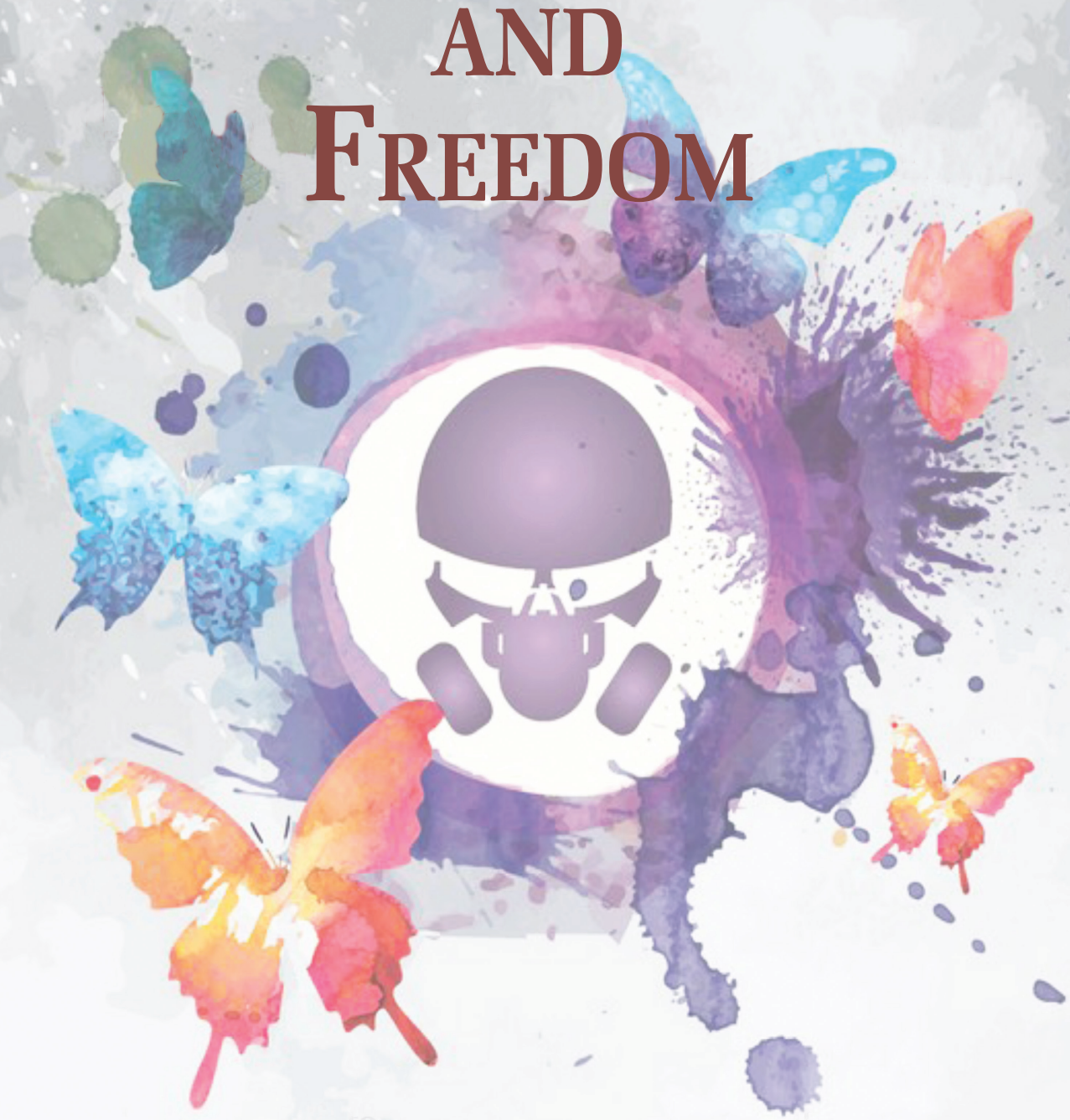
Food for Health and Freedom



Biodiversity for a Healthy Planet and Healthy People

Food for Health and Freedom

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Extract from the Manifesto *Food for Health – Cultivating Biodiversity, Cultivating Health*

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FOOD AND HEALTH

INDUSTRIAL AGRICULTURE AND FOOD PRODUCTION THE HEALTH EMERGENCY

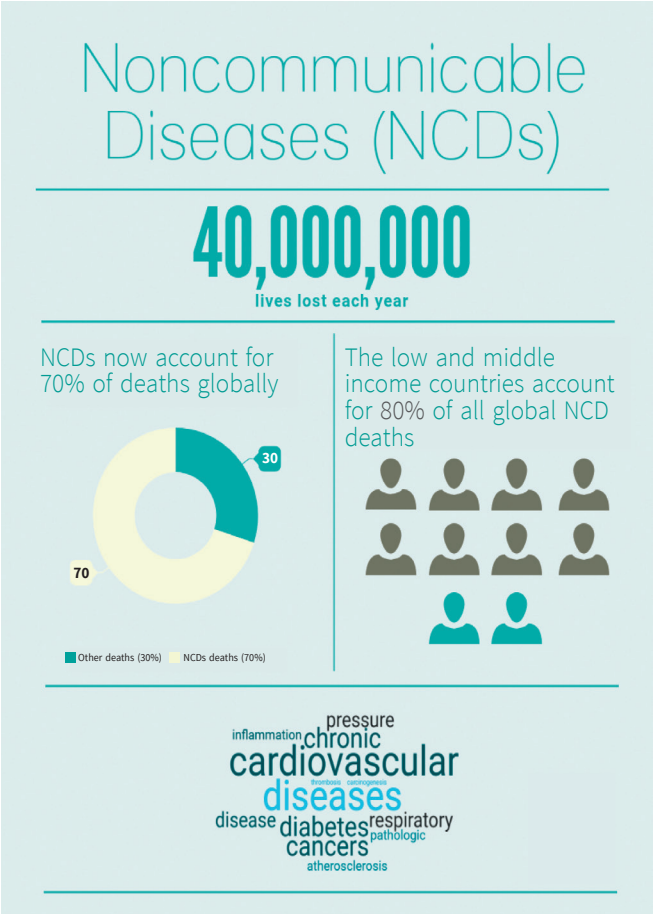
The quality of food is the essence of people's health and is intrinsically linked to the quality of soil, water, air and the environment. The pervasive and growing presence of toxic substances in the environment has led to our impoverished habitat. These toxins accumulate in the food chain, with considerable risks to human health.

Industrial agriculture and industrial food processing have progressively been degrading our diets and our health, both by removing nutrition from the food system and adding chemicals and contaminants across the food chain, from production, to processing, to distribution.

This system of producing food and its consequences are at the root of critical concerns for our wellbeing and the wellbeing of the planet.

