

# Food for Health Manifesto - Synopsys and Background

# Transforming Food Systems that are degrading the Planet and our Health, to Food Systems that Regenerate Health and Well Being

"If we do not create the future, the present extends itself"
- Toni Morrison (Song of Solomon)

The people of the world face a health crisis that arises from multiple degradations in the manner of producing and marketing food. These degradations affect every dimension of the food systems upon which we all depend, from soil, water and seeds to production and processing and distribution, and involve above all, the abandonment of natural and organic food systems, and accompanying diets, that were the foundation of human health throughout the world in most of known human history.

The challenge we are facing today has its roots in the growing dependence on a dysfunctional productive paradigm that depends on pesticides and economies of scale to accelerate the quantities of food produced, but not taking nutritional quality into account, causing a wide variety of detrimental impacts on people's health as well as the ecosystem. This system has adverse effects on health at every stage of human life, which range from undernutrition and malnutrition to a wide variety of chronic diseases, linked to diets and environmental pollution – caused by synthetic products used in agriculture - that are now the leading contributors to premature death and disability across the world.

It is equally alarming to note that the harmful health effects of the globalised industrial food system, extend across generations through transmissible epigenetic effects. We are creating a dark future for our children, as evidenced by the growing epidemics of childhood obesity and early onset type 2 diabetes. We cannot create a society where our children and their children will be deprived of nutrition security because of the actions of commercial interests and inaction on part of governments and other stakeholders in society.

The justification for this emphasis on industrial agriculture, with its fossil fuel based chemical intensive agriculture and chemical intensive systems, centered around maximising production, is the need for sufficient food to feed a growing global population. As a matter of fact,, this system produces instead nutrition empty commodities loaded with chemical poisons, radiations and toxics, are not providing nourishment and health to the world population. They are, on the contrary, degrading our ecosystems and our health, as well as diminishing nutritional quality and diversity of food. In addition, the industrial agri-food system consumes an immense amount of fossil energy (producing almost a third of all global greenhouse gas emissions), thus contributing to altering the ecosystem in the short term (climate variability) and in the long term (climate change).

This shift away from traditional farming based on time tested principles agroecology, along with the lack of significant investment in research and innovation by scientific institutions and governments, is due to the influence and of series of mega-corporations, driven by the quest for maximum profits and minimum regulation, which are taking over land throughout the world. They rely on huge quantities of chemical fertilizers, pesticides, herbicides, modified seeds, responsible of the loss of micro-nutrient content in food and of environmental contamination. Industrial agriculture, despite the considerable exploitation of resources, is unable to guarantee food security for the population. However, most of the food we eat is still produced by small and medium-sized farmers, while the vast majority of industrialized crops, such as corn and soya are primarily used as animal feed or converted into biofuel.

It is crucial to recognise that agriculture sector is a major component of what can be best described as 'predatory globalisation,' the management of the world economy to ensure the efficiency of capital rather than the wellbeing of people and planet. These corporations refuse, through their actions, to recognise the right to health and food as integral elements of human rights. The logic of the market is unfriendly to social and economic rights does not recognize the right to, adequate, healthy, accessible, and affordable food.

Not only is the nutritional quality of food sacrificed to reach quantitative goals but the great benefits of biodiversity are seriously reduced by depending more and more on monocultures, which have harmful effects on the quality and range of seeds as well the biodiversity of all species, cause contamination of soil and ground water, contribute significantly to climate change. These high environmental and health costs are largely excluded from the pricing of food, creating the illusion that food produced with high financial, ecological and health costs is "cheap".

When we talk about large scale production, we are referring to big plantation and big corporation operating manly in North and South America, Asia and now in Africa too. We are talking about an agriculture which is aggressive, chemical, industrial, very often including GMOs. This agriculture is growing fast, earns money, landowners (the big ones, which are very few) are increasing worldwide, monoculture of soy, corn, sugar, Asian and African palm oil are spread everywhere with big suffering of the environment and the local economy. Very often it brings along a violent displacing of the people living there.

On the other side, a new generation of farmers are becoming aware and conscious of their role in farming, in defending the land and the environment, defending good food. They are now conscious of the role they have in society and are active in order to defend bio-diversity, land, territory, community and prosperity. Many of them are organized in cooperatives, where cooperatives have a different role from the west side of world: they not only collect and market the product of the members, but take care of the community regarding training, school, sanitary issue and work strongly for the needs of the territory. We call them "farmers who take care", "agricoltori custodi", "family farmers" "agriculteurs paysans". All of them are based on agroecological techniques of managing, they work in network, they are fostering a really sustainable agricolture in their country and demonstrating that another agriculture and food and taking care of the planet is possible, while promoting the shift from an "extractive" to a "contributive and reciprocal" approach.

