 Argumente für den Biolandbau, 2007).

In organic agriculture, the number of domestic animals allowed to be kept is governed by a ratio per hectare. This regulation

ensures that the manure produced can be spread in a lucrative manner as a fertiliser on the farmland and that there are no problems with disposal. This reduces ammoniac emissions, too. Furthermore, organic agriculture limits the release of other polluting trace gases, especially of nitrous oxide (N2O) from the soil.

Soils as a key resource

Sustainability begins with the soil. Soils are a key resource in diverse ways. Besides their importance to world food security and to climate protection, the value of healthy soils for biodiversity, good water quality and the right water balance deserves a special mention.

For biodiversity because between one quarter and one third of all the organisms in the world live in the soil.

For good water quality because healthy soils make a considerable contribution to the conservation and regeneration of our drinking water. As it seeps through the various layers of the soil, the rainwater is quite literally filtered.

For the right water balance because healthy soils are effective reservoirs. On the one hand fertile soils offer better protection from floods because they absorb water quickly and on the other hand they can mitigate the effects of dry periods on agricultural crops by making water available to them for a longer period. Adaptability to climatic extremes such as heavy rainfall and periods of drought is becoming a factor of increasing importance to ensuring yield stability in agriculture.

The loss of soil meant the end of an ancient civilisation

In conclusion it can be said that the soil is one of our most important natural resources and as such is one of mankind's most valuable assets. The decline of ancient civilisations such as that of the Mayas is attributed to soil depletion and the resulting food shortages. This example, as well as the importance of the soil to climate protection and evident signs of global soil depletion should be a warning to us but at the same time also a rallying cry to do what we can to protect this, the basis of our very existence, in the true sense of the word.

Compensating for soil loss

(Guest article from Andre Eitner, Tobias Bandel Soil & More International BV)

2015 is the UN International Year of Soils. And it is high time that the general public came to grips with the subject. In 2011 alone it is estimated that 24 billion tons of fertile soil were lost on a global scale due to deforestation and poor agricultural practices.

However, a growing number of businesses and farmers recognise the necessity of confronting this reality. In this case organic agriculture plays a pioneering role but even growing numbers of conventional farms and supply chains

recognise the benefits to be derived from fertile and healthy soils, be it because of their greater water retention capacity, reduced erosion or higher vields.

Carbon in the soil instead of in the atmosphere - beneficial in both cases

The soil is also a determining factor in mitigating climate change. For instance, it is not forests but soils which are the greatest terrestrial carbon sinks on our planet. The factor soil must be granted absolute priority if we want not only to

be able to feed the growing world population reliably and with healthy products but also to cushion the blow of the worst effects of climate change.

It is mainly smallholders in tropical countries who are already suffering from the effects of a changing climate. Besides this we see less than perfect methods of cultivation which rely on spreading artificial fertilisers, thus neglecting to recycle vital organic matter in the form of compost. The soil's fertility becomes depleted and an opportunity lost is to revitalise the soil at

the same time as protecting the climate.

Several surveys performed by Soil & More International in Nicaragua, Kenya, Uganda and Indonesia found that, where compost is consistently applied, up to 3 tons of carbon per hectare and year and over a period of 30 years on average nearly one ton of carbon per hectare and year can be stored in the soil. This is carbon which would otherwise have been trapped as CO₂ in the atmosphere.

As long ago as 2007 Soil & More Intl. had their first projects verified by the technical inspection agency, TÜV, which were based on compost and designed to reduce emissions. The proceeds from the sale of the CO₂ certificates were used to encourage the production of compost in their partner countries, Egypt, Mexico and South Africa, and to some degree made compost a more attractive commercial proposition than artificial fertiliser. Currently Soil & More Intl. is developing further projects designed to reduce emissions besides composting and which factor in all the emissions avoided by practising sustainable agriculture. Because of this holistic approach, these projects have also been commended with the highest CO2 standard, the Gold Standard.