These concerns include:

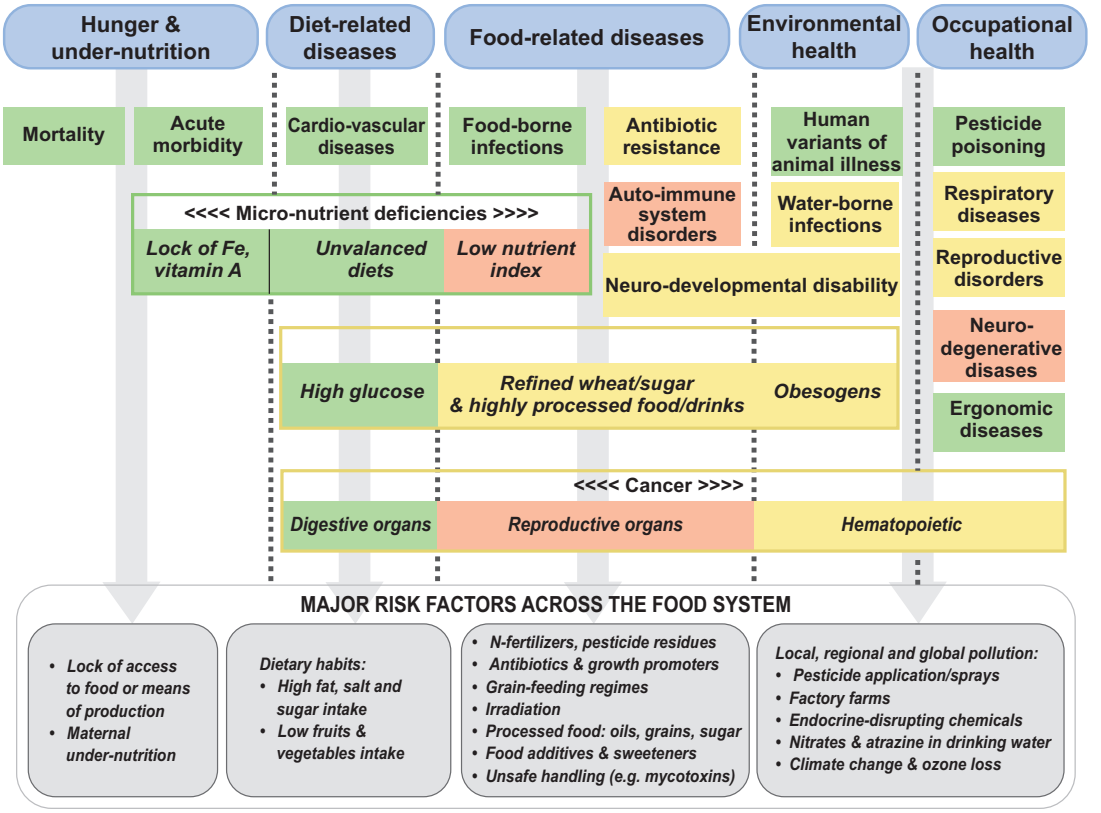
- Loss of biodiversity and thus of the diversity of nutrients in our diets that are essential to our health
- The high health costs of toxic inputs and contaminants in our food
- Industrial, chemical treated agriculture deprives the soil, seeds and plants of their own nutirients leading to less nutritious food
- Globalised trade of industrial commodities does not create food economies that are aimed at nourishing people. Increase in trade of these commodities on a global scale is progressively reducing the availability of healthy and accessible food
- To achieve higher yields, industrial agriculture releases toxic substances into the soil, water and air, which one way or another enter the food chain and threaten human health
- In health terms, industrial processing of food further impoverishes and contaminates our food. (Examples include irradiation during storage after harvest, or all the additives and stabilisers used during processing to extend shelf-life)
- The dangers of low quality, less nutritious diets pose a grave threat of chronic diseases that are often described as 'lifestyle diseases' but are in reality driven by faulty food systems.



Non Communicable Diseases (NCDs) now account for 70% of deaths globally, accounting for 40 million lives lost each year. About 15 million of these occur below 70 years of age. The low and middle income countries account for 80% of all global NCD deaths and 90% of NCD deaths between 30-69 years of age. Major NCDs include cardiovascular diseases, diabetes, cancers and chronic respiratory diseases. A large proportion of NCDs are diet related, due to unhealthy diets causing disease through biological risk factors like blood pressure, blood sugar, blood lipids and body fat, which in turn trigger pathologic processes of inflammation, atherosclerosis of blood vessels, and thrombosis and induce carcinogenesis through epigenetic effects.

Agriculture is the second leading cause of outdoor air pollution, accounting for 20% of the total disease burden, or 664, 100 deaths per year. Globally, outdoor air pollution leads to 3.3 million premature deaths annually.

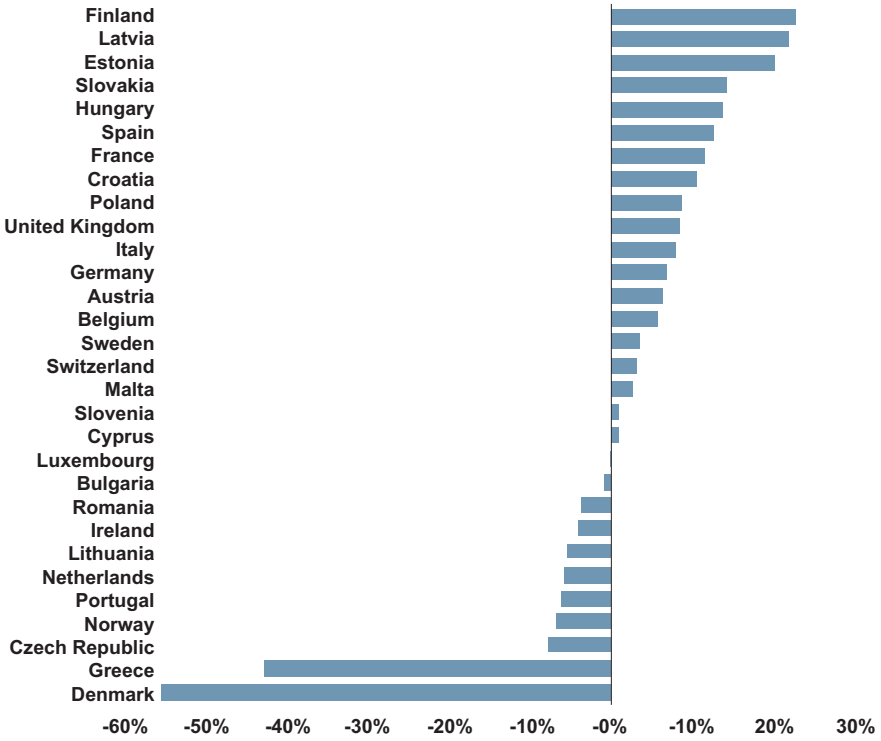
FOOD ECOLOGY AND HEALTH



The world today witnesses the many faces of malnutrition - hunger, wasting, stunting, underweight, overweight, obesity and a variety of micronutrient deficiencies. These also open the body to a variety of diseases that can lead to premature death and severe disability and prolonged suffering. Meanwhile, two billion people suffer from being overweight or obesity. Malnutrition continues to affect a large number of children and adolescents, women in reproductive age and the elderly throughout the world: more than two billion people suffer from serious deficiencies in vitamins and minerals, over 200 million children are stunted, with undernutrition being attributable for deaths of over three million children under five every year.

Pesticides and risks for human health

The FAO defines pesticides as: “any substance, or mixture of substances of chemical or biological ingredients intended for repelling, destroying or controlling any pest, or regulating plant growth”. The term is generically used to address all the substances that interfere, obstruct or destroy living organisms, including microorganisms, virus, molds, fungi, insects, and “weeds”; These substances have toxic, persistent and bio-accumulative properties with associated negative impacts not only on the living species they are created for, but on the entire ecosystem, and human health itself.



Percentage change from 2014-2015 vs. 2011-2013

Today more than ever, our fields and tables are flooded with dangerous chemicals: more than 80,000 new chemicals have been commercialized since the second world war and 20 million have been created as by-products. According to an English study, an average British citizen has more than 300 to 500 chemicals in his body compared to fifty years ago.

