



Asian Local Governments for Organic Agriculture

ORGANIC FOUNDATION COURSE
**A READER FOR
ORGANIC DEVELOPMENT**





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Compiled and edited by Konrad Hauptfleisch, Starfish Organic

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Preface

The Organic Foundation Course Reader for Organic Development (OFC) is an outflow of the very successful series of Organic Foundation Courses conducted by the Asian local Governments for Organic Agriculture (ALGOA), IFOAM Organics Asia, and the Asian Organic Youth Forums in recent years. It has been compiled and developed specifically for Asian stakeholders and is now one of the tools to steer the OFC programme on its course. As it is a living document, it is meant to be read, re-read, commented on and revised.

The Reader is fully funded by Goesan County, South Korea, the current holder of the Presidency of ALGOA. ALGOA was initiated by IFOAM-Organics Asia in 2015 and is legally registered in South Korea as a non-profit organization with the purpose of working in close collaboration with local governments to foster the growth of organic agriculture in Asia. See more at: www.organicgovts.com.

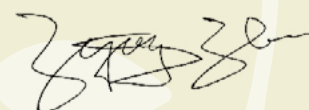
We would like to thank all the contributors, resource persons and the staff of Goesan County and IFOAM-Organics Asia for their worthy contribution in editing and updating this reader for our course.

Special thanks go to our “Great Teacher”, Mr Konrad Hauptfleisch, who has inspired us into action through his lectures at the various OFC sessions and the Asian organic Youth Forums and for his valuable guidance throughout the publication of the Reader.

We hope you will enjoy the Reader and make full use of its contents. Happy Reading!



Lee Cha Young
President of ALGOA
IFOAM-Organics Asia



Zhou Zejiang
Mayor of Goesan County

1. Why do we need to change?

Author: Konrad Hauptfleisch

Arguments for a radical and urgent change of the current food and farming system in the context of the climate crisis and environmental destruction.

These sprays, dusts, and aerosols are now applied almost universally to farms, gardens, forests, and homes - nonselective chemicals that have the power to kill every insect, the 'good' and the 'bad,' to still the song of birds and the leaping of fish in the streams, to coat the leaves with a deadly film, and to linger on in soil - all this though the intended target may be only a few weeds or insects. Can anyone believe it is possible to lay down such a barrage of poisons on the surface of the earth without making it unfit for all life? They should not be called 'insecticides,' but 'biocides'. – Rachel Carson, 1962

Why is it so critical for us to change our food production, trade and consumption systems?

Are we not feeding more people better than ever before in the history of humanity on this planet? Surely, with the advent of modern industrial agriculture, tailor-made, high-yielding seeds, feeds, and fertilisers, we have addressed many of the challenges facing our communities, and we have better nutrition, fewer deaths to malnutrition and better use of resources. For most of us, our budget for food has reduced due to the lower food prices and higher availability. We have more money to spend on other commodities and services and can invest in our future and that of our children.

This narrative is all too familiar. A positive spin on a food system that has gone wrong in so many ways, on a planet where every living creature is facing a crisis of existence. And ironically, the system that is providing sustenance to billions of its inhabitants is contributing to its destruction.

Conventional, industrial agriculture has reached a crossroads. It has been part of the problem for more than a century now. Organic agriculture, an innovative and adaptive production system, can help ensure that agriculture is practised differently, and become part of the solution.

During most of this century, the dominant trend in agriculture has moved away from the principles of sustainability. Agriculture production systems have been copied from industrial models. The principal objective has been to increase the productivity of soil and labour by introducing external energy and other commercial inputs. This has been a successful strategy in agriculture, just as in industry. However, the cost has been a drastic increase in agricultural resource use and environmental pollution.

Agriculture's heavy footprint

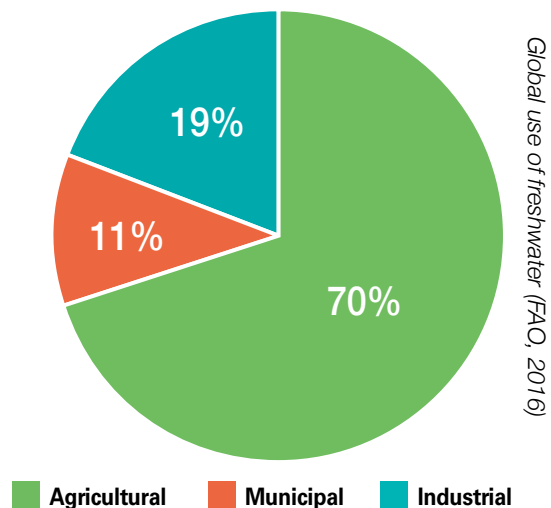


According to a global survey, “World Agriculture and the Environment,” by Dr. Jason Clay, head of the Centre for Conservation Innovation at World Wildlife Fund (WWF), agriculture uses more than 50% of the habitable area of the planet, including land that should not be farmed, and destroys some 100,000 square miles of forests and other critical species habitat annually. Globally, agriculture wastes 60% of the 2.5 trillion litres of water that it uses each year.

While an increase in agricultural productivity has meant some reduction of agricultural land use, this emphasis on increasing yields and productivity has in many cases also had extremely negative consequences on environmental sustainability.

These consequences were often not foreseen, as they occurred over time, and some occurred outside of the traditional farm boundaries. For instance, over 1.9 billion ha (and 2.6 billion people) today are affected by significant levels of land degradation. Fifty years ago, water withdrawal from rivers was one-third of what it is today: currently 70% of freshwater withdrawal globally (2700 km³-2.45% of rainfall) is attributable to irrigated agriculture, which in some cases has caused salinization. Approximately 1.6 billion people live in water-scarce basins. Agriculture contributes about 60% of anthropogenic emissions of CH₄ and about 50% of N₂O emissions. Inappropriate fertilization has led to eutrophication and large dead zones in a number of coastal areas, e.g., Gulf of Mexico, and some lakes, and inappropriate use of pesticides has led to groundwater pollution, and other effects, for example loss of biodiversity. (IAASTD Global Summary for Decision Makers, 2008)

Global sum of all withdrawals



(IAASTD Global Summary for Decision Makers, 2008)

Broken nutrient cycles

Plant nutrition is now based on commercial fertilisers, which are mined from non-renewable supplies in the earth crust, or industrially made with large inputs of fossil energy. Consequently, the recycling of farmyard manure and other organic waste as plant nutrients is no longer seriously pursued. Animal husbandry has concentrated to specialised production sites and regions, where their manures have turned into a disposal problem instead of a production resource. Human waste and other organic material from cities and towns are rarely returned to the soil.

The use of commercial fertilisers drastically changed production patterns. Grain cultivation, no longer limited by the availability of natural nutrients, expanded greatly. Animal husbandry, once based on coarse fodder (roughage) from pasture or nitrogen-fixing ley (cultivated grassland), is now based on grain. Grain-dependent animal species - pigs and chickens - now dominate meat production. The quest for increasing output has led to grain-dominated feeding even of ruminants, in particular dairy cows. The overall level of nutrient input has increased greatly whilst large amounts of nutrients are lost in cities and in agriculture. Nutrient leakage and contamination problems are to a great extent linked to the heavy concentration of animals in limited space and regions.

Pesticides: The lack of crop rotation in chemical fertiliser-based agriculture leads to a reliance on chemical means to control weeds and pests. A gradual strengthening of pesticide legislations in affluent countries of the North presently keep environmental and health risks under control. In many countries in the South where pesticide use is not well regulated, millions of people suffer acute poisoning yearly. Worldwide residues accumulate in both surface and ground water.



Bee-friendly biodynamic farm, Netherlands (Photo: Konrad Hauptfleisch, 2014)

Pesticide poisoning

WHO has estimated that 3 000 000 persons are exposed to single and short term pesticide poisoning resulting in over 200 000 deaths per year. (WHO, 2017) Another 735 000 persons suffer from chronic effects of long-term exposure. In addition, an unknown number of ordinary people are affected by long-term, low-level exposure through foods and 'background' pollution.

Animal confinement: Competing yields in animal husbandry has led to unnatural feeding, and also to unnatural or sometimes cruel production systems, i.e. without movement, access to out-door space or possibility for normal behaviour. Consequently, a high use of pharmaceuticals, e.g. antibiotics and parasiticides are needed to

maintain animal health. Use of antibiotics as prophylactic threatens future treatment as bacteria and parasites develop resistance to the antibiotics.

Threatened production resources

Soil: Soil fertility on farms managed entirely without organic fertiliser, deteriorates from the combination of grain monoculture, diminishing levels of organic matter and soil structure damage from use of heavy machinery. These farms are also more likely to be affected by cadmium pollution through the use of phosphate fertilisers.

Soil erosion together with damage from exaggerated irrigation are the two major causes of soil degradation. Both are directly related to industrial cultivation methods. Water and fertile soil have become limiting factors for agriculture production. In many tropical regions, native rainforest is clear-cut to make room for beef ranching. Soil is also destroyed when farmland is converted to industrial or housing suburbs to accommodate expanding cities.

Loss of agricultural land

Worldwide, almost 2 billion hectares of land (about 15% of vegetated soils) have been degraded since 1945, about 300 million hectares of which have suffered such extreme degradation that reclamation of their original biotic functions may not be feasible. Two-thirds of the world's degraded lands are located in Asia and Africa, but human-induced degradation is most severe in Central America and Mexico, where one-quarter of the vegetated land is degraded. About 15 million hectares of forests are cut down each year, much of it for conversion to agricultural use by farmers.

Overgrazing, deforestation, and over-exploitation for fuel wood account for about 70% of global soil degradation since 1945. To a large extent, these problems result from or are exacerbated by inadequate property rights, poverty, population pressure, inappropriate government policies, lack of access to markets and credit, and inappropriate technology for agricultural intensification. Faulty agricultural practices, which account for another 28% of soil degradation, may also be partly attributable to poverty.