At the same time it is also the aspiration of this very Gold Standard to reduce the bureaucratic requirements made of projects designed to reduce emissions, thus making them more attractive for farmers, too, and especially smallholders. The good thing about this is that it



Using compost as a fertiliser improves humus content, sequesters carbon in the soil and supplies the soil with nutrients Worm compost is rich in nutrients



Vermicompost is a nutrient-rich organic fertilzer

is no longer just a matter of projects which reduce emissions but that the main focus is placed on the development of sustainable agricultural methods, especially on the formation and conservation of fertile soils. Emissions trading is therefore not plain "greenwashing" but also makes a contribution to the advancement of sustainable agriculture.

The wise use of crop residues

Composting remains a core issue, all the same. Be it in Europe or overseas, Soil & More Intl. is trying to develop pragmatic local solutions for and with farmers in order to recycle the residues of biomass which are produced in the course of agricultural operations. This ranges from ploughing in harvest residues to mulching and the composting of green waste and manure. Organic residues contain valuable nutrients and carbons as well as water. By recycling them in the soil, less fertiliser is required and the soil structure is improved, which in turn enhances protection from erosion, one of the greatest problems the world over. Both on a one-to-one basis or in courses held in farmer field schools, Soil & More Intl. attempts to pass on its practical experience without propounding any particular technology.

Impressive results have been reported by both smallholders in Ethiopia, India and Kenya and by large farms in Egypt, Ecuador and South Africa. By recycling biomass in the soil, nutrient application in the form of fertiliser can be reduced by 30% or more.

An important role in this concept is the use of compost tea. To make it, ripe compost is "activated" with water, oxygen and natural sugar. Where compost tea is spread, soil fauna is stimulated and the accessibility of nutrients to the crops increases temporarily. This is very helpful particularly during critical phases of the vegetation cycle such as germination, or propagation, or even during flowering and when fruits are ripening.

Of particular advantage is the fact that no microbes need to be purchased for this purpose. Everything needed is normally available on the farm and only needs to be multiplied and improved. Living soil means fertile and healthy soil, less disease pressure on the crops and, where combined with sufficient organic substance, the formation of humus and an improvement in the structure of the soil. Soil & More Intl.'s approach is initially to make use of natural resources available locally and to improve them. In most cases this is sufficient to achieve significant results.

Soil & More International is a business which has specialised in improving soil fertility. The company offers advisory services in the fields of composting, sustainability, research and development as well as software, and provides assistance to farmers and firms. For further information, visit their website www.soilandmore.com or send an email to info@soilandmore.com.

Soil erosion

Wind-swept and washed away: is this the fate of our soils?

Soils are the basis of mankind's existence but despite their vital function and the crucial importance to our food supplies, we do little to protect them. We treat them as if they were inexhaustible. The fact is, however, that our soils are a natural resource which cannot be renewed, because it cannot be replenished after degradation or loss within a human life span.

It takes 2000 years to create 10 centimetres of soil. Every year over 24 billion tons of soil are lost to erosion. This is equivalent to over 3 tons of soil per person living on this earth (according to the global report "Agriculture at a Crossroads"). Almost 15% of land farmed globally is threatened by erosion. The areas which are put to human use following forest clearance are lost to agriculture by the same amount due to erosion!

Erosion means the removal of loose material by wind and water. It is a natural process which has been shaping our natural environment for millions of years, flattening mountains and filling oceanic basins with sediments. The soil erosion with which we are confronted with today is on an unnatural scale and is created by agricultural activities.

Soil erosion of the topsoil, which is normally rich in nutrients, causes the loss of these nutrients to the soil below. The removal of organic mass reduces the soil's water absorption and retention capacity and the soil becomes increasingly shallower. This leads to a gradual decline in the soil's productivity and in the worst case to complete degradation. There are times when farmers abandon their land and clear new areas to farm. In other regions the eroded soils cause the sedimentation of bodies of water and other damage such as air pollution in the case of extreme wind erosion and even the acceleration of climate change, not to mention the loss of biodiversity. In one handful of fertile soil there live more organisms than there are people on the earth!

What causes erosion?

Erosion always occurs wherever soils are exposed to the forces of wind and water without any form of protection. Soil erosion takes place in two stages. First of all the energy of the raindrops destroys the soil aggregates. The now smaller soil aggregates choke the pores in the soil and so the infiltration of water into the soil is reduced; this is called capping or silting. In the second stage the water which cannot penetrate the

soil runs off if the land is sloped, which leads to the erosion and displacement of the soil particles.