The WHO cites 200,000 deaths per year from organophosphorus pesticides alone. Globally, the Pesticide Action Network estimates the number of people affected to be between 1 and 4 million people.

EXPOSURE FACTORS

Chronic exposure

"Chronic exposure" means exposure to small but prolonged doses, which occur already in the uterus or even before conception by the action of the molecules on germinal cells.

Professional Exposure

This kind of exposure can occur during production, transportation, preparation and pesticides application. Main factors involved in this kind of exposure include the intensity, frequency, duration and methods used for pesticides application, as well as compliance with safety standards, the use of individual protection equipment, and the physical-chemical and toxicological profiles of the pesticides themselves.

Environmental/Residential Exposure

Living near areas where pesticides are used, produced or disposed can significantly increase human exposure by inhalation and contact with air, water and soil. Of particular concern is the drift effect, in which pesticide particles disperse in the air, and rather than reach targeted crops, they spread to surrounding environments and communities instead. Often intensive agriculture borders private residences or public places, such as schools, kindergartens, parks, etc., increasing the probability of contaminating residents and the local population.

Dietary Exposure

Residues of pesticides are found not only in fruit and vegetables, but also in meats, fish and dairy products, due to their bioaccumulation and biomagnification in the food chain.

Direct Pesticide Exposure

Direct exposure to pesticides mainly concerns inhalation and dermic contact. The most extreme form of direct exposure is ingestion resulting in poisoning.

Is there cause for concern if pesticide residues are within legal limits?

There are multiple reasons why current risk assessments for chronic exposure to pesticides are not adequate to protect human health these include:

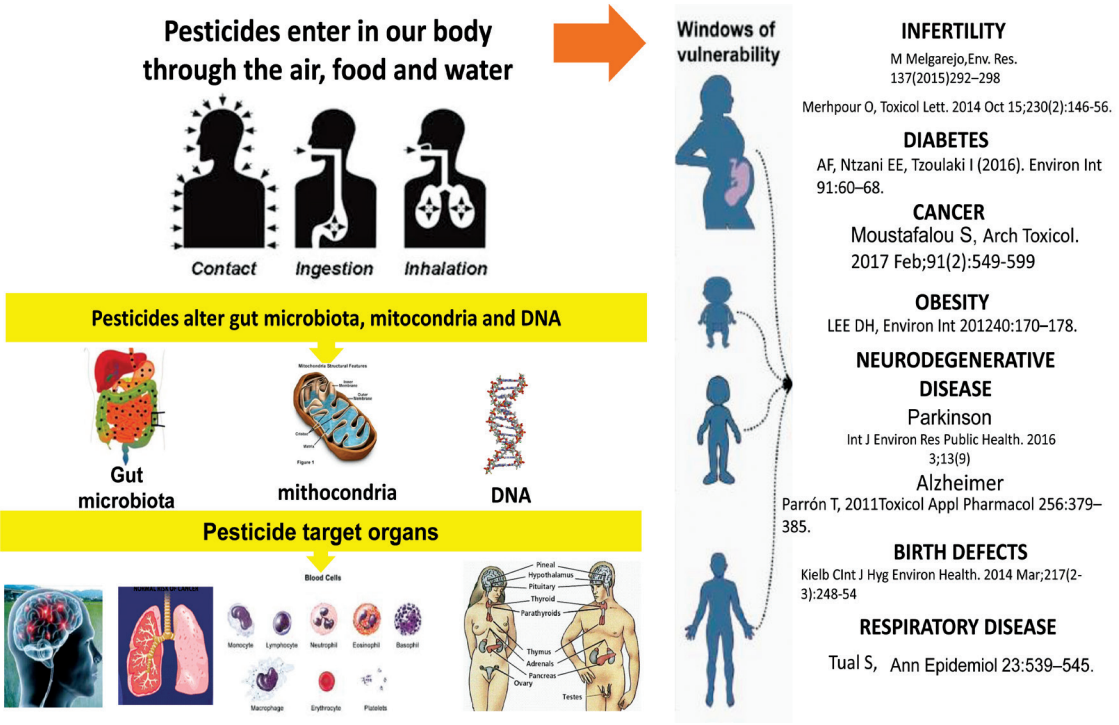
- The multiplicity of the sources of exposure: limits are set for food or water but not for residential or air and ground exposure.
- The fact that the metabolites can be more toxic than the original molecule.
- The action of the single pesticide is considered without considering interactions between multiple residues and the cocktail of molecules to which we are exposed.
- Attention being paid only to the active ingredient, neglecting numerous other substances present (adjuvants, preservatives, diluents, emulsifiers, propellants, etc.), which significantly increases the toxicity of the final product, ie. glyphosate.
- Legal limits refer to an adult person of 70 kg and it is not considered that even minimal doses well below the limits of the law can be dangerous especially in crucial phases of life (embryos, fetuses children), particularly for endocrine disrupting substances.
- The documentation of the proponent and not the available scientific literature is taken into consideration and this leads to discordant opinions among which, once again, glyphosate is an emblematic example.

Increased cancer incidence from pesticide exposure

A number of reviews and meta-analyses indicate that pesticide exposure increases cancer risk and incidence, including but not limited to kidney cancer, bladder cancer, lung cancer, childhood cancer following pre-natal exposure and the most empirically verified, Non-Hodgkin Lymphoma.

Neurological disorders related to pesticide exposure

The main neurodegenerative diseases correlated to pesticide exposure are Parkinson's disease, Alzheimer's disease and Amyotrophic Lateral Sclerosis (ALS). There is a growing body of knowledge that highlights serious risks from pesticide exposure for the developing brain and subsequent neuropsychological sequelae in childhood.



SOME NEGATIVE EFFECTS OF INDUSTRIALIZED FOOD PRODUCTION:

Harm to health: The processing phase between farm and table is where more synthetic chemicals enter our foods. Plastics, preservatives, organic solvents, hormones, flavour enhancers and other food additives are all commonly introduced into our diets during industrial processes. All carry negative effects including rising incidences of autoimmune diseases and autism. Some food additives are endocrine disrupting chemicals and there is substantial evidence that these contribute to the risk of various cancers, particularly sex differentiated cancers, developmental problems, diabetes, possibly obesity, and most likely infertility and sub-fertility.

Anti-microbial resistance (AMR) is the heightened resistance of micro-organisms, ie. bacteria, fungi, viruses and parasites, to anti-microbial agents. AMR may result from natural adaptations. However it most frequently develops as a consequence to indiscriminate use of antibiotics, fungicides or other anti-microbial substances. In the agricultural sector, the primary catalyst for the alarming rise in AMR is intensive livestock production. A recent review commissioned by the UK Department of Health estimated 700,000 human deaths each year from AMR infections. In the absence of mitigating and adaptive policies, this figure is expected to rise to 10 million deaths per year by 2050, more fatalities than from cancer. In the year 2014, multi-drug resistant strains of tuberculosis led to the deaths of 190,000 people and the prevalence of drug-resistant infections was higher than ever before. In light of these growing concerns, AMR has been recognised as a paramount global public health threat by key international institutions, such as the World Health Organization and the Food and Agriculture Organization.