Hence, there exists an alternative approach to food security that is based on biodiversity, combines quantity and quality, to maximise the benefits to the health and well being of the planet and people. The emerging paradigm of agriculture, food, nutrition and health is an alternative to the chemical based monoculture paradigm which is degrading our land, our food, our health, and instead regenerates the health of ecosystems and communities. It is displacing the current experiences and trends toward degradation with policies, practices, and knowledge that ensures renewal. We interpret renewal to mean above all a revived reliance on the health potentialities of the natural food systems, working toward harmony with nature, food sovereignty and seed resilience in the hands of farmers, including a mindfulness of environmental impacts and a recognition of the historical relevance of global warming due to the discharge of greenhouse gas emissions from industrial agriculture and long distance trade.

To achieve this transition to a new paradigm based on accommodation of health with benevolent forms of food security will depend on the energies and commitments of civil society, private sector, governments, as well as global institutions.

The right to health can be realised only if the right to good nutrition is recognised, respected and realised. It is possible to create good health through good nutrition. For this we have to transform our food systems. This task is pivotal for not only for reaching the Sustainable Development Goals of 2030 but for ensuring human and planetary health in a sustainable manner over a longer future;

This manifesto, involves a call for responsible citizenship, which at once acknowledges the planetary dimensions of the challenge, calling for the supplementing of conventional ideas of citizenship of sovereign states with a boundary less vision of planetary citizenship and also recognises that the new paradigm will not come into being unless incubated by the felt reality of global community that must be achieved as a future-oriented project, and depends on the rise of citizen pilgrims, those recognising that a journey to a more humane future is essential for the safeguarding the health and life prospects of unborn generations. In effect, we recognise that the renewal we call for is based on new, yet available, knowledge, and a moral commitment to food justice as well as to human health. We believe that the renewal and adaptation of the best scientific and medical knowledge is necessary and possible, and highly desirable, generating a historic collaboration between popular movements and those experts attuned to the renewal of natural systems of food production and congenial social movements and initiatives.

#### The Working Group

On 15 and 16 May 2018, a group of eminent experts in the fields of health, food and agriculture met in Florence to draft a Manifesto on Food and Health, as part of the Food for Health campaign and in continuation of the work of the International Commission for the Future of Food and Agriculture. The document is the result of the discussions and includes contributions and analyses by the participants, which were subsequently coordinated and integrated by the editorial board of Navdanya International.

#### **Group of Experts on Food for Health**

**Vandana Shiva**, Meeting convenor, Founder, Navdanya, Research Foundation for Science, Technology and Ecology

**Renata Alleva**, Specialist in the Science of Nutritition, Department of Biomedical and Neuromotor Science, University of Bologna, ISDE – International Society of Doctors for the Environment, Scientific Committee

Sergio Bernasconi, Full Professor of Paediatrics, former Head of Paediatric Clinic, University of Parma

Piero Bevilacqua, Author, Sociologist, Historian, Sapienza University of Rome

Lucio Cavazzoni, former president of Alce Nero (organic food & products), bee-keeper

Salvatore Ceccarelli, International expert in Agronomy and Plant Genetics

Guy D'hallewin, Coordinator, National Research Council, CNR - ISPA UOS Sassari

Nadia El-Hage Scialabba, Food Ecology expert and former Environment and Climate Division at FAO

Hilal Elver, UN Special Rapporteur on the Right to Food

**Richard Falk**, Professor of International Law Emeritus, Princeton; Director Climate Change Project; Advisor, POMEAS Project, Istanbul Policy Center, Sabanci University

**Patrizia Gentilini**, Oncologist and Haematologist, ISDE – International Society of Doctors for the Environment, Scientific Committee

**Jacopo Gabriele Orlando**, Public Affairs & Project Development Manager, Aboca Group (research and innovation in medicinal herb-based products)

**Srinath Reddy**, President, Public Health Foundation of India and the World Heart Federation, All India Institute of Medical Science (AIIMS)

**Mira Shiva**, Director, Initiative for Health and Equity in Society, former Chairperson, Health Action International Asia –Pacific

# The Manifesto was also drafted by:

**Sebastiano Andò**, Full Professor of General Pathology, Director of the Department of Pharmacy and Health and Nutrition Sciences, University of Calabria.

**Dario Bevilacqua**, official at the Italian Ministry of Agricultural Policies and professor at Sapienza University of Rome

**Famiano Crucianelli**, Biodistretti, Surgeon, Under-secretary for Foreign Affairs (2006 -2008) Valentino Mercati, President of Aboca Group

## International Meeting of Experts on Food For Health

"The health of the planet and the health of the people are one" - Vandana Shiva, Navdanya International "The current health crisis has roots in the same system that has contributed to the ecological crisis", commented Vandana Shiva, President of Navdanya International, at the end of two days of discussion and the drafting of the manifesto on "Food for Health", for which experts from around the world met in Florence, in continuation of the work of the International Commission on the Future of Food and Agriculture. The ecologist and Indian scientist continued by pointing the finger at the industrial agriculture model: "Desertification, climate change, biodiversity loss, water pollution. 75% of today's ecological problems and new epidemics are related to agrotoxics and fossil fuel agriculture". Dr Shiva also talked about the issue of integrating systems: "It is important to find alternatives, which are useful for both the planet and the people. "The health of the planet and the health of the people are one. Alternatives do exist and are based on regenerating health of the earth through agro-ecology, conservation of biodiversity, promotion of local economies and food systems "from field to table". Health, starting with the soil, to plants, animals and humans must be the organizing principle and the aim of agriculture, commerce, science, of our lives and of international trade."