Biodiversity loss

Biodiversity has reduced massively under modern agriculture. Farmers of traditional and low input agricultural systems have long favoured diversity on the farm, and it is only recently that monocropping (fields reduced to single species and varieties) have become common. The introduction of modern varieties and breeds has almost always displaced traditional varieties and breeds. More than 90 percent of crop varieties have disappeared from farmers' fields; and 75% of planet genetic diversity has been lost. Half of the breeds of many domestic animals have been lost. Only about 150 plant species are now cultivated, of which just 3 (rice, maize and wheat) supply almost 60 per cent of calories derived from plants.

Stressed Farmers: Industrialisation of agriculture has greatly reduced the independence of farmers. Production patterns and production methods are strongly influenced by input providers on the one hand and the processing industry on the other. Increasing economy of scale and productivity through enlargement of holding and new technology are often

presented as the only options for farmers to maintain viability in face of competition, market price pressures and input costs.

The economically and socially stressed situation of many farmers, both in the North and South, is not sufficiently regarded. The “family farmer” today typically works alone with a high workload, heavy economic responsibilities and extremely long hours.

The message emerging from recent climate research makes even scarier reading when considering our ability to grow our food in the very near future. The consensus in the research and scientific community is overwhelming. Business as usual is no longer an option. Since the IAASTD Report was published with this dire warning ten years ago, new research has not only corroborated the need for radical transformation, but the speed in which this change is needed.

Why we have to change need no longer be questioned, but two questions still remain among many in the agriculture sector: Change to what? And how? In the following chapters we will make the argument for organic agriculture as the best example of true sustainability in agriculture. We will explore the history, the principles and the practices of a farming approach that is central to the survival of not only the human species, but every other living organism on this - still beautiful - blue planet.



Dumungag, Zamboanga del Sur, Philippines. (Photo: Konrad Hauptfleisch 2014)

2. Our Roots: History and pioneers of organic agriculture

Author: Konrad Hauptfleisch

“To forget how to dig the earth and to tend the soil is to forget ourselves.”

Mahatma Gandhi

History and early pioneers

What is the history of organic agriculture? How old is it? Who pioneered it? On the surface, these are deceptively easy questions to ask, but not so easy to answer. As we learn in science and philosophy, defining the question correctly is critical to the process of finding an answer. So, in order to ask the right question, let us take a few steps back:

There is evidence of plant cultivation on our planet as far back as 23,000 years ago, of animal husbandry between 10,000 and 13,000 years ago, and of the use of manure, compost, and ash over 10,000 years ago. We learnt from [a study published in 2020](#), confirming earlier theories that humans have been managing the Amazon forest through a system of agroforestry, plant breeding, composting and use of biochar thousands of years ago.

So, we can comfortably say that agriculture is at least 10,000 years old, if not older. The question we should rather be asking then, is: How old is modern industrialised agriculture?



Fritz Haber, c. 1918 (Photo: Open Source)

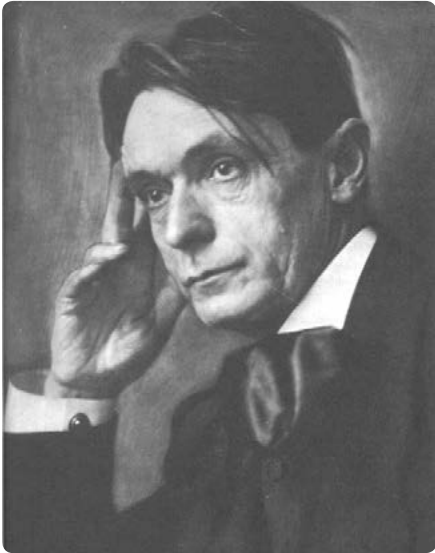
Modern industrial agriculture was really born in the early 20th century, with the development of the [Haber-Bosch process](#) in 1909 - synthesising nitrogen fertiliser in the form of ammonium nitrate from the atmosphere in massive quantities through an energy-intensive process, supported by the availability of cheap and plentiful fossil-fuels. Haber proudly called it “making bread from the air”. This process had two very divergent results: firstly, humans could feed their plants from a bag rather than through composting or other natural and traditional methods.

Secondly, this process gave the German arms industry access to large amounts of the same chemical, and the devastation of the First World War (1914-1918). Haber proudly supported the war effort, and was later also involved in the development of [Zyklon B](#) - an all-too-familiar and ironic twist in the story of human endeavour.

But the story of humanity also tells us that traditional, natural, and “agro-ecological/organic” farming systems have been around for over 100 centuries. What we so easily call “conventional” agriculture has been around for less than 1, and the Green Revolution for less than 60 years. And considering that the first GMO technology in agriculture was only

approved in 1994, we should rather consider the following statement when discussing agriculture:

The true convention in agriculture should be organic agriculture – based on a combination of indigenous knowledge systems, a deep understanding of ecosystems, nutrition, sustainability and agro-ecological approaches, should be the dominant agriculture system. The more recent experiment in industrial food production systems based on extraction, oversimplification and over-reliance on non-renewable resources, should be called what it is – a failing experiment.



Rudolf Steiner, c. 1919 (Photo: anthroposopie.net)

So, if organic agriculture is the oldest and most proven of the food production systems, what do we mean when we talk about the history and pioneers, starting with such people as Rudolf Steiner with biodynamic agriculture in 1924, Albert Howard learning from India and teaching Europe in the 1940s or Lady Eve Balfour publishing *The Living Soil* in 1943? They did their work in the first half of the 20th century, at the same time as the birth of extractive industrial agriculture. They are pioneers of the “Organic Agriculture Renaissance” – first movers and visionaries who realised that the industrial experiment with agriculture is going down a dangerous path with its unsustainable and even harmful approaches (something that has become very apparent in recent years).

We should celebrate all the pioneers of modern organic agriculture. Apart from the three mentioned above, there are many more, from every continent and every nation. In the sub-chapters below, we will focus on a few of the pioneers and pioneering agencies that helped define the future of organic agriculture in Asia. We honour these pioneers; we share their stories and we honour the pathfinders.



Eve Balfour (Photo: Pinterest) Hauptfleisch, 2014)

In order to map a successful organic future, it is essential to celebrate our organic past.

Pioneers of Organic Agriculture in India

Bhaskar Save: the Gandhi of natural organic farming from India

Author: Sabyasachi Roy

“I see with conviction that only by organic farming in harmony with nature can India sustainably provide abundant wholesome food and meet every basic need of all - to live in health, dignity and peace.” – Bhaskar Save, 2006

Early life



The Gandhi of natural organic farming, Bhaskar Hiraji Save was born on 27 January 1922 in the coastal village of Dehri, near the Arabian Sea in Gujarat state of India into a family of farm tenders. During his early years, modern conveniences, like electricity did not yet exist. Farming was a natural, integral part of life, changing according to the season, but regulated by the monsoon, which signalled the

beginning of a new production season. He grew up on his family farm which cultivated traditional crops like rice, pulses, and vegetables. Despite the demands of farming there was abundant leisure time, which allowed him to observe and enjoy the beauty and gifts of nature. He spent ten years as a teacher while working every morning from 6 to 10 AM on the family farm.

In 1951, he married his wife Maltiben. In the same year he dug a well and along with water irrigation, came the first use of chemical fertilizers. He started to have bumper crops which even attracted public attention. He was convinced as well as convincing with this new form of agriculture and became a “model farmer” in the early days of the synthetic chemicals led “green revolution.” In the mid-1950s, he made good profits and bought one hectare of land suitable for growing paddy in Dehri, which became the foundation of his widely popular Kalpavruksha farm. However, Bhaskar Save had a realization that he had entered a vicious cycle with the use of chemical fertilizers. Just to avoid dropping yields he had to use more and more mineral fertilizer (Wikipedia, 2020; Mansata, 2010; Rapunzel, 2010).

Organic experiments with the truth

Since his early age, Bhaskar Save was highly influenced by the Mahatma Gandhi. Gandhi's ideas inspired his “organic experiments with truth” that became the precursor to his conversion into organic farming. Another influential person was Vinoba Bahve who impressed Bhaskar Save not only with his writings on farming, but even more so with his integrity, a trait Vinoba shared with Gandhi.

Bhaskar Save reverted to organic paddy farming and initially experienced significant decrease in yield. However, he also realized there was significant decline in input costs, which gave him a marginal profit even during first year of conversion. Initially, he did not fully convert to organic farming, but continued to use chemicals for the production of his market vegetables. However, he faced difficulties in marketing the vegetables due to over-supply, and thereby, he switched to planting of fruits and nuts. More and more diversity flourished on his farm where he grew a mix of field and horticultural crops. Trees became an integral part of his farm and he reworked the ancient system of “trench and platform system” of raised platforms divided by irrigation trenches on which trees are grown, which also got recognition from the United Nations. His “experiments” convinced him to convert into an organic farmer and he totally stopped using synthetic chemicals on his land (Rapunzel, 2010; Wikipedia, 2020).

Strong critique of chemicalized green revolution

On July 29, 2006, Bhaskar Save wrote an open letter to the father of Green Revolution in India, Dr. M.S. Swaminathan, the then Chairperson of the National Commission on Farmers constituted by the Government of India to bring attention to the mounting suicide rate and debt among farmers. The letter was a strong critique of the government's agricultural policies and called for urgent and fundamental re-orientation (Pawar, 2015). He wanted to encourage policy makers to abandon their policies of importing and promoting the use of toxic chemicals that the ‘green revolution’ had encouraged. He regarded the green revolution as having been a total disaster for India – socially, economically and ecologically (Todhunter, 2015).

Bhaskar Save stated that modern technology, wedded to commerce – rather than wisdom or compassion – has proved disastrous at all levels... We have despoiled and polluted the soil, water and air. We have wiped out most of our forests and killed its creatures. And relentlessly, modern farmers spray deadly poisons on their fields. These massacre nature's creations (jeev srushti) the unpretentious but tireless little workers that maintain the ventilated quality of the soil and recycle all life-ebbed biomass into nourishment for plants. The noxious chemicals also inevitably poison the water, and nature's prani srushti (life creations), which includes humans.