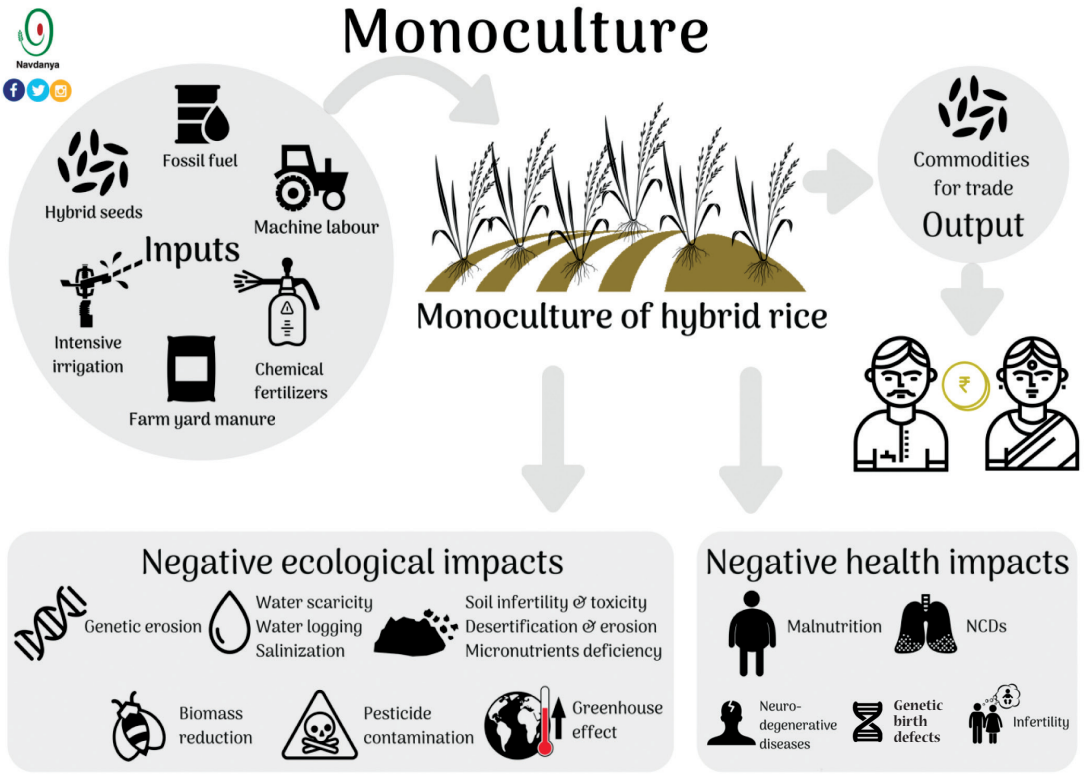
Loss of biodiversity: There has been an unprecedented reduction of biodiversity and the depletion of diverse nutrients in food. 75% of genetic diversity has disappeared in just one century. From 10,000 species originally, barely more than 150 species are now being cultivated and the great majority of mankind is now living off no more than 12 plant species.

Loss of nutrients: Crops have lost 25-70% of their nutrients since the end of the 2nd world war. Today's food produces 10 to 25 percent less iron, zinc, protein, calcium, vitamin C, and other nutrients.

Failed technology: Chemical pesticides have not only damaged the environment and human health, but have also failed to eliminate pests from farms. In forty years of escalating pesticide use, their numbers are rising. Parasitic insects have shown extraordinary genetic plasticity and are able to continuously transform themselves to resist pesticide chemical aggression.

Agro-chemicals are the basis of monocultures, the emblem of industrial agriculture. The less the biodiversity, and its ecological functions for renewing soil fertility, controlling pests and weeds, the higher the dependence on chemicals.

In addition to the increased uniformity in the varieties of species, industrial plant breeding has also contributed to a decrease in the number of crops with only about 30 plant species supplying 95% of the global demand for food and with the four biggest staple crops (wheat, rice, maize and potato) taking the lion's share.



WHAT ARE THE TRUE COSTS OF INDUSTRIAL AGRICULTURE?

There are numerous hidden costs in the industrial food systems which are not taken into account. These costs, particularly those relating to health, are systematically externalised by industry, which refuses to take responsibility for the damage caused by malnutrition, pesticides and chronic diseases.

The challenge of sustainable development in the 21st century is both to reorient our agriculture and food systems to become better aligned to the nutrition and health needs of a growing global population, and at the same time being environmentally sustainable and financially viable.

According to a 2012 study, the costs of damage caused to human health by exposure to 133 pesticides in 24 countries in Europe in 2003 were equivalent to the costs incurred for the purchase of almost 50% of the total amount of pesticides applied in that year. Just 13 substances, applied to 3 classes of crops (grapes / vines, fruit trees, vegetables) contributed, to 90% of the overall health impacts of about 2000 disability-adjusted life years in Europe every year, with an annual economic cost of 78 million euros.

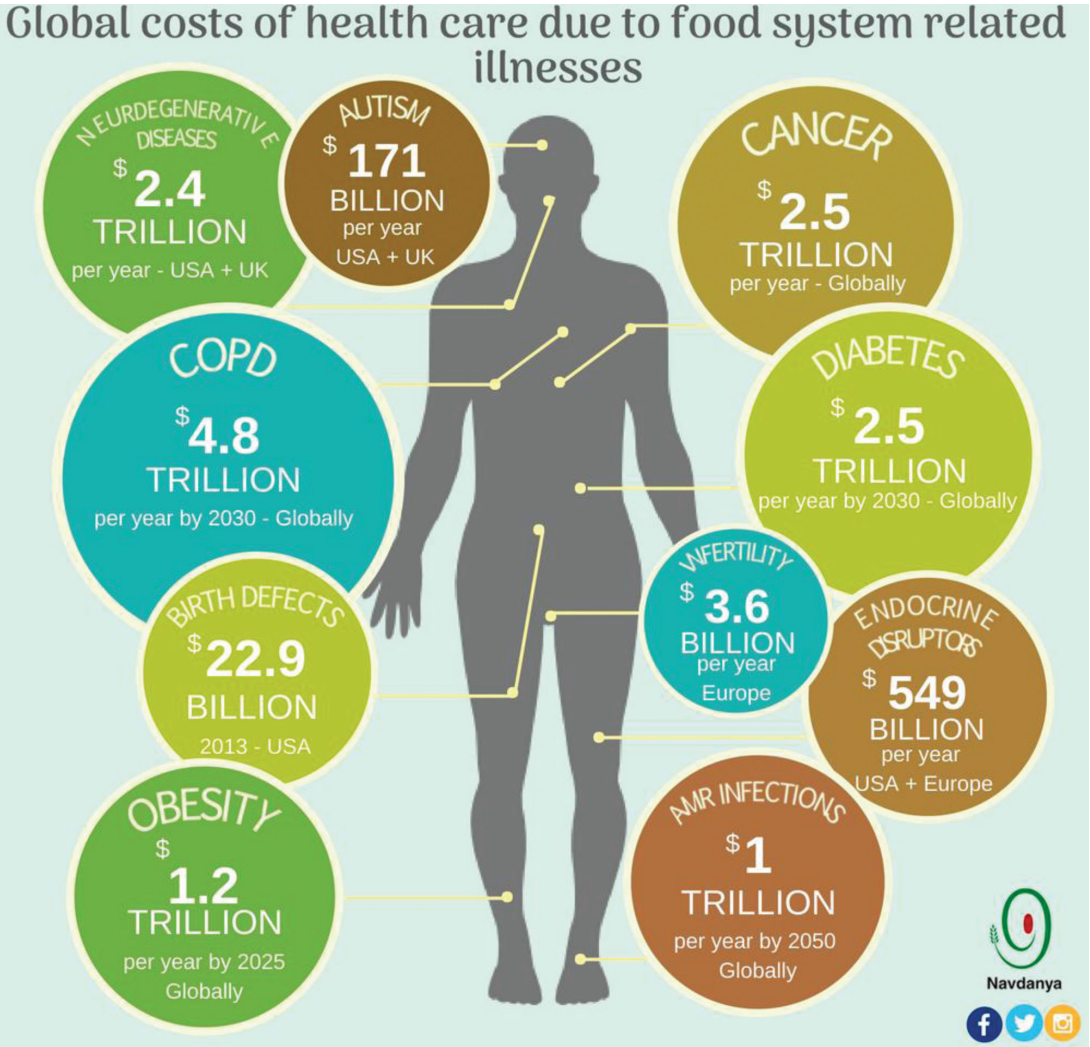
The economic costs of malnutrition and its adverse impacts on development are huge. Over the next 20 years, NCDs will cost more than $30 trillion, representing 48% of the global GDP, and pushing millions of people below the poverty line.