This statement was made at the conclusion of the meeting, which saw the collective work of international specialists, which ended on May 16 at a <u>public event</u> in Piazza SS. Annunziata 1, Florence. The Manifesto, which once developed will be disseminated to farmers and citizens, governments and stakeholders around the world, aims at highlighting the inseparable link between food and health, developing comprehensive strategies to overcome the model of industrial agriculture, encouraging the convergence and action of the movement for <u>Agroecology</u> and Public Health movements to reach a common vision of sustainable development, which must be equitable and inclusive.



Full Photo Album

The conference was introduced by **Caroline Lockhart**, vice president of Navdanya International, who reviewed the steps that led to the establishment of the <u>International Commission for the Future of Food and Agriculture</u> and the drafting of the Food for Health Manifesto. "Since the time the International Commission on the Future of Food and Agriculture was created, here in Florence, **the Commission**, **through its** <u>Manifestos</u> and <u>publications</u>, with Navdanya International, have focused on promoting a <u>new agricultural and economic paradigm</u>, and the belief that solutions to the multiple crises facing humanity today can come from a determined shift away from the present profit and competitive-based paradigm to a model that has at

its keystone the protection of the earth and environment and respect of the rights and dignity of people. Our times require adaptation, resilience and critical thinking, and the defence of our democracies and common goods for a brighter and more equitable future for all."

#### TOXICITY OF THE INDUSTRIAL FOOD SYSTEM

Experts of the international group gave testimony of their contribution to the drafting of the Manifesto. Hilal Elver, UN Special Rapporteur on the Right to Food, denounced the toxicity of the industrial production system: "It is crucial to achieve real access to the procedures by which decisi ons are made at the institutional level. Are all studies and assessments perhaps related in some way to corporate interest or are they truly independent? It's a myth that the use of agrochemicals, a market worth some \$ 50 billion/year and growing, is necessary to feed the world's population." A concept reiterated by Nadia El-Hage, former Environment and Climate Division at FAO: "We need an ecological approach to food and nutrition. We need to promote awareness of the damages caused by the use of chemicals in agriculture ". Also Patrizia Gentilini, oncologist and hematologist, member of ISDE Scientific Committee - International Society of Doctors for the Environment, spoke about the damage suffered by citizens and the environment: "The problem of pesticides is a public health problem. Especially children's health is at stake. We are seeing an increase in cases of childhood cancers. According to a survey of the International Agency for Research on Cancer (IARC), global numbers have increased from 124 cases per million in children between 0 and 14 years of age in 1980 to 140 cases in 2010. Security levels related to pesticides have been proven totally unreliable, while an economic damage of 194 billion Euro / year is estimated in Europe alone. It has now been demonstrated how an agriculture model that respects and cooperates with nature is the best form of food production, both from the point of view of the quality of food, and of the environmental impact. And that's why it's critical that **organic farming becomes the only form of food production**." About the problem of pesticides in our food and the need for higher guarantees for health in our diet, spoke Renata Alleva, Specialist in the Science of Nutritition, Department of Biomedical and Neuromotor Science, University of Bologna, member of ISDE Scientific Committee – International Society of Doctors for the Environment,: "Numerous studies have shown that contaminated food exposes us and puts us at risk of developing various diseases. It's therefore important to promote organic food consumption, which in any case contains less pesticides and, as studies have shown, is richer in polyphenol and antioxidants, on average 20-60% more. If we begin to ask for clean food, and if we startnow, we can be very powerful, and achieve our goals, because we are many more in number than the corporations that poison our food." One of the objectives of the Manifesto is to raise more awareness on the harm to human health caused by the use of synthetic chemicals in agriculture. As highlighted by Sergio Bernasconi, Professor of Paediatrics at the University of Parma: "The knowledge on endocrine disruptors must come out from academic circles and specialized areas. The current model of food production forces us to nourish ourselves with food that is dangerous to our health. " Another important aspect has been analyzed by Mira Shiva, Medical Doctor, Director of the Initiative for Health and Equity in Society - India: "The indiscriminate use of antibiotics in factory farms, which end up in the food chain, causes higher resistance to medicines used by people to treat diseases. There is conflict of interest at different levels. We must overcome the idea that food is a commodity and that citizens are only consumers."