He further stated that for more than forty centuries, our ancestors farmed the organic way – without any marked decline in soil fertility, as in the past four or five decades? Is it not a stark fact that the chemical-intensive and irrigation-intensive way of growing monoculture cash-crops has been primarily responsible for spreading ecological devastation far and wide in this country? Within the lifetime of a single generation! However, Bhaskar Save was optimistic that a fundamental change in policy could turn things around. In conclusion, he wrote that the national commission on farmers

has the integrity to support widespread change to mixed organic farming, tree planting and forest regeneration (with local resources and rights) – that India greatly needs (Save, 2006).

Table 1: Comparison between chemical farming and organic farming by Bhaskar Save

SI. No.	Chemical farming	Organic farming
1	Fragments the web of life	Nurtures its wholeness
2	Depends on fossil oil	Depends on living soil
3	Farmers see their land as a dead medium	Farmers know theirs is teeming with life
4	Pollutes the air, water and soil	Purifies and renews them
5	Uses large quantities of water and depletes aquifers	Requires much less irrigation, and recharges groundwater
6	Mono-cultural and destroys diversity	Poly-cultural and nurtures diversity
7	Produces poisoned food	Yields nourishing, poison-free food
8	Has a short history and threatens a dim future	Has a long history and promises a bright future
9	An alien and imported technology	Has evolved indigenously
10	Propagated through schooled, institutional misinformation	Learns from Nature and farmers' experience
11	Benefits traders and industrialists	Benefits the farmer, the environment and society as a whole
12	Robbs the self-reliance (and self-respect) of farmers and villages	Restores and strengthens it
13	Progressively leads to bankruptcy and misery	Liberates from debt and woe
14	Violent and entropic	Non-violent and synergistic
15	A hollow 'green revolution'	The true green revolution
16	Crudely materialistic, with no ideological mooring	Rooted in spirituality and abiding truth
17	Suicidal, moving from life to death	The road to regeneration
18	The vehicle of commerce and oppression	The path of culture and co-evolution

Bhaskar Save’s four principles of farming in harmony with nature

Bhaskar Save observed that there are four fundamental principles of natural farming Masanta (2010) and they are quite simple as given below:

- i) All living creatures have an equal right to live and to respect such right, farming must be non-violent.
- ii) Everything in nature is useful and serves a purpose in the web of life.
- iii) Farming is a dharma, a sacred path of serving nature and fellow creatures; it must not degenerate into a money-oriented business. Short-sighted greed to earn more – ignoring nature's laws – is the root of the ever-mounting problems we face.
- iv) Finally, principle of perennial fertility regeneration. It observes that we humans have a right to only the fruits and seeds of the crops we grow. These constitute 5% to 15% of the plants' biomass yield. The balance 85% to 95% of the biomass, the crop residue, must go back to the soil to renew its fertility, either directly as mulch, or as the manure of farm animals. If this is religiously followed, nothing is needed from outside; the fertility of the land will not decline.

My university is my farm



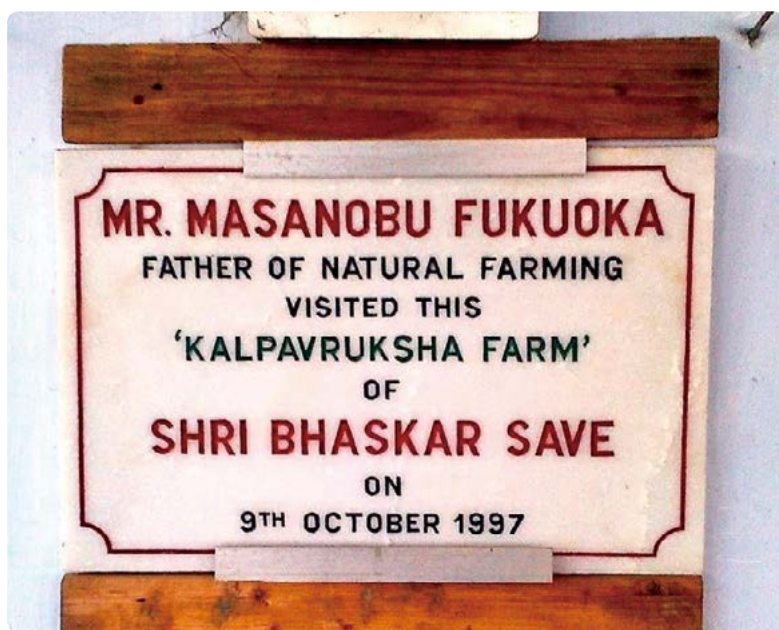
Bhaskar Save's farm in 2012, exemplifying the concept of integrated natural systems and multi-storeyed cultivation (Photo: Konrad Hauptfleisch, 2012)

Bhaskar Save's "Kalpavruksha," a food-forest natural farm of 14 acres, is the glorious example of what he taught in his entire life. It has trees, crops, weeds and rich soil and is a net supplier of water, energy and fertility to the local ecosystem rather than a net consumer. He believed that "cooperation is the fundamental law of nature," a simple and concise introduction to the philosophy and practice of natural farming.

Bhaskar Save grew native variety of high-yielding rice, several kinds of pulses, winter wheat and some vegetables and tubers in seasonal rotation on about two acres of the land. These provided enough for the self-sustenance of the farmer's immediate family and occasional guests. Mostly, there was some surplus rice, which he gifted to relatives or friends, who appreciated its superior flavour and quality.

About 10 acres was for a mixed natural orchard of mainly coconut and sapota. The orchard also included numerous trees of bananas, papayas and areca nuts and a few of dates, drumsticks, mangoes, jackfruit, toddy palms, custard apples, jambul, guavas, pomegranates, limes, mahua, tamarind and neem apart from bamboo and shrubs like curry leaves and tulsi, and vines like pepper, betel leaf and passion fruit. The remaining two acres was for a nursery for raising coconut saplings that was always in great demand.

Probably the unique achievement of Kalpavruksha was that the high yield outperformed any modern farm using chemicals, while costs (mainly labour for harvesting) are minimal, and external inputs almost zero. The number of coconuts per tree was perhaps the highest in the country. A few of the palms yielded over 400 coconuts each year, while the average was about 200. The sapota, planted nearly 50 years ago, provided about 300 kg of delicious fruit per tree each year. In the farm, rarely there was any small patch of bare soil exposed to the direct impact of the sun, wind or rain.



A plaque at Bhaskar Save's farm, commemorating Fukuoka's visit (Photo: Konrad Hauptfleisch, 2012)

Kalpavruksha is an outstanding example of natural farming. In 1997, Masanobu Fukuoka, the legendary pioneer of organic movement visited Bhaskar Save and described Kalpavruksha farm as “the best in the world, even better than my own!” Over the years, the farm became a sacred university for many, as every Saturday, which was also the Farm's Visitors' Day brought in numerous people, including farmers from all over India, agricultural scientists, students, senior government officials, city folk and occasional travellers from distant lands, who have read or

heard of the Bhaskar Save's work (Mansata, 2010). Since 2014, a residential Natural Farming Learning Centre has been initiated that offers a six-day long introductory courses in three Indian languages, viz. Hindi, Marathi, Gujarati and also in English.

Conclusion

Bhaskar Save died on 24 October 2015 at the age of 93. He was a source of inspiration for generations of farmers and will continue to be for many generations to come. His way of farming and teachings was rooted to his deep understanding of the symbiotic relationships in nature, which he was ever happy to share freely and enthusiastically with anyone interested. He showcased that Small, diverse, ecological farms produce not only more, but much better, food. His emphasis on self-reliance at the farm and village level will always be remembered.

Throughout his exceptional life, Bhaskar Save got numerous awards and recognitions from state and central government of India and various organizations across the globe. In 2000, he was presented the Jamnalal Bajaj Award by the Honourable Vice President of India for Organic Farming Science and Technology and for Rural Development Work. In 2006, he received the Indian National Award from the Government of India for the Best Coconut Farmer. Above all, in 2010, the International Federation of Organic Agriculture Movements honoured Bhaskar Save with the “One World

Award for Lifetime Achievement.” The jury declared, “He is one of the most outstanding personalities in the organic world.”

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Dr. Alexander Daniel

The One who Paved the Way for Alternative Organic Agriculture Certification in India

Author: Joy Daniel

“Do not go where the path may lead, go instead where there is no path and leave a trail.”

-Ralph Waldo Emerson



Dr. Alexander Daniel (13 April 1944 – 21 December 2005) was a teacher, social worker, economist, and a social entrepreneur best known for his pioneering work on alternative and inclusive organic agriculture certification in India and promotion of such alternatives in the rest of the world.

Born in Sri Lanka and raised in Kanya Kumari District of Tamil Nadu state, the southern tip of India, Dr. Daniel earned his master's degree in economics from Presidency College, Madras. Later he obtained his Doctorate from Pune and also carried out post-doctoral work in Agricultural Economics from Bihar. These, along with his various degrees in journalism, languages, and studies in theology made him an acute thinker and communicator of social and economic issues that concern the marginalized sections of the communities.

He was a man of wisdom and vision. Having himself faced impoverished circumstances, he knew what it takes to overcome social prejudices and economic injustice. His experiences therefore channelled his vision and mission. His vision was that of a prosperous India, whose prosperity is founded on the Gandhian philosophy of integrated village economy. His two-fold mission in life was to bring prosperity to India through development of villages and to preserve the environment of planet earth by promoting organic agriculture. And to realize his vision and mission, he established the Institute for Integrated Rural Development (IIRD) in 1987 at Aurangabad. It was in this organization that he piloted his ideas which transformed communities and influenced policies in the country and around the world.

The 1980s and 1990s were the decades when policy makers, academia, and farmers were all postured towards chemical farming. While all of them had a say to prove that chemicals are good for the soil and the only way to produce food for the masses, Dr. Alexander Daniel chose to go the other way. Albeit all the freebies and incentives to promote chemical farming, there were pockets in the country where chemicals had not reached – tribal areas, traditional farmers, and millet farmers in rainfed areas. He paved an alternative path to bring these farmers within the ambit of certified organic farming. These, he firmly believed, were the ones who fed the nation and would help India rise prominently as a market for certified organic foods.