As such, industrial agriculture system has negative productivity, and would not be viable without the huge subsidies given to industrial agriculture. The costs to health, environment and society are not counted and are discounted as externalities.

Local agriculture is a concrete alternative also in terms of productivity. Small farmers, proportionally, are more productive than large industrial farms. With just 25% of arable land, they provide 70% of food at the global level.

Contrary to the false claim of higher productivity, industrial agriculture requires ten times more inputs of energy than it produces in food.

Every year in Europe 13 million IQ points (Intelligence quotient) are lost due to prenatal exposure to organophosphates Added to this are 59,300 cases of intellectual disability. Given it is estimated that each IQ point lost due to prenatal exposure to mercury is worth about 17,000 euros, a similar cost estimate can easily be made for exposure to organophosphorus.



Sources: World Obesity.org, Americain Diabetes Association, The World Bank, ASCO Daily News, Chemical & Engineering News, The Lancet, Autism Speaks, American Medical Association, The Health and Environment Alliance, Information Technology & Innovation Foundation, Harvard School of Public Health & Olesen J *The economic cost of brain disorders in Europe*

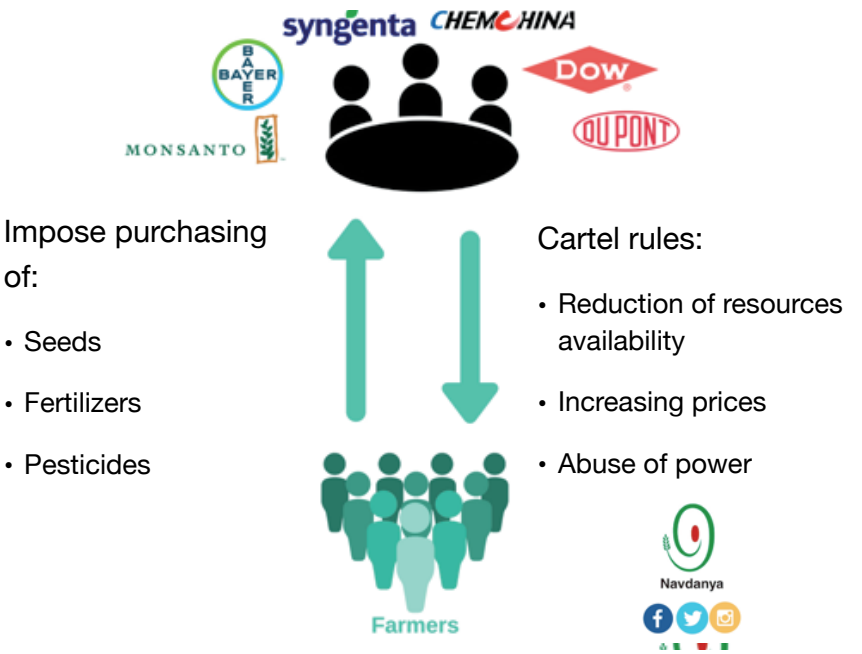
Citizens around the world are paying for billions of subsidies out of their pockets, that turn into profits for the same companies that are spreading disease through the production of toxic and nutritionally empty food. With this system the incomes of small and medium-sized farms fall, the profits of the industry increase and the quality of food collapses. It is clear that the aim of the current system cannot be the provision of adequate nutrition and well-being, but to maximize the profits of Big Food.

The key question to ask is:
Who controls our food system?

Through aggressive mergers and acquisitions big agri-chemical corporations are expanding their markets, and, by directly targeting decision-makers, they are increasing their influence and pressure on governments and institutions and increasingly undermining our democracy. By expanding their monopolies on seed and food, chemicals and medicines, they deepen their control over our food and health. The Big 6 multinational corporations that own the world's seed, pesticides and biotechnology industries have enlarged their empire with mega buyouts : Syngenta with ChemChina ($43 billion deal). Dow Chemical, (former Union Carbide responsible for the Bhopal disaster that killed over 20,000 people) with Dupont ($122 billion deal) and most recently Bayer and Monsanto ($66 billion deal). These three giants have thus gained control of 60% of the world's seeds and 70% of the chemicals and pesticides. The consolidation of dominant power players further impedes the emergence of sustainable agricultural models and different systems of seed supply, production and trade. deal).

In 2016, about 55% of the worlds seed market, a market worth billions of dollars, was concentrated in the hands of just five large multinational corporations. This is in stark contrast to the 10% market share they held in 1985. Some of the same corporations simultaneously control another multi-billion dollar market, that of pesticides (i.e. herbicides, insecticides and fungicides.

Agri-chemical corporations control the Market



TRANSITIONING TOWARDS LOCAL, ECOLOGICAL AND DIVERSE FOOD SYSTEMS IS A SOCIAL, ECONOMIC AND DEMOCRATIC IMPERATIVE

From high-input chemical monocultures to organic food systems

Agroecology, organic, local and biodiversity based agriculture is the formula for the conversion to ecological food systems that regenererates soils, biodiversity, the environment and health, combining quantity and quality and maximizing benefits for the health of the planet and of people.

This forward looking, and at the same time time-honored approach is displacing the current damaging health and environmental trends with policies, practices, and knowledge that ensure renewal, that are mindful of environmental impacts and contribute to preventing global warming caused by greenhouse gas emissions incessantly being pumped into the atmosphere by industrial agriculture and long distance trade.

From a linear and extractive economy, to a circular and solidarity-based economy

A transformation must take place from the present extractive and boundaryless economy which has brought us to todays' exponential global disparity between the billionaires and mega corporation vs the industrious working citizen small businesses, small farmers to a circular, solidarity based economy that is imperative for a healthy planet and healthy people.

Circular economies in food systems mean efficient and reduced use of resources, reduction of food waste, and recycling residues. Short chain supply, such as direct trade and zero km diets, help decrease food waste, carbon emissions, ecological footprints and wealth disparities.

Diversity of crops and foods is essential for a healthy *gut flora, which leads to, and is vital for good health. Throughout the world, whether it be buying points in villages or chic cafes in major metropolises, direct trade and the zero km diet is growing in popularity and demand, as consumers seek more personal connections with their food sources.

*The microorganisms present in the gut play a crucial role in digestive health

Transforming the food system is pivotal for both achieving the Sustainable Development Goals of 2030 and for ensuring human and planetary health for generations to come. A healthy diet is a universal right, not a matter of "personal choice".

The right to health can be realised only if the right to good nutrition and food security is recognised, respected and realised. The transition will depend on the commitment of civil society, the private sector, governments and global institutions.