## GLOBAL PRODUCTION AND DISTRIBUTION SYSTEM

Of major significance is **the system** through which our food is cultivated and processed. **Shrinath Reddy, President of the Public Health Foundation of India (PHFI),** said: "It is astonishing to think that globally there are people who go hungry and people who suffer from <u>diseases caused by eating excessively and</u> incorrectly. The food production system, besides being characterized by an extreme problem of distribution, is a system that is introducing unsolicited and especially harmful substances in our food."

#### **DEFENSE OF BIODIVERSITY**

The industrial agriculture system and the way in which access to seed is regulated have a **fundamental impact** on biodiversity. It has been shown that the more our diet is "biodiverse", the greater **are the health benefits**, as pointed out by **Piero Bevilacqua**, **historian and writer**, **Emeritus Professor of Contemporary History at the University La Sapienza - Rome:** "the loss of biodiversity in the Mediterranean area has caused a substantial decrease in food plants variety. Industrial agriculture has wiped out a legacy of foods

that have fed people for millennia." Regarding the biodiversity of seeds, Salvatore Ceccarelli, **International Expert in Agronomy and Plant Genetics** underlined one aspect about which still too little is said: "How can we eat 'diverse' foods, when 60% of our calories come from just three plant species i.e. wheat, rice and corn? How can we eat diverse foods if almost all the food we eat is produced from varieties that, in order to be legally traded (i.e. products derived from these seeds can legally be sold in supermarkets), must be listed in the official Register of Varieties, which only recognizes seeds which are 'distinct, uniform and stable'?" According to Guy D'hallewin, coordinator at CNR - ISPA UOS Sassari, "Intensive agriculture and the use of chemicals have significantly reduced genetic diversity of spontaneous wild plants. This loss of biodiversity has a negative impact on traditional rural knowledge. It 's very important to recover for example ancient fruits, also with the aim of preserving local food cultures. Now the global market offers only a limited range of fruit types, from the point of view of genetic diversity. Recent studies have evidenced that several landraces have very high antioxidant properties due to extraordinary levels and chemical variability of polyphenols. In addition, dietary fiber contents are high and total sugars in most fruit is low". Lucio Cavazzoni, founder of Alce Nero (organic food and products) provided data on the decrease of nutrients in foods today, compared to the past: "Modern grains cause allergies and intolerances that the EU estimates to represent at least 20% of the total. According to a research of ISPRA, the apples of Provence today contain 5% of the vitamins, which were contained in the same apple of 60/100 years ago. We must consider that the food we eat today is depleted food, industrial food. "

#### RIGHT TO HEALTH

On the issue of the right to health and a healthy diet spoke **Richard Falk, legal expert and professor emeritus at Princeton University:** "Without proper attention to the rights related to health, there cannot be a people-oriented perspective of change. We need to rethink development, encourage the adoption of quality tools." It is therefore important that these issues are disseminated in order to raise awareness among the public, as was stated by **Jacopo Orlando, Agronomist, Project Development Manager at ABOCA:** "A growing dissemination of knowledge is necessary, in order to inform and educate especially young generations. All the focus today is on the compliance with organic standards, while no attention is given to the lack of compliance with regulations by those who practice conventional farming". **Ruchi Shroff,** director of Navdanya International, concluded: "The only possible response to the growing ecological degradation, poverty, health emergency and malnutrition is to move from the present linear and extractive economic and industrial agricultural paradigm based on a one-way extraction of resources and wealth from nature and society, to, instead, a regenerative ecological and nature-based circular approach, aimed at guiding decision makers not only regarding agriculture, but to apply it to all economic and social choices Ecological organic agriculture and local food systems can lower the ecological footprint and increase human health and wellbeing."

**✓** Video testimonials of the experts

## **Photos**



"Food for Health Manifesto" Working Group – Among the participants (from left to right):

Caroline Lockhart, Vice-President, Navdanya International, Mira Shiva, Director, Initiative for Health and Equity in Society, former Chairperson, Health Action International Asia -Pacific, Lucio Cavazzoni, former president of Alce Nero (organic food & products), bee-keeper, Jacopo Gabriele Orlando, Public Affairs & Project Development Manager, Aboca Group (research and innovation in medicinal herb-based products), Richard Falk, Professor of International Law Emeritus, Princeton; Director Climate Change Project; Advisor, POMEAS Project, Istanbul Policy Center, Sabanci University, Vandana Shiya, Meeting convenor, Founder, Navdanya, Research Foundation for Science, Technology and Ecology, Guy D'hallewin, Coordinator, National Research Council, CNR - ISPA UOS Sassari, Hilal Elver, UN Special Rapporteur on the Right to Food, Srinath Reddy, President, Public Health Foundation of India and the World Heart Federation, All India Institute of Medical Science (AIIMS), Salvatore Ceccarelli, International expert in Agronomy and Plant Genetics, Renata Alleva, Specialist in the Science of Nutritition, Department of Biomedical and Neuromotor Science, University of Bologna, ISDE – International Society of Doctors for the Environment, Scientific Committee, Patrizia Gentilini, Oncologist and Haematologist, ISDE -International Society of Doctors for the Environment, Scientific Committee, Sergio Bernasconi, Full Professor of Paediatrics, former Head of Paediatric Clinic, University of Parma, Neha Raj Singh, Research Analyst & Youth Project co-ordinator, Navdanya, Ruchi Shroff, Executive Director, Navdanya International, Manlio Masucci, Communication Manager, Navdanya International.