Wind erosion occurs as a result of the removal, transport and deposit of soil material by the force of the wind. The amount of soil removed depends to a significant extent on the factors soil structure and wind speed.

Sandy soils, in particular those with a high proportion of fine and medium sand, are at great risk. Wind erosion starts at a wind speed of 6 m/s if the surface of the soil is dry. Both factors can be influenced by the farming method. Landscapes with hedges and trees offer good protection from strong winds and reduce their speed. The formation of humus increases the resistance even of sandy soil against erosion by wind.

Erosion is more than a question of location

The extent of the risk of erosion depends greatly on geographic factors. Different soils are at different degrees of risk, depending on their structure and texture and the content of organic mass. Accordingly, poorly structured soils of medium to fine texture and a low content of organic mass erode more easily because on the one hand water cannot be absorbed so easily and on the other hand the loose soil particles can be washed out more easily. Inclines aggravate the vulnerability of all types of soil to erosion.

In many places soils are regularly exposed to strong rain and wind and thus are at greater risk from erosion, and other regions are beset time and time again by extreme weather events. The forecast with respect to climate change is anything but reassuring.

The naturally occurring situation defines just how much difference the farming method makes. In many an area people have found a considerable store of humus already there in the soil. The ruthless exploitation of nature over decades will perhaps only have a noticeable effect in the next generation.

In October, 1998, Hurricane Mitch, one of the five most violent tornados of the 20th century, devastated large swathes of Central America, with a death toll of over 10,000 and leaving some 3 million people homeless. Without a doubt, Hurricane Mitch was a climate event of extreme violence: over 1,000 mm of rain fell in only three days. However, the extent of the resulting landslides and floods must be seen within the context of the deforestation which was practised in prior decades and in the light of unsuitable farming methods. This applies particularly to soils which, in the mountainous regions, were exposed for decades to ruthless exploitation without the protection of intact vegetation, and were then entirely at the mercy of the massive rainfall. Whole mountainsides and hills slithered down into the valleys. Soil and water was flushed into the rivers which then swelled at a rapid rate within hours, the deluge taking many people by surprise.

The author of this article had at this time already been working with a soil conservation programme in a coffee foundation in Sierra del Merendón in the north-west of Honduras. The native communities there were in some cases very open to the soil conservation measures recommended to them because they had already witnessed the destructive forces of hurricane-like rainfall in previous storms. When Hurricane Mitch struck it was clear for all to see that the areas which had been farmed in a sustainable manner reported significantly less loss.

This was also confirmed in an exhaustive survey which compared some 1,800 conventionally and organically managed farms. The survey determined that the farms which focussed on mixed cultivation, agro-forestry systems, buffer strips against erosion, ground cover, the terracing of slopes and other sustainable farming methods reported twice or three times less harvest and soil loss. An encouraging finding of the survey was that some 90% of the conventional farmers had expressed a wish to adopt the techniques which the sustainably managing farmers had employed in future.



Where slopes are steep, whole hillsides can descend

In other places, by contrast, the wrong farming methods can lead to drastic soil loss within a short span of time, leaving infertile land behind. Every year about 10 million hectares of land are given up because of low productivity caused by soil erosion. In Asia, Africa and South America, an average of about 30 – 40 tons per acre are lost. In Europe and the USA the average is, admittedly, "only" about 10 tons, but that is still considerably more than the natural formation of soil of about 0.5 to 1 ton per hectare and year as a result of farming! On a global scale, our stock of healthy, fertile soil, is running low.

But whilst the agricultural frontier continues to devour the last remaining rainforests, it is the farmers who have been driven off other areas who do the hard work of clearing the forest, squeeze the last ounce of fertility out of the soils in just a few years by planting maize and beans on it, and then leave the soils behind, depleted and eroded, handing the land over to the large land-owners whose herds of cattle are waiting in the wings. Here governmental and municipal authorities as well as civil society itself are called upon to create a fair system of land distribution whilst paying due attention to implementing the environmental laws which already exist.

Measures suitable to combat erosion

A new factor here are the challenges posed by climate change and the expected increase in extreme weather events; in other words, appropriate farming methods designed to conserve the soil are taking on even greater significance.