A transition to an agroecological system of food production for health requires :

Shifting from an industrial agricultural model, based on intensive use of chemical inputs - to an ecological and regenerative organic farming model that respects all living systems

Shifting from a reductionist paradigm, that separates health from agriculture, from food and from nutrition - to a systems paradigm, based on agroecology which connects us to nature, the soil, our biodiversity, our farmers livelihoods and our health

From monocultures and uniformity - to biodiversity in our fields, on our plates, in our gut and in our cultures

From commodification of our seed, our food, our health, and our knowledge and our democracy - to recovery of the commons and their centrality

From the manipulation of knowledge and science by commercial interests that control agriculture, food, nutrition and health - to participatory knowledge and 'biodiversity of knowledges'.

From competition between countries, which leads to conflicts, violence and precarious work, to cooperation across countries and between people for a new planetary citizenship to create community and cultivate the commons, between humans and other species to create an Earth Community and cooperation on the indivisible health of the planet and people.

A transition from predatory globalization to local, cooperative, circular, and solidarity based economies for the common good and the health of the planet.

From an extractive economic model based on unjust trade agreements and corporate free trade that is degrading the planet, our democracies and our local economies - to a circular economic system of solidarity and participation based on the concept of cooperation between peoples and food sovereignty.

Biodiversity rich agriculture is essential for proper nutrition and good health

Earth, food and our organisms are interconnected living systems. Our health and the health of the planet are one and the same.

Over thousands of years, local communities and cultures have been breeding seeds to obtain as many varieties as possible, constantly evolving and able to adapt to the specific environmental characteristics and climatic conditions of each particular territory. The resilience and longevity of this approach handed down a healthy planet to ensuing generations.

Diversity in soils, in fields and tables is essential for the diversity of intestinal microbiota, that is the key to health. The first step to change the status quo is shifting from "cultivating uniformity" to "cultivating diversity".

The benefits of organic nutrition and food

Significant differences exist between organic and conventional food products in terms of from a nutritional point of view.

Below are some of them:

- Organic crops have higher antioxidant activity and between 18 and 69% higher concentrations of a range of individual antioxidants which have shown to help reduce the risk of certain chronic diseases such as cardiovascular and neurodegenerative diseases and certain cancers, few varieties of nuts and oil seeds such as flaxseeds
- Organic milk and dairy products have greater concentration of nutritionally desirable omega 3 fatty acids
- Organic milk contains higher levels of total conjugated linoleic acid (CLA) and higher iron and αtocopherol concentration, all considered to be nutritionally desirable.
- Organic food contains greater level of polyphenols (from 19% to 51%) and antioxidants, less residue of agrichemicals and less levels of heavy metals, particularly cadmium
- The EU in December 2016 recognized that organic food consumption reduces risks of allergic diseases, obesity and particularly in pregnancy protect brain development of fetus and causes less risk of antibiotic resistance
- A new study in California demonstrated that an organic diet can reduce quickly and drastically reduce exposure to pesticides in only six days depending on the compound.

Ecological and biodiverse agriculture

All over the world small farmers and gardeners, through biodiverse ecological agriculture, are rejuvenating the soil and saving and breeding their seeds, providing healthy and nutritious food to their communities. Communities are leading the way by focusing on local, fair and cooperation-based economic systems, creating and building innovative solutions, displacing and

From Ethical Purchasing Groups, to Community Supported Agriculture (CSA) consumer models, to farmers' market where groups of citizens meet to purchase fruits, vegetables and other food products from local farmers in a direct relationship. Many benefits are to be had such as product traceability and seasonality, and fair prices that help to protect farmers increasingly confronted by large-scale retail trade.

The number of organic producers worldwide in 2016 is estimated at 2.7 million. An increase of 12.8% from 2015 data.

The global market for organic products and consumer demand is growing and has reached a turnover of about 75 billion Euros in 2016.

Agricultural areas dedicated to organic farming have reached 50.9 million hectares in 178 countries around the world with an increase of 15% from 2015 on a percentage of 1.2% of agricultural areas globally.

Biodiversity of food, free from chemicals is essential for health of intestinal microbiota. A biodiverse agriculture is essential for a proper nutriton and good health. Our intestine is a microbiota which contains billions of bacteria. It needs a diversified diet to work properly A diversified diet requires diversity in our fields and gardens.

Based on the concept of a short chain supply, the biodistricts model, is an innovative approach to sustainable, integrated and participatory territorial development based on environmental, social and economic dimensions of sustainability. The success of biodistricts depends on the active mobilization and participation of citizens from all sectors, and are based on a pact between the productive world, local governments and civil society to achieve together a sustainable governance of the territory.

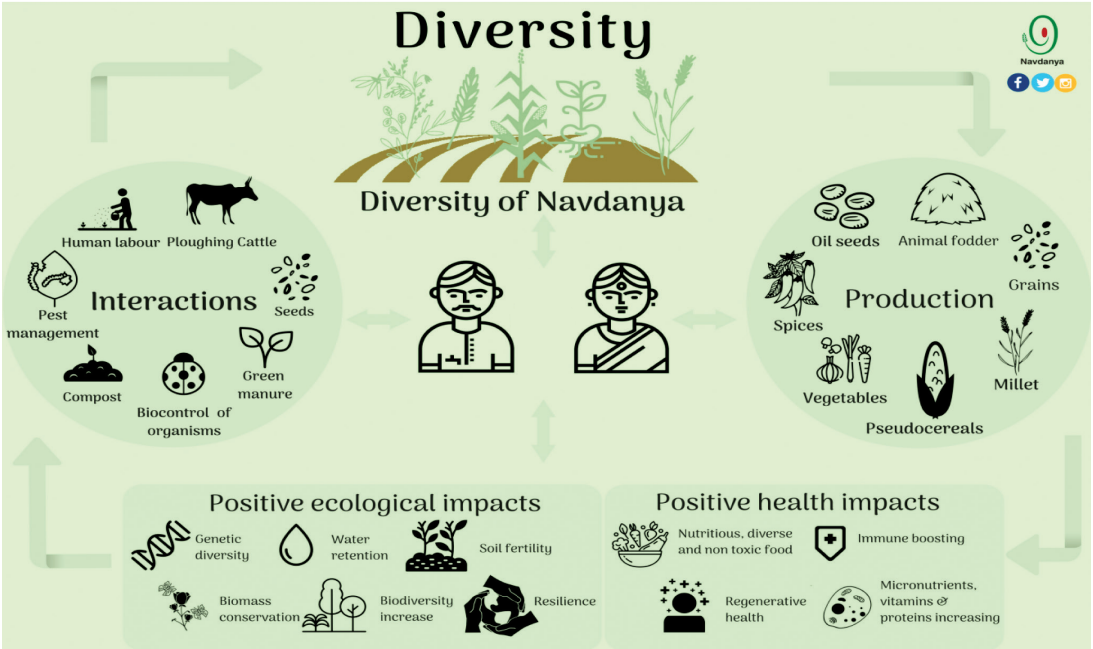
100% organic is possible and is already a reality

Soils where organic farming is practiced have more nutritional content than chemically farmed soil. This becomes food for plants, which in turn becomes food for humans. The results of a 20 year study comparing soils farmed organically and soils farmed chemically shows the build up of nutrition in organic soils, and decline in the nutrition in chemically farmed soils.

All over the world ecological, organic and solidarity-based food systems are expanding and springing up in communities everywhere as examples of good practices, and witness to how it is not only possible but are far more efficient and health effective than producing and consuming the poisonous chemicals in our every day industrialized food. This is the reason why the world of agribusiness is seeking to undermine organic farming and local products. More and more studies, including the FAO papers, affirm that agroecology is now the only viable way to produce healthy and nutritious food globally scale, reduce waste and inequalities with regard to access to resources, and mitigate the life-threatening crisis of climate change.