Over the years, he made significant contributions in the promotion of organic agriculture, alternative certification,

and related advocacies. These involve active participation and leadership roles in several national and international organizations. Some of his commendable achievements and roles include the following:

- Dr. Daniel felt that many of the rule-based approach of organic agriculture practiced in developed countries were rather alien to the illiterate farmers of India. He was a pathbreaker and a pioneer in developing the first voluntary Indian standards for organic agriculture through establishing a National Standards Committee in co-operation with several national NGOs and thousands of organic farmers. The voluntary standards “Concepts, Principles and Basic Standards of Indian Organic Agriculture”, had relevance to Indian agro-climatic and agricultural practices. It has been translated in several languages in the country and was a guiding document for the formulation for the National Programme for Organic Production (NPOP), India. He became a member, of the Standing cum Accreditation Committee for Organic Foods, Govt. of India (1999-2002) and was part of the advisory committee for developing governmental national standards for organic agriculture in addition to formulating procedures for inspection and certification.
- In collaboration with national research institutions and agriculture universities in Maharashtra, he developed a manual in Marathi for the local farmers of Maharashtra (Shendriya Sheti Pustika) for appropriate organic farming methods taking into consideration the drought prone conditions of the Marathwada region. This manual is being followed by the organic farmers of the region and is also used by trainers as training material.
- With the participation of farming communities in Paithan Taluka, he also developed local standards in Marathi (regional language) applicable to small and marginal farmers and appropriate to the dry and drought prone region of Marathwada (central India).
- He also pioneered an alternative quality assurance system called the community guarantee system, as against the expensive and incompatible third-party certifications which were not feasible for small farmers, who wanted to market their organic produce. The local guarantee system for organic farming is now developed into a government approved Participatory Guarantee System (PGS).
- He also developed alternative systems of marketing which he called “organic bazaars” to market the produce in local markets. These bazaars are modelled on traditional markets and it supported the farmers to establish direct market linkages with the consumers avoiding the middlemen and building enduring relationships. He developed innovative producer -consumer partnerships through dialogues and workshops with consumers and replicated this model focusing on the small and marginalized organic farmers in other districts of drought prone Marathwada region as well as other states of India.
- He travelled extensively and has contributed to organic agriculture on a worldwide scale especially in countries in the Europe and Asia. Dr. Daniel was elected into the World Board of International Federation of Organic Agriculture Movements (IFOAM) for the period 1996 to 1998.
- He helped strengthen the organic movement in Asia and was instrumental in developing the collaborative efforts of the Asian movement through his role as the Regional Coordinator of IFOAM – Asia (1995-2001) and was instrumental in the initiation of organic agricultural programmes in Japan, Korea, China, Sri Lanka, Nepal, Philippines, Thailand,

Malaysia, Hong Kong, Indonesia, Singapore and Vietnam

- He helped establish the Asian Research Network of Organic Agriculture (ARNOA) in 2001, based in South Korea, a research-based network, to discuss regional concerns on organic agriculture, involve in research to identify more sustainable pathways and advance the knowledge of organic agriculture. He was the President of the Network at his time of death.



Dr. Daniel receiving the SARD prize from Dr. Vandana Shiva. 1998

Dr. Daniel received several prestigious national and international awards for his contribution to the cause of organic agriculture and rural development. Special mention has to be made of the SARD (Sustainable Agriculture and Rural Development) Award 1999 and the IFOAM Recognition Award, 1999 for outstanding contribution towards promotion of organic agriculture world-wide

My Personal Memoirs of Dr Alexander Daniel

By Mathew John

The journey might not go back a long way as many others in this book might have experienced but it seemed just a few years ago that I met Dr. Daniel – it was at a meeting organized by an organic group, based in Germany. Isn't it a surprise and a pity that many times, many of us get to meet people from our own country and working in the same field, in other countries and at workshops and conferences? We got put together as roommates and so the relationship grew – one, a senior statesman and another, a young guy taking his first steps and being initiated into the theory and practice of organic agriculture.



Dr. Daniel addressing the first IFOAM-Asia meeting, 1995

The dilemma always remained – in India, calling him Dr. Daniel out of respect but while travelling together in many other parts of the world, it was always Alexander. Don't know what he felt about it but our friendship grew as we were constantly together on many forums, pushing the agenda of small farmers together. For

me, a milestone was achieved when we were together in Brazil in 2004, talking about alternative certification systems for small and marginal farmers and harvesters. For him, it was something that he had been talking about and advocating for many years – he had held many consultations in the country trying to bring a more understanding and humane touch to the certification world. It was great bouncing ideas and concepts off him and trying to balance the needs and dreams of farmers who also wanted the benefits of certification and access to markets.

It still remains a challenge in our country and as we continue to break new ground in Participatory Guarantee Systems, his memory and enthusiasm will continue to remain in my memory.

For us, it was a tremendous effort on the marketing front where we were constantly trying to convince customers that products were organic. Many of them had sceptical looks that said it all. We knocked on the doors of many certification agencies, but a workable solution did not appear. We attempted at our end to disseminate informa-

tion that we were working with each one of these farmers/gatherers on a continuous basis and the guarantee that we gave was the most precious thing that we could offer.

Participatory Guarantee Systems (popularly, called PGS all over the world, now) was a tremendous boost for small producers as it helped them to access the market on their own terms. They were part of the appraisal system and hence the products that they sold carried their stamp of guarantee – more information is available at www.pgsorganic.in and

http://www.ifoam.org/about_ifoam/standards/pgs.html .

Hope that the enthusiasm and courage he showed to many will continue to ignite fires of enthusiasm among the many who knew him or heard about him.

Pioneers of Organic Agriculture in Japan: **Masanobu Fukuoka**

Author: Miyoshi Satoko

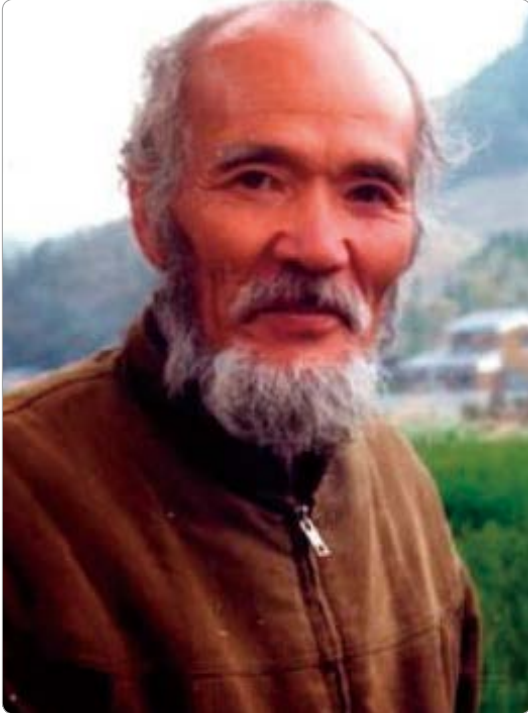


Photo Credit: Wikipedia

Masanobu Fukuoka (1913-2008) is often known as the “Father of Natural Farming” and his method of farming was described in his book, *The One-Straw Revolution – An Introduction to Natural Farming* - which has been translated into more than 20 languages, and over one million copies sold worldwide.

The book starts with these remarkable words of “I believe that a revolution can begin from this one strand of straw. Seen at a glance, this rice straw may appear light and insignificant. Hardly anyone would believe that it could start a revolution. But I have come to realize the weight and power of this straw. For me, this revolution is very real”.

Photo Credit: Wikipedia

Fukuoka’s philosophy of nothingness (無) has been widely supported with empathy, and understood as the way of life as well as a farming method. It is also referred to as “the Fukuoka

Method”, “the natural way of farming” or “Do-Nothing Farming”. It was a “no-till, no-agrochemical, no-fertilizer” method, which was contrary to the contemporary farming trends of that period. His method of farming still attracts many new recruits to farming.

Fukuoka’s Four Principles of Natural Farming as outlined in the *One Straw Revolution*

1. No cultivation: no ploughing or turning of the soil.
2. No use of chemical fertilizer or compost prepared: do not interfere with nature
3. No weeding by tillage or using herbicides: Weeds are part of nature and are important in building soil fertility and balancing the biological community.
4. No use of chemicals

According to Fukuoka, the “four principles of natural farming comply with the natural order and lead to the replenishment of nature’s richness”.

Fukuoka practiced his unique way of farming in harmony with nature and not by controlling nature and doing as little as possible – leaving nature to do its job. His way of natural farming is based on the complexity of living organisms including micro-organism, plants, insects, and humans. Farming is not just for producing foods, but is an aesthetic and spiritual approach to life, as he believed that the ultimate goal of farming is to cultivate the human being to perfection.

“Spreading straw might be considered rather unimportant, but it is fundamental to my method of growing rice and winter grain. It is connected with everything, with fertility, with germination, with weeds, with keeping away sparrows with water management. In actual practice and in theory, the use of straw in farming is a crucial issue. This is something I cannot seem to get people to understand.”

Masanobu Fukuoka, One Straw Revolution

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Yoshinori and Tomoko Kaneko

Author: Jennifer Chang

I first met Yoshinori and Tomoko Kaneko when I visited their farm in late February 2012. The farm was an hour away by train from Tokyo and I still remember the warm welcome that was given to me. Since then, I have taken the time to visit them whenever I was in Tokyo. The journey to the Shimosato Village in Ogawa-town in Saitama Prefecture was something of a highlight to me, almost like a visit to two favourite relatives. I would come away from every visit inspired and “healed” and this feeling would stay with me for a long time, sustaining me in my work to build up a regional body in Asia.



The Kanekos Receiving the IFOAM Asia Lifetime Achievement Award in 2016

Yoshinori and Tomoko Kaneko are both pioneers in the organic movements in Japan and are respected for their personal integrity and honest characters with a strong sense of social responsibility. They are visionaries and deeply respected as outstanding leaders in the local farming community, for their dedication to development of organic farming for more than 40 years. They have been mentors and exemplary models for young future leaders and have trained more than one hundred and sixty local and foreign trainees interested in organic farming. Many of these trainees have continued on to become organic farmers in their local communities.