Organic agriculture is principally a good foundation since it relies to a much greater extent on the fertility of the soil and cannot increase yields, if only temporarily, by applying artificial fertilisers, as is the case in conventional agriculture. It therefore aims at farming the soil in a sustainable manner in order to ensure long-term productivity.

Any recommendations made as to sustainable soil management methods first of all always need to be appropriate to the location. Conservation agriculture, which works the soil in a conservative manner, to preserve the soil, without resorting to ploughing or hoeing, is in many cases a good alternative to traditional farming methods. However, in the farming systems employed by smallholders, who often suffer from a grave lack of organic mass and fertiliser, it is imperative to work the soil in order to loosen the compacted earth or to enhance the mineralisation of plant nutrients by ploughing or hoeing.

However sustainable the farming method may be, however much it conserves the soil, it meets its match when land is cultivated which is just not suitable for farming. Steep slopes, no matter how sustainably they are farmed, can at some point not resist the physical laws of gravity and friction.

Decisions about land-use are crucial to what risks the soil is exposed to. Plantations and perennial plants cause less

erosion than seasonal plants and annuals. Well managed pastures are less susceptible than arable land; however, overgrazing causes the gravest soil erosion. Slopes which are at great risk of erosion should not be cultivated with broad rows of crops such as maize or with field vegetables which require frequent working of the soil.

Agronomical measures such as weed control and seedbed preparation have an influence on how long and intensively soils are exposed to rain. Erosion protection measures appropriate to the location (e. g. vegetation or hedges round the borders) arrest the erosive power of water and protect the fields from wind. There also exist highly promising technical measures such as terracing and the building of stone contour walls. These measures are often very labour-intensive and can only be recommended if their maintenance by continual upkeep can be ensured.

Reducing erosion by enhancing soil fertility

Measures designed to increase the fertility of the soil include mulching, the appropriate crop rotation, mixed fruit cultivation, buffer strips and ground cover. The integration of trees provides additional organic material from leaf litter and the mulch protects the soil from the impact of the raindrops.

Ideally, arable land is continually covered but even in organic agriculture the



Organic material such as leaf litter and mulch protects soil from the impact of raindrops and wind erosion

focus is still often on monocultures instead of mixed crops.

Protection from soil erosion is achieved by the choice and combination of various measures, the importance of which depends to various degrees on the location and method of farming employed. Where coffee and cocoa are grown organically to the Naturland standards, this is done by adopting agro-forestry systems suitable for the location with at least two levels of shade

trees above the coffee and cocoa plants. The requisite shade density is 40%, which translates into 70 to 120 trees per hectare depending on the size of the shade trees.

Besides their function as erosion protection measures, agro-forestry systems have other important protective functions such as the maintenance of the water balance, the protection of water catchment basins and the preservation of biodiversity. The sequestration of

carbon in the soil due to the increase of organic substance in the soil is an important contribution to climate protection because CO₂, a greenhouse gas, is removed from the atmosphere. Agroforestry systems offset climate extremes and the supply of nutrients to the crops is increased by shade trees, especially if leguminous trees are planted.

Soil fertility is like music

The ground is the source of 99% of all our food. Between one quarter and one third of all fauna lives in the ground. Despite this, we treat our soil in such a negligent manner that we lose 10 million hectares of arable land each year due to soil erosion. Other problems such as compacted soil, monocultures, overfertilisation and the application of pesticides are further threats to our soils. Volkert Engelsman, general manager of Eosta and Nature & More, is the initiator of a campaign called "Save our Soils". In this campaign, which started in 2013, he draws the public's attention to the importance of the soil and above all illustrates the threats posed to the foundations of our existence.



saveoursoils.com

1. Mr Engelsman, do you have any idea why we treat our soil so shabbily?

I think the problem lies in our mentalities. The soil does not have a lobby because its importance for our food production is not recognised. The general perception is that the soil is just a substratum on which plants are cultivated with the addition of nutrients. That is a very over-simplified view of the world. For many people it is inconceivable that billions of micro-organisms live in the soil in perfect organic balance and that it is the basis of our existence.