The Indian state of Sikkim, in the Himalaya is the first to be certified as fully organic after a transformation process of 15 years. An example of how a 100% organic agricultural model, based on the principles of agroecology and local circular economy, is not only possible, but also advantageous : farms that practice organic and biodiverse farming, including the neighboring Navdanya farm and Earth University, have shown that organic farms are 20% more productive than those that practice monocultures with the use of chemicals.

In Italy in Malles, a small village in South Tyrol in 2015, the majority of citizens voted in referendum, to become the first pesticide free village in the country. A strong and vocal movement is fast expanding's giving voice to the inhabitants most affected by pesticides and monocultures.



ROAD MAP FOR CHANGE

Government Actions local, regional, national, international

- Local governments must take back their right to protect public health on the principle of subsidiarity and promote healthy local food economies.
- Regional governments must promote biodiverse, local agriculture and bioregional food and health policies.
- National governments, in all policies and laws, should be guided to give primacy to the health of their citizens specially the most vulnerable sections of society, women, children, elderly and future generations.
- Governments should support policies that promote access to nutritive quality fruit and vegetables, the cost of which is often prohibitive despite recommendations for their consumption, also for the more vulnerable members of the population.
- Public subsidies should be redirected from health-damaging systems to systems based on agroecology and biodiversity conservation, which benefit health and protect common goods.
- Governments should ban the use of toxic hazardous chemicals and instead defend biodiversity and promote agroecology.
- National and regional governments should put in place policies to assess the damage caused by chemicals and apply the polluter pays principle and, the precautionary principle in respect of pesticides and food additives. Moreover, public research should shift from promoting chemicals and contaminants to promoting biodiversity and agroecology healthy & nutritionally rich foods.
- All policies related to agriculture food, nutrition and health need to be integrated on the basis of their interconnectedness.
- Trade rules and free trade agreements (FTAs) should be revised on the basis of environment and health impact of agriculture and food systems, safeguarding food and nutrition security and food sovereignty of their citizens.
- Institutions at all levels should support and promote the transition to healthy agriculture and food systems including organic, pesticide and poison free regions.
- Creation of need for public awareness about foods that are health promotive and that which are health destructive, through programmes such as the One Health Approach promoted by the World Health Organisation (WHO), Food and Agriculture Organisation (FAO) & World Organisation for Animal Health (OIE)
- Citizens participation to create food democracy and healthy agriculture food systems should be actively promoted and considered essential at all levels.




Changes in the International Trade Rules and Systems: Responsibility of the United Nations and its relevant bodies

a) As the main global declaratory and regulatory institution of global policy, the UN should be entrusted to work as a matter of priority on a comprehensive, global treaty to minimise the adverse impacts of the use of chemicals, and other practices that are dangerous to health and to the health of the environmental with particular attention to biological diversity, and which offers a framework on human rights principles. The objectives of such a treaty are as follows:

- identify and remove relevant double standards among countries, especially those that are detrimental to countries which are most food insecure, are lacking in knowledge and have weaker regulatory systems;
- generate policies to reduce pesticide use worldwide and develop a framework as a matter of urgency for the banning and phasing out of hazardous and toxic pesticides;
- promote agroecology and related approaches as an alternative production method to the current reliance on monoculture based industrial agriculture with its major use of chemical inputs;
- make liable pesticide producers that refuse to follow voluntary guidelines.

(b) To reach these goals, building awareness and the promotion of various non-binding documents is an essential step toward transforming agriculture for the benefit of human health: for instance the use of various existing tools established by the UN, such as the UN Decade of Action on Nutrition, as well as NGOs and academic networks to create a "master plan for nutrition" with a time frame and budgetary targets specifically tailored to meet national needs.

(c) The UN should encourage States to adopt an initiative similar to the WHO Framework Convention on Tobacco Control to regulate the food and beverage industry and protect individuals from the negative health and nutrition effects of highly processed foods.

(d) UN agencies and programs must establish coordinated transparency and accountability mechanisms, with sensitivity to relevant stakeholder perspectives, to ensure that the multitude of existing nutrition targets are implemented in a way that is coherent, harmonised, mutually reinforcing, and avoids gaps, with clear timelines and indicators to assess progress, and responsive to democratic values of participation and interaction.

(e) International regulations need to be articulated and implemented to curb the unchecked actions of powerful transnational economic actors that have led to the flooding of global markets with "junk food" and many kinds of processed foods not consistent with international nutrition standards. In this regard, negotiations within the Human Rights Council to establish a legally binding instrument to regulate the activities of transnational corporations is very much welcomed, and consistent with the spirit and realisation of the Manifesto.

(f) Implementation of the UN Guiding Principles on Business and Human Rights, to ensure corporate responsibility of the food and nutrition industry, as well as developing and enforcing the rights of victims of human rights violations, with full respect to extra-territorial obligations of states and other relevant actors.

(g) International trade and investment agreements should be re-evaluated to ensure they do not undermine health and nutrition policies. For example, food taxes, tariffs and other market restrictions or incentives that justifiably form part of national nutrition policies should be exempted from WTO rules and should not lead to penalties for violating trade agreements.

(h) Recognizing the particular vulnerability of women, and especially girls, to malnutrition, the international human rights framework must protect a woman's general right to adequate food and nutrition. The empowerment of women should firmly be embedded within nutrition strategies.

SEEDING FREEDOM

POISON FREE, FOSSIL FUEL FREE, FOOD AND FARMING 2030

The Poison-free Food and Farming 2030 Campaign is an invitation to women and young generations, citizens and people in institutions, indigenous people everywhere, farmers, producers and consumers of food, local communities north and south, from the local to the global, who are already mobilizing to defend the earth and future generations, to create a unified movement for change. Join us in becoming one voice in our rich diversity, to create poison free organic zones and local ecological food systems, that rejuvenate biodiversity, the soil and water, that create climate resilience and climate stability, that protect the health and well-being of our children and the heirs of all species.

The signs are clear:

Fossil fuels and poisons are driving the Sixth Mass Extinction and Climate Catastrophe

The signs are loud and clear. From the Earth. From diverse species. From insects. From science. From women. From children. From indigenous communities. From the increase of disease in our daily lives.

Life on this planet, our own future, is under severe threat of the sixth mass extinction and climate catastrophe.

The extinction of species, disappearing biodiversity and the destruction of the planet's climate systems are interconnected through fossil fuels and chemical poisons based on rampant acquisitive competition and profit-based agricultural industrialization.

It is clear that the sixth mass extinction has now begun, driven by the limitless greed of the 1% and their total disregard of the ecological limits set by the Earth, and the inherent limits for social justice and human rights.

We are forgetting that we are one humanity on one planet. There is no planet B. It is here where either we will continue to live, or go extinct as a species, together with the millions of species that have been driven to extinction by the violence and carelessness of an agriculture based on poisons.

Bees, butterflies, beetles and other pollinators and friendly insects are disappearing in what has been called an "insectageddon". Pesticides and chemical poisons, first used to kill humans in concentration camps have subsequently been used in industrial agriculture for "war on bugs". Killing insects is their purpose. Protecting life on Earth is critical.