1970s: Start of Organic Farming

In the early 1970s, after graduation from the Natural Farmers Academy, Yoshinori Kaneko, realized that the Japanese society was totally dependent on imported agricultural products and decided to undertake organic farming. He believed that if farmers produce safe and tasty organic products, urban consumers would surely be supportive and purchase their products.

Building up Good Soil

Under the belief of that good soil is the most basic in organic farming, he decided to build up a circulation system starting with cow dung manure. Whatever was produced was eaten by themselves or their consumers and leftovers were used to feed the livestock. Manure from livestock and the fallen leaves from the nearby forest as well as the rice straw from the paddies became raw materials of barnyard manure. Later, he would move on to the use of only vegetable matter compost to avoid pest damage caused by nitrogen excess and to consider the basic balance of soil.

Establishment of a “Seed Exchange Meeting”

The Kanekos organized the first “seed exchange meeting” in their Farm in 1982. Most of the organic farmers in Japan have been collecting their own seeds or were in possession of heirloom or native seeds which had high productivity and were less conducive to pests and more resilient to survive poor soil conditions. The idea was for farmers to bring their best two varieties of in-house seeds and to multiply the cultivars and to begin a mechanism that could increase and preserve biodiversity.

1980s: “Orei-sei” system of payment

One of the Kanekos’ first schemes in the early 1970s was to link up their farm in a small community of self-sufficiency with ten households. Their farm would provide food for the ten households in a unique “Orei-sei” system where the price for the produce would be determined not by farmer but by consumers according to their free will.

The word “Orei” from “Orei-sei” means “gratitude” - consumers paid what they could for the food delivered from the farm and this expression of gratitude was not even necessarily in the form of financial remuneration. Even today, fifteen households in the Tokyo metropolitan area and fifteen households in the vicinity of their farm, maintain the “Orei-sei” partnership with the Kanekos.

The package includes rice and vegetables and delivered directly from the farm once a month eggs and seasonal vegetables are delivered once a week. The Kanekos try to deliver the produce directly to their consumers to build up close relationships based on face to face conversation.

1979 to the present: The Start of the Successful “Shimosato Model” of an Entire Village Turning Organic

From 1979, the Kanekos began to accept trainees on their farm. Until today more than 100 “new farmers” from Japan and abroad were trained in the basics of organic farming and the Farm has been designated by the Ministry of Agriculture as a training center for organic farming.



Photo Credit: Yoshinori Kaneko

In 2001, the Kanekos were asked by the Shimosato Village to start the collective cultivation of organic soybean as an effort to scale up the production in the village. This is the “Shimosato Model” - the first case in Japan that entire village has converted to organic agriculture. Seventeen hectares of farmland were turned into organic together with the production of pesticide-free wheat, soybean and paddy rice. Ogawa Town became famous and the entire village has been accepting delegations from various places including from abroad to benchmark the success of the village

transformation. The Emperor and Empress of Japan personally paid a visit to the Village in 2014.

Training of the Young Generation



All Trainees Share the Family Meal. Photo Credit: Yoshinori Kaneko

All trainees live on the Farm and are treated as a family member with common chores and share the family meals. They usually reside for a year learning about organic farming and getting familiar with the customs, the life in general in rural areas, the ways of communication with the people in the region, participation in local events, etc, which constitute a whole set of enriching experiences for most of the trainees.

An average of 6 to 8 trainees live on the Farm every year and more than two hundred have lived and trained on the farm.

95% of the trainees are from non-farmer families and many of the trainees have gone on to start organic farming, all over Japan, from Hokkaido to Okinawa. Trainees have come from all over Japan as well as from other parts of Asia, Europe, etc.



Photo Credit: Yoshinori Kaneko

Personal Testimonial from a Former trainee

By Akihiro Asami

I joined the organic farming training for one year from July 1995 at the Kanekos' Shimosato Farm. At that time, it was rare to get support for new farmers, so it was difficult to find a place to learn about the very basics of agriculture. At such desperate times, it was a ray of hope for me to find a farmer like Mr. Kaneko who willingly accepted trainees personally.

The true goal of the organic farming practiced by the Kanekos is not just about food safety without using pesticides and chemical fertilizers. They were and are still trying to develop technology to grow many kinds of crops, to experience the richness of living among the natural biotic community, with the wisdom to make the most of the given environment, and using innovative ways to introduce the resource recycling energy system such as biogas. And most importantly, building up firm relationships with not only local people but also people from all over the world! Everything I saw at the farm was beyond my imagination! Going Beyond Japan and into the realms of Asia!

What I saw there was a sort of ideal society we should aim for, that is, a model for a peaceful society with sustainable and prosperous life. Therefore, to a youth with no farm experience like me, one year of the training was too short to learn from such a rich world.

However, if I try to express what I have learned from this experience in a simple way, it would be "the way of life". What you really need when standing face to face with social issues to be solved, is not the power to twist the opponent's arm or the brilliant techniques of logical speech to persuade the opposite party. The important thing is to have your roots fastened deep into the earth, plowing the soil and reading the wind of the weather as well as reading the climate of the times, and making yourself a trust-worthy person among your local communities.

We may call it "the spirit of self-sufficiency, self-reliance and autonomy", not by presenting yourself in a flashy light. And this is exactly what I learned from the Kaneko couple through the training. This has become my guiding principle for the rest of my entire life.

After finishing the training, the place I chose to settle down as a new farmer in Aizu Fukushima, a disadvantaged area for farming, surrounded by mountains and with heavy snowfall in the wintry months. In this land, I am putting into practice the "way of life" I learned from the Kanekos. That does not mean to mimic them, but to expand organic agriculture best suited in this very area, being faithfully connected with local people to achieve a sustainable society together.

It is such a grand goal, it has already been 20 years since I finished the training, it seems that I still only halfway there.

In 2011, there was radioactive contamination in this area due to the explosion of Fukushima Nuclear Power Plant caused by the Great Earthquake of Eastern Japan. My farm has been badly affected but the reason that I have decided to stay and continue farming in this land is because once again, I realized what I have learned from the Kanekos -I have to make my community achieve "Self-sufficiency, Self-reliance and Autonomy" based on our common agricultural practice.

Pioneers of Organic Agriculture in South Korea: Won, Kyung Sun, the Father of Organic Agriculture

Author: Jennifer Chang



Photo Credit: Jennifer Chang@Won Kyung Sun Museum,

The words most associated with Won, Kyung Sun, are “life agriculture” and “righteous education” and these words are synonymous with the life that he led as an organic farmer and as an educator.

Until his passing at the age of ninety-nine years of age, Won Kyung Sun was foremost an organic farmer with the “respect of life(生命)” and the “love of thy neighbour” at the core of his beliefs. He was born into a poor farming family and became the head of his family at the age of sixteen upon the death of his father.

Won Kyung Sun was a farm worker, a construction worker, and did odd jobs before he found his own piece of land to farm. This was the start of the “Pulmu Farm” (three ha) where he started a life of sharing with orphans, the homeless and the destitute who had lost everything in the Korean War. After a morning of prayer, the afternoons were devoted to learning about farming methods and animal husbandry.

His seven children lived together with the

extended farm family, eating from the “same pot of rice”. It was a self-help, communal farm based on Christian beliefs.

By the early 1970s, Won, Kyung Sun had realized the dangers of farming with chemicals and was looking into alternative ways of farming when he came across an article on organic farming by Kotani Junichi, the founder of a Japanese organic farmers’ association called Ainoukai (愛農會). This was a turning point in Won Kyung Sun’s life, and in 1976, he moved his farm to Yangju in Gyeonggi Province and fully converted to organic farming. He decided to stop farming with the use of chemical fertilizers and pesticides as he passionately believed that these practices led to the destruction of all life forms. His beliefs also led to the formation of Jeongnonghoe (正農會, “Righteous Farming Association”), recognized as the start of the organic movement in South Korea.

Won Kyung Sun was also well-known for his beliefs in “open and humane” education and he served on the board of

the Geochang High School from 1961 to 2006. It was a school set up for alternative education based on Christian beliefs with the purpose of educating “democratic citizens”. During the times of oppression under the governments of former dictators, the school was almost closed down for its liberal education and refusals to compromise on the unfair demands by the authorities.

In 1981, a small shop selling the organic produce from the Pulmu Farm and from other Jeongnonghoe farmers was opened by Won Kyung Sun’s oldest son, Won Hae Young. The shop laid the cornerstone for Pulmuone which has grown into one of the major food companies in South Korea.

By the 1990s, Won Kyung Sun had expanded his work from a communal and life-respecting movements into the international sphere. He became an active part of the environment movements and helped set up the Korea Food for the Hungry International, an international NGO that works to alleviate hunger. In 1992, he was the citizen representative from South Korea at the Earth Summit in Rio de Janeiro where he espoused the benefits of organic agriculture. He also went on to serve as the first Board of Director of the Citizens’ Coalition for Economic Justice (CCEF), an NGO working on environmental issues.

Won Kyung Sun received many international and local accolades for his lifelong in the organic and environmental movements such as the 1995 Global 500 Roll of Honour for Environmental Achievement. In 2004, he moved his farm to Goesan County where he continued to live until his death. The farm still exists today, and his farmhouse has been turned into a museum in celebration of his life.

Source

<http://wonkyungsun.pulmuone.kr/pulmu/>

¹ Won Hae Young had just been released after serving a prison sentence for his pro-democratic activities and was searching for ways to look after his family. He left the operations of the company to a long-time family friend and donated all his Pulmuone stocks when he entered politics in 1996. He served as a member of Parliament under the Democratic Party until April 2000.

Park, Jae-il, Founding President of Hansalim

Author: Ji Young Moon

“Is the life of living or killing where the earth and people, things and things, and people and people are divided and unbelieving? Also, when the price of agricultural products goes down, the farmers cry and the consumers like it. When the price of agricultural products goes up, the consumers cry but the farmers like it. Is this right way of living that the other’s pain becomes my joy? (...) Is there any way to believe and share without being unfair?”