In order to grasp this and to value the soil for what it is, we need to adopt a holistic approach, and this must be at every level: in science, education, politics, business and especially among consumers.

2. You call organic agriculture the best way to escape this distressing state of affairs. You are making a contribution to organic agriculture with your company Eosta which trades in fresh organic fruit. Is that not enough? Why then did you start the "SOS" campaign three years ago?

You can never do enough for a good cause. We still believe that we need agro-chemicals to feed mankind. It is true that at first high yields are produced if we feed plants with mineral fertilisers and "spray away" pests, but that is to the detriment of the soil's vitality. It is wrong to assume that this conventional form of agriculture, based as it is on chemicals, is sound, too, and necessary for world food security. Agriculture based on agro-chemicals is poison for our soils and therefore poison for our future.

Organic or biodynamic farming is definitely not the only form of agriculture, but at the moment by far and away the best thing we can do for the soil. Organic agriculture enhances the soil's fertility, increases the soils' water retention capacity, sequesters carbon, thus counteracting climate change, and,

above all, organic agriculture focuses on biodiversity. Diversity in the soil is not only the basis of diversity in flora and fauna but also of the soil's vigour and vitality. Our aim is to raise awareness of these facts with our campaign.

3. This way of thinking is meeting with increasing approval. How can people to whom this campaign appeals join in? Are you still accepting other companies as sponsors? How can businesses adopt this campaign for themselves?

Anyone can take part in the campaign. All of us can release money for diversity on the campaign site www.saveoursoils.com

By clicking the "I Like Organic" button, 5 € are contributed from the Save our Soils Fund. In this way, $500 \ m^2$ of soil can be saved. What you can also do – and this is something which should interest companies, processors, NGOs and other partners - is to become a Soilmate. There are already some 200 Soilmates, i. e. soil partners, who give financial aid to the



Every year, 10 million hectares of arable land are lost to soil erosion

Save our Soils Fund. Naturland is one of them. (Editorial Note: on the website "Save our Soils", there is a counter that shows how many squares of land are destroyed by agriculture on an industrial scale for the presence in the web site).

4. Can farmers also participate?

Farmers could also become Soilmates. However, they are mainly the ones who put into practice what we are campaigning for. They are saving the soil.

A campaign jury decides in which projects soil loss should be compensated for and the fertility of the soil saved. This can be projects under conversion but also projects specifically designed to give financial assistance to organic farmers.

They need to develop or be encouraged in their awareness of the fact that shortterm yields will not help us in the long run. We need to farm our lands organically to conserve our soils before we lose them.

5. What other campaign activities are you planning in the future?

On 26th and 27th June we are holding a conference in Amsterdam under the slogan "Celebrating Soil! Celebrating Life!". In three sessions we intend to examine the current situation, the importance and the future of the soil. We are being supported by such prominent people as Andre Leu, President of IFOAM, Maria Helena Semedo, Deputy

Director-General of the FAO, Chief Arvol Looking Horse, spiritual leader of the Sioux, Vandana Shiva, Dr. Ibrahim Abouleish von Sekem and Dr. Hans Herren, winners of the Alternative Nobel Prize, Sharon Dijksma, Dutch Minister of Agriculture, Renate Künast, Sarah Wiener, Pema Gyamtsho, Minister of Agriculture and Forests in the Democratic Government of Bhutan, Thabo Makgoba, the South African Anglican Archbishop of Cape Town, Dr. Götz Rehn, General Manager of Alnatura, Doug Tompkins, founder of Esprit and North Face, and many, many more who are campaigning for the soil.

6. According to the ticker on the Save our Soils website, over 4 million square metres of soil have been destroyed by industrial-scale farming since the start of our telephone conversation. The campaign has only managed to save some 500,000 square metres. Does this (dis) proportion not sometimes render you speechless or make you feel utterly helpless?

No, not at all. Changes have never been initiated by a critical crowd. It has always been just a few pioneers who do the ground-breaking work. The organic movement, too, is still only a small percentage. Nevertheless, it has been doing pioneering work for decades and is producing a gradual change towards greater awareness. We want to join forces with all those active in this field to spur on this change.