Food for Heath Manifesto – Experts: Hilal Elver, UN Special Rapporteur on the Right to Food



Food for Health Manifesto – Public Conference (from left to right):

**Hilal Elver**, UN Special Rapporteur on the Right to Food, **Vandana Shiva**, Meeting convenor, Founder, Navdanya, Research Foundation for Science, Technology and Ecology, **Patrizia Gentilini**, Oncologist and Haematologist, ISDE – International Society of Doctors for the Environment, Scientific Committee, **Mira Shiva**, Director, Initiative for Health and Equity in Society, former Chairperson, Health Action International Asia –Pacific.



Food for Heath Manifesto – Experts:

Nadia El-Hage, former Environment and Climate Division at FAO



Food for Health Manifesto – Public Conference (from left to right):

Hilal Elver, UN Special Rapporteur on the Right to Food, Vandana Shiva, Meeting convenor, Founder, Navdanya, Research Foundation for Science, Technology and Ecology, Patrizia Gentilini, Oncologist and Haematologist, ISDE – International Society of Doctors for the Environment, Scientific Committee, Mira Shiva, Director, Initiative for Health and Equity in Society, former Chairperson, Health Action International Asia –Pacific, Srinath Reddy, President, Public Health Foundation of India and the World Heart Federation, All India Institute of Medical Science (AIIMS), Salvatore Ceccarelli, International expert in Agronomy and Plant Genetics, Renata Alleva, Specialist in the Science of Nutritition, Department of Biomedical and Neuromotor Science, University of Bologna, ISDE – International Society of Doctors for the Environment, Scientific Committee, Lucio Cavazzoni, former president of Alce Nero (organic food & products), beekeeper.



Food for Health Manifesto – Public Conference:

**Richard Falk**, Professor of International Law Emeritus, Princeton; Director Climate Change Project; Advisor, POMEAS Project, Istanbul Policy Center, Sabanci University, **Hilal Elver**, UN Special Rapporteur on the Right to Food.



Food for Heath Manifesto – Experts:

**Salvatore Ceccarelli**, International expert in Agronomy and Plant Genetics, **Guy D'hallewin**, Coordinator, National Research Council, CNR - ISPA UOS Sassari.

Credits: @Manlio Masucci

#### Press Release 09 Sep 2018

## Italian edition of "Food for Health" Manifesto launched in Bologna

Scientific research confirms the unsustainability of the high chemical input industrial agricultural model and lays the foundations for an ecological breakthrough

"Every day each of us can make right decisions through what we choose to put in our plates. We can choose food that is living and real. The industrial food system, the poison cartel and the large-scale retail cartel are propagating their own system through a false science and to the advantage of mere industrial profit. The meaning of trade has been through so-called 'free trade' treaties, which are nothing but free, as they prevent us from choosing. With our everyday eating choices we can make false science, false trade and false rules for food security irrelevant".

With this statement, Dr Vandana Shiva introduced the <u>Italian Edition of the Manifesto on Food for Health</u>, which was presented at Sana, in Bologna, Italy, on 9 September 2018, to a wide audience of professionals and citizens. The Manifesto is published by <u>Terra Nuova Edizioni</u> and edited by Navdanya International, which has brought together leading international experts in the fields of food and health, as part of '<u>Food for Health</u>' international campaign and in continuation of the work of the <u>International Commission on the Future of Food and Agriculture</u>.

The presentation saw the participation of: **Sergio Bernasconi**, Professor of Paediatrics at the University of Parma, **Lucio Cavazzoni**, former President of Alce Nero (organic food and products), **Salvatore Ceccarelli**, **International Expert in Agronomy and Plant Genetics**, **Nadia El-Hage**, food ecology expert and former Environment and Climate Division at FAO, **Patrizia Gentilini**, oncologist and hematologist, member of ISDE Scientific Committee - International Society of Doctors for the Environment along with multiple representatives of Civil Society Movements as well as Institutional and political bodies.