- Park Jae-il: At the launch of Hansalim, 1987

Life for farmers and rural communities



Photo Credit: Hansalim

Park Jae-il is the first president of Hansalim, who first started the Hansalim Movement by opening a rice shop called Hansalim Nongsan in Seoul, Korea on December 4, 1986.

Born in 1938, Park Jae-il participated in the pro-democracy movement when he was a college student, and then went down to rural areas in 1970 to support the establishment of credit unions in rural areas, thus, laying the foundation for the cooperative movement in South Korea.

In 1972, there were massive floods that caused serious damage and killed almost 400 people. Park Jae-il was responsible for the flood recovery project in the city called Wonju and to assist with the flood recovery, various organizations gathered from across the country – this group came to be called as “Wonju Camp,” and became the symbol of the Korean democratic movement.

It was during this time that Park Jae-il joined the Catholic Farmers Association and became its vice-chairman in 1975. He started the rice production cost survey project to ensure that the government purchase price of the rice properly guaranteed the cost of production and he found out that the farmers were losing money due to the inappropriate government purchase price. He continued in his campaigns for advocating farmers’ rights and interests and promoting the development of rural communities.

The following year 1976 became a turning point in his life when one of the branch heads of the Catholic Farmers’ Association died of pesticide poisoning. This incident made to him realise the need for a fundamental change during a period of government subsidies of the ‘Tongil Rice’ variety which required a lot of chemical fertilizers and pesticides,

making the farmlands become barren.

The Catholic Farmers Association began to promote the importance of life-agriculture and distributed enzyme farming methods using microorganisms and Park Jae-il later toured the overseas consumer cooperatives in Japan and Taiwan, and contemplated how to organize consumers to create relationships with farmers who do organic farming. In the meantime, he initiated the Hansalim movement with support of the German Misereor Foundation, which had previously supported the Wonju flood recovery project.

Farming that farmers and consumers do together

Park Jae-il believed the way of the farmers and consumers doing farming together is a way of guaranteeing the recovery of the production costs so that farmers could continue farming according to one's will, and support the farmers' courage to not use herbicides and carry out organic farming that saves lives.

Hansalim was the first and a very uncommon movement at the time, in the way, that producers and consumers, who were considered to be different stakeholders, run one organization together, based on eco-friendly organic agriculture. This model went one step beyond the existing activities of consumer cooperatives and farmers associations at the time. To this day, this movement based on trust and strong relationships between the farmers and consumers serve over 2,200 households of farmers and over 700,000 households of consumer members.

Hansalim's long-standing phrase that "Producers are responsible for the lives of Consumers and Consumers are responsible for the livelihood of Producers" has been maintained for last 34 years as an important premise of sustainability of eco-friendly organic agriculture.

Park Jae-il passed away in 2010 at the age of 73 and is buried in Goesan County, where the Hansalim farmers and consumers keep alive the organic movement he started in the early 1980s.

Speech At the Opening of Hansalim Nongsan (1987, Park Jae-il)



Photo Credit: Hansalim

The world today makes and uses so many things in bulk. People think that it is good if something is higher and faster and that it is even better if it is convenient.

But does this good-looking thing make us feel safe, trusted, helpful, and provide a healthy and satisfying life?

What will our lives be like when the air we breathe, the water we drink, and the lands we farm lose its true nature?

You can use something only when it is made, and it can be made only when it is needed to be used. It continues. Originally, production and consumption, producers and consumers are inseparable. They need and help each other, but now the reality is that this has become a conflicting relationship.

Consumers do not know who and how the things are made, and the producers do not know who and how the

things they produced are consumed. So, we became more distrustful of each other. In the case of agriculture that makes food that sustains our health and life, farmers do not know where the produce goes, who eats the produce and the economic situation of people who eat the produce.

The amount of pesticides and chemical fertilizers is increasing year by year, the water is polluted, and the land has lost its fertility and vitality. Farmers suffer from pesticide poisoning, and poisoned agricultural products are harming and threatening the health and life of consumers. Amid the flooding of foods with pesticides, preservatives, colorants, and various food additives, mothers who need to set a healthy table to protect the health and life of their families are anxious because they cannot believe anything.

Can we not find and eat healthy food with confidence?

Is the life of living or killing - where the earth and people, things and things, and people and people - are divided and unbelieving? Also, when the price of agricultural products goes down, the farmers cry and the consumers like it. When the price of agricultural products goes up, the consumers cry but the farmers like it.

Is this the rightful way of living that the pain of others becomes my joy? In particular, the distribution process of agricultural products is too complicated and goes through many steps. So, the value, quality, and quantity of agricultural products are often manipulated. Is there any way to believe and share without being unfair?

There are farmers who do composting, weeding, and sweating in order to save the land and also themselves; and protect the health and life of consumers. And there are many consumers who look forward to such agricultural products made by those farmers. However, they cannot meet each other and do not believe in each other.

What you give to your family or close people is carefully made. The recipient will also appreciate. If producers and consumers meet and become close friends, wouldn't the sincerity and gratitude be shared?

Hansalim aims to make a close relationship between producers and consumers so that producers protect consumers' lives and consumers secure producers' livelihood. And more, by reducing the distribution stage of agricultural products, we carry out direct transactions that reduce excessive distribution margins. Only then, the quality or quantity of agricultural products can be trusted, and both producers and consumers can both benefit from the appropriate price.

We want to do things that can save the land, produce healthy and safe agricultural products, build a trustworthy relationship with each other, and protect the health and life of all.

This is not something one or two people can do. It is possible only when several people are working together. It is possible only when the producer and the consumer are together.

We look forward to your understanding, support, and participation in this Hansalim Movement. This movement is initiated by the cooperation of many farmers, consumers and supported by the Catholic Diocese of Wonju.

Pioneer of Organic Agriculture in the Philippines: **The Local Government of Dumingag Municipality**

The Municipality of Dumingag is a small municipality located in the south western part of the Philippines in Mindanao. One of the poorest municipalities in the Philippines in the early 2000s, Dumingag has more than 90% of its people living below the Philippine poverty level.

A charismatic person, Nacienceno Pacalioga was elected as Mayor in 2007 and immediately addressed the biggest issue in the municipality. Also known affectionately as “Mayor Jun”, he, together with the municipal employees and the people of Dumingag, established the “Genuine People’s Agenda” (GPA) as the basis for its sustainable development program. The program encompasses 15 strategic items such as the development of organic agriculture which became its core strategy, the improvement of health services, environmental protection, security, peace and tourism.

Poverty Reduction

In less than 10 years, through their GPA which centred primarily in sustainable organic agriculture in attaining food security, Mayor Jun, the municipal employees and the people of Dumingag successfully reduced the poverty incidence rate to 20% levels. This has gained much attention to local, national and international levels.



Rice fields at harvest time in Dumingag (Photo: Konrad Hauptfleisch, 2014)

Awards

Dumingag was a Department of Health (DOH) Red Orchid Hall of Fame Awardee in 2012, 2013 and 2014 for being a 100% tobacco-free municipality. In 2010, it was awarded the Galing Pook Award for best practice in local development through people empowerment. It was also chosen by the National Anti-Poverty Commission (NAPC) as a Model LGU for its poverty reduction program founded on organic agriculture and implemented thru community empowerment and convergence of different stakeholders.

The One World Award in 2012

The small municipality of Dumingag, for their effective Genuine People's Agenda won the prestigious One World Award in 2012. The One World Award is jointly sponsored by the International Federation of Organic Agriculture Movement (IFOAM) and the Germany-based Rapunzel Naturkost and as described in their website, "honours people and their projects that make the world a better place; dedicated people who give positive and innovative examples of globalization - people who make the future worth living".



Dumingag becomes a founding member of LOAM and becomes its first President.

In 2012, Mayor Jun, together with 7 other mayors in the Philippines organized the League of Organic Agriculture Municipalities (LOAM) in the Philippines, which expanded to 168 members in 2020 and become the League of Organic Municipalities and Provinces in the Philippines (LOAMCP-Ph) which added city mayors and governors. The Dumingag municipality, through Mayor June, becomes the first president of what would become one of the biggest and most influential organic groups in Asia. More on LOAMCP-Ph at Chapter 7, Policy and Advocacy.

Sources

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Pioneers of Organic Agriculture in China

Organic Food Development Center of the Ministry of Environmental Protection



Organic Food Development Center of the Ministry of Environmental Protection, China (OFDC-MEP), founded in 1994, is the pioneer of the organic movement in China. But its core group has already become IFOAM member in 1987. OFDC-MEP has long been engaged in researches on policies, standards, practical technology, production base planning, publicity, training and quality control of organic farming and eco-farming, providing technique supports to the government decision makers.

Achievements of OFDC

- OFDC is the only Chinese organic certification body accredited by IFOAM, which also includes ISO65 accreditation.
- OFDC is the first established organic product certification body in China (in 1994).
- OFDC organized the first international organic inspection in China in 1990.
- OFDC's certification services have been extended to North America, Europe, Australia and other Asian countries.
- Drafted the first set of government rules on organic food management—"Measures for Management of Organic Food", "Technical Norm for Organic Food Production and Processing" in 2001.
- Responsible for the approval assessment of "National Organic Food Demonstration Production Base".
- Participated in the drafting and revision of the "National Organic Product Standards" and related regulations.
- Has cooperated with many international organizations such as UNEP, World Bank, Asian Development Bank, IFOAM, GTZ, AMBER Foundation, Rockefeller Brothers Fund, etc. on promoting Chinese organic agriculture movement.
- Has carried research projects such as "Organic Agriculture Development in Poverty Striking Areas", "Comparative Study of Organic Agriculture Development in China", "Development of Organic Agriculture in Semi-Arid Area of China", "Research on Ensuring and Technology for Environmental Security of Agricultural Production" and "Developing Organic Agriculture for Controlling of Rural Non-Point Pollution in Taihu Lake Basin", etc.
- Participated in conferences, workshops and forums organized by international organizations such as FAO, UNEP, UNCTAD, IFOAM, etc.
- Joined IFOAM Standard Committee and Development Committee.
- Provided consultation services for research and development projects, cooperating with the WWF, IFAD and

related organizations of United States, Netherlands, Canada, etc.