7. What do you see as your probable summary of this campaign? What have you achieved so far?

Our website where we earn money to save the soil is a fantastic idea. But at the end of the campaign it will not be so important exactly how many square metres we have been able to save. It will be more important that the topics of soil and soil fertility have penetrated hearts and minds. It is important that science, politics and business no longer ignore the topic but instead campaign for soil life.

We are happy to play an instrument in the soil conservation orchestra with our campaign. "Save our Soils" is just playing a tiny piccolo part. We take off our hats to all the other instruments which have joined this orchestra in a common cause. Klaus Töpfer, who is uniting scientists to discuss the topic of soil at the Global Soil Week, the UN and the FAO, which have given great impetus with the International Year of Soils. Hats off too, above all, to organic agriculture, which has been fighting the cause of soil fertility for 70 years now, and to the consumers who buy organic food and thus have cast their votes for soil fertility.

Thank you, Mr Engelsman, for this interview and for your contribution to the orchestra of soil conservation.



Healthy soil, rich in humus, has a firm crumb structure



Volkert Engelsman, General Manager of Eosta and Nature & More

"Save our Soils"

The "Amsterdam Declaration" – an appeal to the world's rulers

"Celebrating Soil! Celebrating Life!"

In the Royal Tropical Institute in Amsterdam, some 500 participants came together on 26th and 27th June to attend "Celebrating Soil! Celebrating Life!", an international conference arranged to give the soil a vote.

The message of the conference, which was part of the campaign "Save our Soils", of which Naturland was one of the sponsors, was that immediate action is necessary. Every year, 24 billion tons of fertile soil are lost, an economic loss of 1.5 trillion euros. If no stop is put to this development, the consequences will be disastrous: after all, in order to achieve climate targets and ensure food security, we need healthy soil.

The "Amsterdam Declaration"

What can we do, though, to stop the gradual destruction of the soils? As an answer to this question and as a promise to future generations, prominent persons and the 200 partners in the Save our Soils campaign have collated suggestions and undertakings and published them in the form of the "Amsterdam Declaration". In it, they commit to the cause of organic agriculture and the sustainable treatment of the soil. To quote: "Policy makers, governments, representatives of industry and commerce, and civil society too, need to recognise that this form of agriculture is the best solution to maintain biodiversity and to safeguard the climate and food security". One of the contributors, Germany's former Minister of Agriculture, Renate Künast, declared, "It is time that the item of soil be placed on the global agenda."

A signal for the soil

The participants in the conference sent out a symbolic signal for future generations early in the day: Vandana Shiva, environmental campaigner, Volkert Engelsman, general manager of Nature & More, Dr. Götz Rehn, general manager of Alnatura, Sarah Wiener, celebrity chef, and several others gathered in front of the congress building for a joint guerrilla gardening event. Wielding spades, they lifted flagstones out of the pavements of Amsterdam and scattered organic seeds and compost on the earth below. "Living soils and living seeds are the foundation of our society," declared Vandana Shiva.



Vandana Shiva, Archbishop Thabo C. Makgoba, Renate Künast, Volkert Engelsman, Sarah Wiener, Prof. Dr. Götz Rehn, Rabbi Awraham Soetendorp (from left to right)

Volkert Engelsman, who launched the "Save our Soils" campaign jointly with the FAO and IFOAM, expressed his hopes at this event. "Farmers who look after their soils are the true doctors of the future. But consumers are the "sleeping giant" in this story. Only if they decide to fill their shopping bags with products that sustain soil health will change take place." Then he added, "What gives me hope is that young thought-leaders all agree that organic and sustainable agriculture is the way to go. We, as the ruling generation, must take responsibility."

"Save our Soils"

The "Save our Soils" campaign (www.saveoursoils.com) was launched by Nature & More, a leading international distributor of fresh organic fruit and organic vegetables, and by the FAO, the Food and Agriculture Organization of the United Nations, in order to raise awareness about the importance of healthy soils. The Save our Soils Foundation was started in February 2015. So far it has collected 200,000 euros to be used as financial support for farmers throughout the world in their efforts to maintain fertile, healthy soils, and for organic agriculture.

For more information, go to: www.saveoursoils.com www.natureandmore.com



saveoursoils.com

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