Scientists have warned that "Unless we change our ways of producing food, insects as a whole will go down the path of extinction in a few decades". The epidemic of chronic diseases is also the result of the spread of toxics in our food systems. Unfair "free trade" agreements are spreading poisons in food and farming worldwide destroying local, ecological food systems, which protect the earth and our future. Small farmers who care for the Earth and our health through growing real food that nourishes us are going extinct along with 200 species that disappear daily with the spread of capital intensive chemical intensive industrial agriculture.

The Inter-Governmental Panel on Biodiversity and Ecosystem Services (IPBES) has warned in its assessment that "Rapid expansion and unsustainable management of croplands and grazing lands is the most extensive global direct driver of land degradation, causing significant loss of biodiversity and ecosystem services – food security, water purification, the provision of energy and other contributions of nature essential to people. This has reached 'critical' levels in many parts of the world. With negative impacts on the well-being of at least 3.2 billion people, the degradation of the Earth's land surface through human activities is pushing the planet towards a sixth mass species extinction"

The poison-based industrial and monoculture paradigm of growing food, is responsible for the destruction of biodiversity, extinction of species and is driving climate change. 50% of the Greenhouse gas emissions come from an industrial food system which is also uprooting the small peasants who provide 80% of the food.

The Intergovernmental Panel on Climate Change IPCC has warned that we have twelve years to limit climate change catastrophe.

Life, society and democracy are under threat. The planet and our lives are being destroyed by the brute force misleadingly called the economy. The Economy like Ecology, is derived from "oikos", our home, the earth. An economy that destroys our home is no longer economy. It is a war against the plane, the people, and our future.

The Hopi describe the phenomena of destroying everything that sustains a society as Powaqqatsi – "an entity, a way of life, that consumes the life forces of beings in order to further its own life". This is clearly in evidence today - we are dealing with a destructive extractive system/force that enriches the rich and those who control, and robs people of their rights, livelihoods, health and wellbeing. If we continue along this path, allowing corporations to keep extracting and degrading the planet and impoverishing its soils and citizens, our fragile web of life will be poisoned and broken, the diversity of species will be driven to extinction, people will lose all freedoms to their seed, to their food sovereignty, to their knowledge and decisions, all social relations will be ruptured and broken.

PLEDGE TO PROTECT OURSELVES & LIFE ON EARTH THROUGH POISON FREE, FOSSIL FUEL FREE, ORGANIC COMMUNITIES

Protecting life on earth makes ecological, local agriculture and organic farming an imperative. This transition is at the heart of the movement of Poison Free Food and Farming.

Our love for the earth will not allow this future to unfold. We embrace humanity and celebrate our biological and cultural diversity. We will defend the rights of the Earth and the rights of all her citizens as well as every child.

By first making peace with the Earth, we can create peace among peoples. By recognizing the rights of Mother Earth we are better able to defend the rights of people. Together with our creativity and Earth's generosity we will reduce our ecological footprint and expand our planetary consciousness of being one Earth Family, with one common home.

The Earth is for all beings today and tomorrow.

Together as diverse species and diverse cultures and through poison free organic food and farming, which offer climate solutions and rejuvenate biodiversity, we have the creative power to stop the sixth mass extinction and climate catastrophe.

By joining hands, whoever we are, wherever we are, we must create "ever expanding, never ascending oceanic circles" of poison free, fossil fuel free earth communities, celebrating our interconnected life and freedom.

This is the call of Earth Democracy, our highest duty as Earth Citizens

Poison Free Pledge

"I pledge to support poison free farming and produce poison free organic food, to link my efforts to international earth communities offering powerful, creative climate solutions, rejuvenating biodiversity, and celebrating our interconnected life and freedom"

Sign the pledge and make your community/zone poison free, fossil fuel free on the Navdanya International website.

Write to us to let us know about your ideas and work, as well as issues, projects and actions in your community, and learn more on how to get involved.

Join the movement for Poison Free, Fossil Fuel Free, Organic Communities
www.navdanyainternational.org; www.seedfreedom.info

POISON FREE FOOD AND FARMING MOVEMENTS

NATURALEZA DE DERECHOS
PARA NUESTRAS GENERACIONES FUTURAS

safe • food
MATTERS

Ancut
garden

GMO & POISON
free zone

wakeseed
NÚCLEO DE AGROECOLOGIA

ACRASE
Associazione Culturale
I Sardi a Roma

Finca Agroecológica
Amalur

BLOQUEVERDE

Bread of Freedom

GWATÀ
agroecology - Brazil

HOMEF
HEALTH OF MOTHER EARTH foundation

INTERNATIONAL SOCIETY OF DOCTORS FOR ENVIRONMENT
ISDE

JAGA
INDONESIA
BALI

KIDS
Right to KNOW
ONE PLANET FOR ALL
ALL FOR ONE PLANET

semillas de vida

"Peliti"
alternative community
coexistence in harmony
1995

mantasa

MARCIA
STOP
PESTICIDI

978
1.738 M
Marktgemeinde **Mals**
Comune di **Malles Venosta**

REGENERATION
INTERNATIONAL

SARDIGNA **TERRA BIA**®
SARDEGNA **TERRA VIVA**®

GARN
GLOBAL ALLIANCE FOR
THE RIGHTS OF NATURE

TOWA
TRANSPARENCY ORGANIC WINE ASSOCIATION

Emas Hitam
INDONESIA

CEDAR CIRCLE

CHELSEA GREEN

NAVDANYA INTERNATIONAL

BUILDING A LOCAL ECONOMY

NOFA-CT

NOFA MASS

NOFA VT

REAL ORGANIC PROJECT

RURAL VERMONT

SCHOOL OF THE NEW AMERICAN FARMSTEAD AT STERLING COLLEGE

SOIL CLIMATE

NYU STEINHARDT

VERMONT COMPOST COMPANY

VERMONT HEALTHY SOILS COALITION

Be part of the ever expanding, never ascending oceanic circles
for Seed Freedom, Food Freedom, Earth Freedom

ACTIONS FOR EARTH DEMOCRACY THROUGH SEED FREEDOM, FOOD FREEDOM, EARTH FREEDOM

- Sign the pledge on our website and make your community/zone poison free, fossil fuel free on our website
- Save grow and reproduce traditional seed varieties to safeguard biodiversity, not as museum pieces in gene banks, but in Living Seed Banks as a basis for a healthy planet and healthy people
- Grow Gardens of Hope, Gardens of Health, also at urban level, which favour the diffusion of nourishing and healing plants
- Create and support local food economies, farmers markets, Community Supported Agriculture (CSAs) CSAs, biodistricts, ecozones
- Create links between schools, hospitals, health care centers and local organic fresh, diverse food systems
- Know your food, protect good food and health promotive food, resist health destructive foods
- Create poison free zones, communities, farms and food systems
- Demand banning of hazardous chemicals
- Demand labelling of chemicals and GMOs on the basis of fundamental right to know
- Organise to demand that public money and taxes stop subsidising fossil fuels, chemicals and unhealthy food systems that create a burden of disease for us and shift all public support including policy to health promoting agriculture and food
- Get policies passed for a transition to poison free, fossil fuel free living economies at whatever level possible - local, regional, national
- Protect and defend forests, grasslands and small farms which hold the climate solution in regeneration of biodiversity and chemical free organic practices
- Do not co-operate with laws & policies that force fossil fuel intensive, chemical intensive unhealthy agriculture and food system
- Create organic food communities through living democracy and living economies for the health of the planet and the health of people
- Celebrate 2nd October (Gandhi's birth anniversary) to 16th October (World Food Day) as days of action for Seed freedom, Food freedom & Earth freedom.

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