- Has cooperated with world-famous organic agriculture development organizations such as FiBL, Soil Association, GroLink, JONA, NASAA, etc.
- Has successively organized “National Annual Training Workshop for Development and Information Exchange on Organic Products” and other regional training activities since 1994, more than one million people have been benefited from the trainings.
- Editing and issuing the first journal on organic sector in China -“Organic Food Times”.

Source: <http://www.ofdc.org.cn/en/>

Pioneers of Organic Agriculture in Indonesia

P. Agatho Elsener

Author: Indro Surono



Agatho Elsener came to Indonesia from Switzerland in 1958 as a Catholic priest. He dedicated his life to work in the rural areas in West Kalimantan until 1982.

In 1984 he founded Bina Sarana Bhakti (BSB) Foundation as his new devotion to people and nature. BSB means a place to educate people, especially farmers, to be able to empower other people when they return to their homes.

P. Agatho develop an organic farming development centre in Bogor, West Java,

Indonesia, as a centre of organic education, farm production (vegetables and fruits) and marketing of organic produce. The centre also produces its own seeds to prevent dependency from seed companies.

P Agatho is the person who introduced organic vegetables production in a plot of 1 x 10 meters which is suitable for small farmers. He also created a roof garden when building a house - "building a house does not mean we lose the farm". He was very famous for his motto which was "The Organic Way, All in Harmony".

P. Agatho was consistent in promoting that the practice of organic agriculture is not just a farm technique, but a mentality or attitude to give or share with other creatures. The enemy of organic is not conventional farming, but an egoist mentality/attitude.

P. Agatho became an Indonesian citizen and dedicated his whole life for the organic movement in Indonesia. More than 2.000 people come to BSB every year to learn about organic farming. Thousands of people, from government, private sector, NGOS, farmers and individuals came to know, learn, and acknowledge his contribution to the development of organic agriculture in Indonesia. He passed away in 2016, but the BSB Foundation remains today to continue his values and devotion to serve people and nature.

Source: www.bsb-agatho.org

3. Definitions and principles of organic agriculture

Author: Konrad Hauptfleisch

A summary of the concepts, approaches and theories

“Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved” – IFOAM, Modena 2008

Many of you will be familiar the old childhood verses: “Sticks and stones can break my bones, but words can never hurt me” and “Actions speak louder than words.”

But words, catchphrases, memes and slogans have immense power. When we look at the world today, it is even more striking how short and simple phrases become calls to action, and how proud we are of the words that describe our beliefs, our philosophies, and our world view.

There is much power in a word: the pen - or the smartphone keyboard for that matter - is proven to be mightier than the sword. Very simply, the person or the group that coins the phrase, will direct the narrative and will control the discourse. Definitions, preambles, and principles inspire and direct the actions of people.

The Definition of Organic Agriculture

This is why it was so important for IFOAM-Organics International to agree, after many years of debate, on a common definition of organic agriculture, and have this definition as the banner and clarion call of the organic movement.

This definition, and the four principles of organic agriculture that were adopted in 2005, are not mere words or political battle-cries. In them, we see the practices, values and guiding concepts embedded. This is what makes organic agriculture work.

These are not only words or theory – they describe the Why, the How and the What of truly sustainable organic agriculture. Let’s delve deeper into this by exploring the definition’s three parts:

1. “...a production system that sustains the health of soils, ecosystems and people.”

We start off with the description “production system” Note that it does not say “product” or “production” only. Organic agriculture, like the ecosystem it is embedded in, is a system and should always be viewed as a holistic and complex

collection of practices, approaches and techniques to produce outputs that sustain “the health of soils, ecosystems and people”.

And here, in the second part of our sentence, even the position of the words in the sentence are critical to the meaning and to the organic approach. We should be focusing on soil first. A healthy soil, with sufficient levels of soil organic matter, becomes a powerful medium for the production of healthy plants and animals. They, in turn, nourish humans. This sentence, very simply, answers the “What”-question.

2. “It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects.”

Here, we see the “How-to”. Another dense and deceptively simple sentence filled with practical guidelines to the reader on how to practice organic agriculture and where to look for answers.

It is of critical importance that the organic practitioner observes the ecological processes on her farm. Understanding how nature manages resources, protects species, promotes growth and sustains health and biodiversity is key to everything that follows. If the farmer can develop a production system that emulates ecological processes rather than introducing practices that work against them, the farm becomes a contributor to biodiversity and environmental health rather than a detractor.

These processes and cycles need to be adapted to local conditions – often, teachers and trainers are faced by the fact that their solutions fall short of expectations or are even totally inappropriate to a specific condition or locality, from an ecological, sociological or economic perspective. In organic agriculture, there cannot be a “One size fits all approach” – neither for practices nor for standards, and the definition recognises that. The “How” has to be tested and adapted to the observed reality.



North Chungcheong, Korea (Konrad Hauptfleisch, 2016)

The last part of this sentence has had volumes written about it – by both promoters and opponents of organic agriculture. “Inputs with adverse effects” – such a short and deceptively simple sentence, but without it, this definition will not stand.

Farmers need to have the deep understanding of the principles described in the first and second sentences. With that understanding, and armed with the required knowledge and skills, they can develop solutions to the threats of fertility loss, pests and diseases that will not have adverse effects on the ecological environment of the farming system. It is further important to note that the clause does not say “no inputs” or “never inputs” but rather without inputs that will harm the system.

The organic farmer is not operating in a balanced and perfect system – it has been damaged for decades and continue to be damaged by agrochemical inputs, industrial waste and mismanagement. In such a system, even the best organic farmer might have to use certain off-farm inputs, in order to save a crop or improve the soil. But the definition remains clear on the kind of input allowed, and in that way, sets the parameters for standards and practices. Many other competing systems fall short of saying what they will not do or what is not allowed. Inputs must always be seen as a last resort, if the proactive and positive practices of farm management fall short.

3. “...combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.”

This equally dense and meaningful last sentence of the definition touches on a number of key principles and also reminds us of the “Why” of organic agriculture. Organic advocates are often falsely criticised for being anti-science and synonymous with inefficient and unsustainable traditional agriculture. This last sentence of our definition makes it very clear that organic agriculture is even more current, adaptive, innovative and science-based than its detractors would like us to believe.

Organic agriculture combines the best aspects of the complex systems we operate in, to create a truly sustainable agriculture and food system solution that can lead and assist the world in finding a global solution for the crisis we are currently experiencing.

The 4 Principles of organic agriculture:

As previously mentioned, the definition of organic agriculture is supported by a set of four principles, each focusing on a key pillar of sustainability:



The Principle of Health.

Organic agriculture should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible.



The Principle of Ecology.

Organic agriculture should be based on living ecological systems and cycles, work with them, emulate them and help sustain them.



The Principle of Fairness.

Organic agriculture should build on relationships that ensure fairness with regard to the common environment and life opportunities.



The Principle of Care.

Organic agriculture should be managed in a precautionary and responsible manner to protect the health and wellbeing of current and future generations and the environment.

The 4 Principles of Organic Agriculture (IFOAM, 2005)

Why focus a chapter on this definition and these principles?

The answer should be quite clear by now: we believe that every farmer who practises agriculture according to this definition and these principles can be described as an organic farmer. These are not mere simplistic slogans. These principles contain within them the building blocks for the organic standards that differentiate an organic farming system from a non-organic one.

- The principle of health deepens the first sentence of the definition. It places the emphasis on the soil, the living systems in and on it, and the holistic nature of a truly organic system.
- The principle of ecology goes further and echoes the second sentence of the standard, stressing the requirements that organic agriculture has to work within the cycles and complexities of our planetary ecosystem. We need to grow what works in our specific ecological environment, observe how this agro-ecosystem then starts integrating and strengthening the successful collaboration between the actors in the system. We cannot forget that we are part of this system – it is the arrogance believing that we are separate that creates the conflict where harmony should exist.
- The principles of fairness and care can be read together in that they link with the third sentence of the organic definition. It brings us to looking outward, and forward: cautioning humanity to be careful of using technologies or solutions that could harm us or our future generations, but also embracing the vision of caring for each other and ensuring not only our survival as a species and planet, but seeing the possibility of regenerating a system that is currently broken to the point of collapse.

This definition and these principles are visionary, yes. But they are also eminently practical and measurable once one

understands where they come from – a deep understanding of how the ecosystem works – how the system adapts, regenerates, balances and evolves.

This is tradition, innovation and science forged into a powerful tool. It is the poetry of the soil. And if we take a moment to look and listen, we can all learn how to read and speak it.

The following quote from the National Centre for Organic Farming of India once again lays down the basis of organic farming and serves as an perfect conclusion to this chapter-

“In philosophical terms organic farming means farming in spirits(sic) of organic relationship. In this system, everything is connected with everything else. Since organic farming means placing farming on integral relationship, we should be well aware about the relationship between the soil, water and plants, between soil-soil microbes and waste products, between the vegetable kingdom and the animal kingdom of which the apex animal is the human being, between agriculture and forestry, between soil, water and atmosphere etc. It is the totality of these relationships that is the bedrock of organic farming.”

4. The basics of organic production

Author: Li Feng

*Mother earth never attempts to farm without livestock; she always raises mixed crops; great pains are taken to preserve the soil and to prevent erosion; the mixed vegetable and animal wastes are converted into humus; there is no waste; the processes of growth and the processes of decay balance one another; ample provision is made to maintain large reserves of fertility; the greatest care is taken to store the rainfall; both plants and animals are left to protect themselves against disease. From: An Agricultural Testament
- by Sir Albert Howard, C.I.E., M.A.*

Putting principles into practice

Agriculture is the frontline between human society and the physical world. This interaction started along with the emergence of humans on the planet and dominated the human society's activities for most of our history. It is the fire, burning to sustain the development of our society, and it acts also a primary limitation of the development of the society, which brings so many bitter memories.

Sometimes a powerful concept – in this case reductionism - creates an illusion in which the bitter memories of famine and suffering can be 'erased'. This tasty fruit - conventional agriculture - was so favoured then to be named as the 'Green Revolution'.