Link to full photo album

### **Biographical notes of Participants**

Renata Alleva, Specialist in the Science of Nutrition, Department of Biomedical and Neuromotor Science, University of Bologna, ISDE – International Society of Doctors for the Environment, Scientific Committee Graduated in Biological Science, PhD in Biochemistry - University of Bologna, 2nd level Master's Degree in Clinical Nutrition and specialization in Nutritional Science- University of Siena. She has worked as researcher at: Institute of Technology and Physiology of Food at the University of Granada, Heart Research Institute of Sydney, Rowett Institute of Aberdeen - DNA Instability Group, University of Medicine of Hamburg - Biochemistry Dept. From 1999 to 2015 she is a contract researcher at the IRCCS Rizzoli Institute of Bologna and has collaborated with the Apoptosis Research Group, School of Medical Science (Griffith University, Gold Coast Australia), directed by Prof. Jiri Neuzil. From 2015 to date she is Senior Researcher at the Department of Biomedical and Neuromotor Sciences of the University of Bologna. She is the author of about 50 peer-reviewed publications and book chapters on Nutrigenomics, Oxidative Stress, DNA damage and repair, pesticides and tumors. Speaker at national and international conferences and ECM courses (Continuing Medical Education). She has won 3 national awards for best communication and collaborates with various newspapers. Member of the scientific committee of the International Association of Doctors for the Environment (ISDE), President of ISDE Ascoli Piceno provincial section, member of PAN (Pesticide Action network). She has been engaged for years in the promotion of health through correct food styles with particular attention to Organic Agriculture, and has participated in nutritional education programs in schools. She is a member and teacher at SINU (human nutrition company) and ABNI (association of nutritionist biologists). Reviewer for scientific journals: European Journal of Nutrition, Journal of Nutrition, Toxicology in Vitro, British Journal of Nutrition, Molecular Nutrition and Food Research.

**Sergio Bernasconi**, *Full Professor of Paediatrics, former Head of Paediatric Clinic, University of Parma* Graduated in Medicine and Surgery, specialization in pediatrics and endocrinology. Professor of Pediatrics. He directed the Department of Pediatrics at the University of Modena and Reggio Emilia and University of Parma. Former President of the Italian Society of Pediatric Endocrinology and Diabetology (SIEDP) and Member of the Council of the European Society for Pediatric Endocrinology (ESPE), from which he received the Outstanding Clinician Award in 2013. He's the author of over 300 international publications, mainly on issues of endocrinology and clinical genetics.

#### Piero Bevilacqua, Historian, writer and essayist, Sapienza University of Rome

He was professor of contemporary history at "La Sapienza" University in Rome; prior to which he taught in the halls of Salerno and Bari. He is a scholar with multiple interests, and is actively engaged in issues of agriculture, food and the health of people and of the planet. He founded in 1986 the Southern Institute of History and Social Sciences (IMES), which he still presides.

He is the author of numerous books among which On Venice and the waters:a planetary metaphor (Donzelli, Rome 1995) and Demetra and Clio. Men and environment in history (Donzelli, Rome 2001), The cow is savvy. Historical Reasons for the European Food Crisis (Donzelli, Rome 2002) and Earth is over. Brief history of the environment (Laterza, Rome-Bari 2006). He is also a poet.

#### Lucio Cavazzoni, former president of Alce Nero (organic food & products), bee-keeper

Graduated in sociology at Alma Mater Studiorum University of Bologna, he has been practicing bee-keeping since 1978. He is co-founder of Valle dell'Idice beekeeping cooperative and later of CONAPI, the National Beekeepers Consortium, which he led until 2008. Since 2004 he has been president of Alce Nero, the leading produer of organic products in Italy, with over a thousand farmers, beekeepers and organic processors who since the seventies produce good foods that respect the Earth

#### Salvatore Ceccarelli, International expert in Agronomy and Plant Genetics

Salvatore Ceccarelli was full professor of Agricultural Genetics at the Institute of Genetic Improvement, University of Perugia until 1987. Since 1980 he has conducted research at ICARDA (the International Center for Agricultural Research in Dry Environments, Aleppo, Syria) until 2006, and continued as a consultant until 2014. He is invited around around to speak and work as a consultant on participatory and evolutionary genetic improvement, crops adaptation to climate change, the use of genetic resources and the relationship between biodiversity, food and health.

#### Guy D'hallewin, Coordinator, National Research Council, CNR - ISPA UOS Sassari

Dr. Guy D'hallewin is agricultural engineer and completed his postgraduate studies at the Volcani Research Center and at the University of California Davis. Since 2015 he is coordinator of the Research Unit of the Institute of Science of Food Production of the Italian National Research Council in Sassari, Sardinia. His scientific activity focuses on developing sustainable approaches to contain food losses. Within this context, biodiversity evaluation and use play a key role in those breeding programs intended for industrial farming, which have lost natural biotic/abiotic resistance and in the evaluation of nutritional factors of commodities. The diffusion of old sustainable fruit crops, along with innovative handling systems to avoid crop spoilage after harvest, are presently his main concerns.

#### Nadia El-Hage Scialabba, International food ecology expert

Specialized in environmental sciences at the University of Charleston, USA, during her 33 years of service at the Food and Agriculture Organization of the United Nations (FAO) in Rome, she created and coordinated the interdisciplinary program for organic farming, in addition to her primary responsibility to integrate sustainability considerations into agriculture, forestry and fisheries, from guidelines for integrated management of natural resources, to sustainability protocols and full cost accounting methodologies. She is currently an international consultant on sustainability issues, including transformative approaches to food ecology - especially mitigating the impact of the food system on human health.

#### Hilal Elver, UN Special Rapporteur on the Right to Food

Hilal Elver is the United Nations Special Rapporteur on Right to Food since June 2014. She is an international law professor and Global Distinguished Fellow at the UCLA Law School Resnick Food Law and Policy Center; as well as the Co-director of the *Climate Change, Human Security and Democracy* project at the Orfalea Center, UC Santa Barbara, where she has been Distinguished Visiting Professor between 2002-2012. She has a law degree and PhD at the University of Ankara, and SJD at the University of California School of Law at Los Angeles (UCLA). She started her teaching career at the University of Ankara Faculty of Law, then she was appointed by the United Nations Environment Program as the UNEP Chair on Environmental Diplomacy at the Mediterranean Academy of Diplomatic Studies in Malta. She served also to Turkish government as the founding legal advisor of the Ministry of Environment, and General Director of the Women Status at office of the Prime Minister (1989- 1994). Until 2014 she was one of the members of the Turkish delegation at the UN Climate Change Convention (UNFCCC). Her first book on *Peaceful Uses of International Rivers: The Euphrates and Tigris Basin* published in 2002 by the Transnational Publisher. Second book, *Headscarf Controversy: Secularism and Freedom of Religion* published by Oxford University Press in 2012. Her most recent co-edited book with Paul Wapner is *Reimagining Climate Change* published in 2016 by Routledge Press.

**Richard Falk**, Professor of International Law Emeritus, Princeton; Director Climate Change Project; Advisor, POMEAS Project, Istanbul Policy Center, Sabanci University

Richard Falk is Albert G. Milbank Professor Emeritus of International Law at Princeton University (1961-2001). Since 2002 has been associated as Research Fellow with the Orfalea Center of Global and International Studies at the University of California, Santa Barbara. Between 2008 and 2014 he served as UN Special Rapporteur on Israeli Violations of Human Rights in Occupied Palestine. In 2017 Falk was the coauthor with Virginia Tilley of a report commission by the UN Economic and Social Commision (ESCWA) under the title "Israel's Practices and Policies Toward the Palestinian People Regarding the Question of Apartheid." Falk is also Senior Vice President of the Nuclear Age Peace Foundation. He currently directs a project on Climate Change, Human Security, and Democracy at UCSB, serves as Senior Vice President of the Nuclear Age Peace Foundation, and is a member of the Editorial Advisory Board of *The Nation, The Progressive*, and *Third World Quarterly*. He has been annually nominated for the Nobel Peace Prize since 2008. His recentbooks are (*Re)Imagining Humane Global Governance* (2014), *Chaos and Counterrevolution: After the ArabSpring* (2015), *Power Shift: The New Global Order* (2016), *Palestine Horizon: Toward a Just Peace*(2017), *Revisiting the Vietnam War*(ed. Stefan Andersson, 2017). He has also published a book of poems, *Waiting for Rainbows*in 2015.

**Patrizia Gentilini**, Oncologist and Haematologist, ISDE – International Society of Doctors for the Environment, Scientific Committee

Graduated in Medicine and Surgery - University of Bologna. Specialization in Oncology at the University of Genoa. Specialization in Hematology - University of Ferrara. Qualification of Chief in Oncology. Biennial Course of Specialization in Medicine for Developing Countries at the Faculty of Medicine and Surgery "A. Gemelli "- Catholic University "Sacro Cuore" - Rome. She has worked as Medical Director 1st level Oncology at AUSL Forli until 2007 where she is now Responsible for Onco-Hematology Module, at the Oncology Unit. And has extensive experience both in the field of secondary prevention (early diagnosis) and therapy and assistance to patients with solid and hematological malignancies. For some years now, primary health protection through the reduction of exposure to environmental risks are among her primary interests. She speaks extensively on the subject of environment and health, with particular attention to child health, to air quality, to the economic costs of environmental pollution, to the defense of breast milk from environmental contamination, to sustainable agricultural practices, to proper waste management of waste. She is spokesperson of the National Campaign for the Defense of Breast Milk from environmental contamination. She is author and co-author of 84 scientific publications, as well as numerous informative articles. In August 2007 she received honorary citizenship from the Municipality of Serraungarina for her constant commitment and work as a scientific communicator. She is the recipient of the Recognition prize in memory of Lorenzo Tomatis in 2015 and the "Wangari Maathai - Peace, Women, Environment" in 2016.

**Jacopo Gabriele Orlando**, Public Affairs & Project Development Manager, Aboca Group (research and innovation in medicinal herb-based products)

Joined the Aboca Group in 2013 responsible for Project Development in Agri-business, Agricultural Public Affairs Management, economic assessments and corporate sustainability. Since 2017, he is Vice President of AssoBio (the Italian Organic Industry Association) and member of the Board of Directors of FederBio Servizi. He was part of the Cabinet of the Italian Minister of Agriculture during the international negotiations for the Common Agricultural Policy (CAP 2014/2020). He holds a BSc degree in Agricultural and Environmental Sciences and a MSc in Agricultural Economics at the University of Perugia. He further developed his studies in Agricultural Economics at the Food and Resource Economics Institute of the Copenhagen University (2010), as well as at the Center for Agricultural and Rural Development of Perugia (2011). He is author of articles focusing on agricultural economics and agricultural policy, as well as member of the Agronomists Order of Perugia and of the European Association of Agricultural Economists.

**Srinath Reddy**, President, Public Health Foundation of India and the World Heart Federation, All India Institute of Medical Science (AIIMS)

President, Public Health Foundation of India (PHFI) and formerly headed the Department of Cardiology at All India Institute of Medical Sciences. He served as the First Bernard Lown Visiting Professor of Cardiovascular Health at the Harvard School of Public Health (2009-13). He is presently an Adjunct Professor at Harvard and Emory & Honorary Professor of Medicine at the University of Sydney. He has served on many WHO expert panels & has been the President of the World Heart Federation (2013-14). He chaired the High Level Expert Group on Universal Health Coverage, for the Planning Commission of India. Prof. Reddy is a member of the Leadership Council of the Sustainable Development Solutions Network, established to assist the United Nations in developing the post-2015 goals and chairs the Thematic Group on Health in the SDSN. Prof. Reddy is a member of the Global Panel on Agriculture and Food Systems for Nutrition. He has published more than 480 scientific papers. His several honours include WHO Director General's Award and Luther Terry Medal of American Cancer Society for Outstanding contributions to global tobacco control and the Queen Elizabeth Medal for health promotion. He was conferred Padma Bhushan by the President of India in 2005.

**Mira Shiva**, Director, Initiative for Health and Equity in Society, former Chairperson, Health Action International Asia – Pacific

For over 3 decades Dr. Mira Shiva, medical doctor and activist, has been engaged in comprehensive primary health care, issues of Gender justice, social & health equity. She did her Post graduation in Medicine from Christian Medical College Ludhiana, Punjab and has been involved in relief work & health impact studies after the Bhopal Gas Tragedy, as well as with issues of rational drug policy & rational use of drugs, Women & Child health, Food & Nutrition security, Food Safety & Biosafety, environemtn and health, and using law for Public Health. She is a Founder Member of People's Health Movement, & its Steering Committee Member and Founder Member & former Chairperson of Health Action International (Asia Pacific). She is

Coordinator for the Initiative for Health & Equity in Society, Founder Coordinator & Co-Convenor of All India Drug Action Network. She was also member of the Central Council for Health and Chairperson of the Consumer Education Task Force on Safety of Food & Medicine, Health Committee of National Human Rights Commission. She was Head of Public Policy & Director Women Health & Development & Rational Drug Policy on Voluntary Health Association of India. She is steering Committee Member of the Right to Food Campaign , Diverse Women for Diversity , Indian Alliance for Child Rights, National Alliance for Maternal Health & Human Rights. She was member of the Working Group on Regulations for Food & Drugs, Founding member of Doctors for Food Safety & Biosafety, Founder Member & Co coordinator of Indian Initiative for Management of Antibiotic Resistance. She was the National Focal Point for National Profile for Women Health & Development 2001 & Co-editor of the relevant Publication. She has co-authored & co-edited several political and scientific papers on issues of drugs, women's health, and poisons in our foods. She is recipient of the first Dr Olle Hansson award and of the Women Scientists Award in 2006 by Science & Society , Dept of Science & Technology for "prevention of misuse of Medicines & Medical Technologies".

**Vandana Shiva**, Meeting convenor, Founder, Navdanya, Research Foundation for Science, Technology and Ecology

Vandana Shiva is a physicist, ecologist, activist, and the founder and director of Navdanya International. In 1982 she founded the Research Foundation for Science, Technology and Ecology (RFSTE), an independent research institute that addresses the most significant problems of ecology of our times, and two years later, Navdanya ('nine seeds') the movement in defense of biodiversity and small farmers. In 2011 she founded Navdanya International in Italy and is Chairman of the International Commission on the Future of Food and Agriculture, co-founded with the then President of the Region of Tuscany. Recipient of many awards, including in 1993 the Right Livelihood Award, also known as the 'Alternative Nobel Prize', and named among the top five "Most Important People in Asia" by AsiaWeek in 2001. Shes is a prolific writer and author of numerous books and serves on the board of the International Forum on Globalization, and member of the executive committee of the World Future Council.

# Navdanya International Editorial Team

Vandana Shiva, Caroline Lockhart, Ruchi Shroff, Manlio Masucci, Elisa Catalini, Neha Raj Singh, Prerna Anil Kumar, Isabella Troisi and Terra Nuova Edizioni.