However, this illusion was easily ended with the publication of "Silent Spring". But, what still deeply and widely accepted is the idea that the human being can dominate the relationship between us and nature. This idea prevents us from seeing how nature create a cycling of the energy and nutrients efficiently with a diversified system, but leads us stubbornly to build up an artificial world with high external environmental cost, which eventually will contaminate the whole life system. So, would you like to embrace nature, though there could be some bitter memories, or live in the 'rabbit hole' like a frightened bunny?

Therefore, organic production starts rather from the seed in the heart, than a seed in the soil. The first step in converting to organic will always happen in the head of the farmer. This real bottleneck of organic production shall never be buried under a pile of technical problems.

This mind change to a holistic world view, will first raise the head of the farmer to look to the universe. The constellations - the sun, the moon and stars of the galaxy - never were and never will be absent during the growth of all life on planet earth. So much knowledge regarding to this can be traced in our traditional cultures in both the Eastern and Western world. Ignoring this will only make you lose the chance to join forces with or even have to fight against this ultimate power of our environment. A systematic planning of our agriculture practice according to the rhythm of the sun, moon

and constellations, should be the first item to add on the farm's cost-profit balance sheet. This fundamentally ensures access to the sunshine, temperature, wind, rainfall, soil moisture in a positive way, rather than using electricity to power the additive light for plants; heating or cooling the greenhouses; or too frequently irrigate with a massive waste of water. When you step back on the earth and take time to observe your environment, you may find some surprising things: in a rainforest, the soil organic matter is not nearly as high as one would expect, but the cycling of the energy and nutrients is so fast and efficient that it sustains such a huge and complex ecosystem. On the other hand, a temperate forest closer to the polar zone accumulates the high levels of humus in its soils that farmers would love to see - however, the GPP (gross primary production) is not as impressive as the soil organic matter content. So, which is the better system? A holistic view will first bring you to understand that the distribution of different resources (sunshine, water, temperature, soil structure, nutrients, air) on earth is heterogeneous. Life has developed into so many forms to adapt to this heterogeneity of our environment. What drives the biodiversity is never the life itself but these heterogeneous environmental background values. This is the solid basis of the diversity of the ecosystem. Any attempt that you make to simplify the original ecosystem, will result in nature fighting back to redress the balance in ways that have always been mistaken as pests or diseases. This endless war will result in big red numbers on your balance sheet. Therefore, a better practise is always one that is well-suited to the local natural condition.

So, when we start to design a farm, we have to really step onto the land where the farm will actually be located rather than experimenting in laboratories. We need to observe- study the surrounding landscape as it is now (most probably twisted by human activity), and then try and get an understanding of what it was like before (its original status). Carefully simulate it, where you leave enough space that allow nature to express herself (as buffer zone, ecological corridor, bushes, wetland, etc). Cultivate this balance in you farm and you will be able harvest a balanced agroecosystem which sustains you and makes your life much easier later. Only after this holistic planning, then the locally-adapted agro-technologies could be adopted into the organic production system. And these two parts will form the technology of an ideal organic production system. In this system, we see both traditional experience, and modern science. In the following paragraphs, we would like to consider a few factors and concepts to provide our reader with some common knowledge and ideas that can assist in building a closed-cycle system on your farm.

Soil and Plant Nutrition

NATURAL RESOURCES CONSERVATION SERVICE (NRCS) USDA United States Department of Agriculture

unlock the secrets in the soil

www.nrcs.usda.gov

"We know more about the movement of celestial bodies than about the soil underfoot."
-Leonardo da Vinci

Living in the soil are plant roots, bacteria, fungi, protozoa, algae, mites, nematodes, worms, ants, maggots, insects and grubs, and larger animals.

science of soil
soil is made of about **45% minerals**, **25% water**, **5% organic matter**, and **25% air**

what's underneath
Healthy soil has amazing water-retention capacity. Every **1%** increase in organic matter results in as much as **25,000** gal of available soil water per acre.

One teaspoon of healthy soil contains **100 million-1 billion** individual bacteria. All of the soil microbes in **1ac/ft** of soil weigh more than **2 cows**.

Earthworm populations consume **2 tons** of dry matter per acre per year, partly digesting and mixing it with soil.

what it does
Healthy soil is key to feeding **9 billion** people by **2050**

Source: Composition of soil: The Nature 2 Properties of Soil page 17; Nitro-Brady, Ray & Weil | Water holding capacity: Kansas State Extension Agronomy & Soils, Number 257, July 6, 2012 | Bacteria in a teaspoon: Soil Biology Primer page 27; Eleanor Hughes, Andrew B. Albrecht & Chris Edwards | 1 billion weigh: The Nature 2 Properties of Soil page 10 | Earthworm population consumption: Earthworms & their role produced by Susan Dabney Allen, Ph.D. of Soil Management and Richard Steiner, Assoc. Prof. Environmental Soil Science, Faculty member, The United Nations | USDA is an equal opportunity provider and employer

Photo Credit: USDA

Soils, as the most important production factor for crops, are very diverse and complex systems full of life. The basis of soils are mineral particles originating from subsoil and rock, which get crushed to smaller and smaller pieces through physical and chemical weathering processes.

By the uptake of the mineral nutrients from these particles, life starts to dwell on land and gradually develops into a territorial ecosystem. The decay of these life forms makes up the soil organic matter or humus.

Soil organic matter is of tremendous importance for the soil fertility.

The active part of soil organic matter acts as energy source, will be further decomposed by soil organisms and then could be taken up by plants or soil organisms as mineral nutrients. The stable humus structures will help to build up a loose and soft soil structure with a lot of cavities (pores). This leads to better aeration, better infiltration of rain or irrigation water and

an easier penetration of roots and soil-dwelling lifeforms. All these elements mentioned above make up the soil, never just the solids or minerals. The interaction between the life and physical world (solid, liquid and gaseous phase) repeats for millions of years to form the soils, like the samsara. The ancestors bless the new generation by this accumulated 'samsara'.

When you understand soil, you will then know how to pay your respects to it – or how to maintain the soil fertility:

Samsara or rebirth means we first have respect soil as the birthplace of life, not just a tool for production, and the principle of return shall always be obeyed, not the principle of sacrificing it as an artificial commodity. With this positive and respectful approach, a proper soil structure and prosperous soil biosphere will be built up that will sustain a good nutrient flow for your crops.

However, cultivation, erosion, draught or flood and other factors will still affect your soil system. And most importantly, the crop production itself will probably not follow the rhythm of your soil nutrients flow, and the repeated harvesting

will definitely remove nutrients from the soil. So, several practises are recommended to offset this. Covering crops and mulching help very much in reducing erosion, keeping water in the soil to maintain good structure. A diversified crop system with proper rotation will reduce much of the nutrient management pressure. Manures and compost would help a lot for the plant nutrition in crop production system. By adopting farm animals, the nutrient cycling will be easier to manage.

Never forget that the atmosphere is not only for oxygen and carbon dioxide, but also the single largest source of nitrogen, which can be fixed effectively by selected green manure plants or leguminous crops. Although these practices are all allowed in your organic practice, never overdo it.

As said before: either nature or your accountant will always bring it back into balance.

Once you have a healthy soil, the healthy plants, animals and a healthy food system are not far away. But if something goes wrong with the plant, as it often does, what is a farmer to do?

Pest and Disease Management

Try your best not to let it go wrong. A healthy plant is less vulnerable to pest and disease infestation. Therefore, a major aim for the organic farmer is to create conditions which keep a plant healthy. The health condition of a plant depends to a large extent on the fertility of the soil. When nutrition is well balanced, the plant becomes stronger and is therefore less vulnerable to infection. Climatic conditions, such as suitable temperatures and sufficient water supply, are further factors which are crucial for a healthy plant. If one of these conditions is not suitable, the plant can become stressed. Stress weakens the defence mechanisms of plants and makes them easy targets for pests and diseases. One of the most important points for an organic farmer is therefore to grow healthy plants. This avoids many pest and disease problems. Knowledge about plant health and pest and disease ecology helps the farmer to choose effective preventive crop protection measures. As many factors influence the development of pest and disease, it's crucial to intervene at the most sensitive points. This can be accomplished through the right timing of management practises, a suitable combination of different methods, or the choice of a selective method.

If all preventive crop protection practices fail to sufficiently prevent economic losses to the farmer, it may be necessary to take curative action. Curative action means controlling the pest or disease once it has already infested the crop. Several options exist in organic agriculture:

- 1) Biological control with natural predators or antagonistic microbes.
- 2) Natural pesticides based on herbal preparations or other natural products.
- 3) Mechanical control with traps or hand picking.

The general approach in organic agriculture to deal with the causes of a problem rather than treating the symptoms also applies for pest and diseases. Therefore, management is of a much higher priority than control. The second sentence of the organic definition gives guidance in this regard:

“(Organic agriculture) relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the

use of inputs with adverse effects”

The farmer should keep this in mind, not only when planting managing and harvesting a successful season's crop, but also when pests and disease strikes. While it can be heart-breaking to see crop failure because of such occurrences, it is also clear that a balanced farming system is a process and a journey, not a short-haul destination. Observation, perseverance and humility are ingredients that are allowed in unlimited quantities on any organic farm.

Always remember the words of the pioneering farmer and author, Michael Ableman: “The best fertiliser is the farmer's footsteps in the fields...”

Conclusion and reflection:

Once you have successfully harvested your products, and you think you somehow have already achieved your organic agriculture aims, it is time to reflect. This could be very wrong. You might be in front of the biggest gap you could face on the whole organic value chain. Because now, the will, the needs and the greed of the human being is starting to weigh heavier than the relationship with nature. Before the harvest, nature has the strongest voice - not the trade or consumers.

We will see more energy-hungry activity post-harvest, such as cold chain management, packaging materials, food additives, transport, cleaning materials and more. Boundaries between organic sustainability and economic viability are increasingly difficult to draw. And not only in this food technology area, but also in consumer behaviour part, this becomes very apparent.

Consumers increasingly prefer convenient ready-to-eat or ready-to-cook foods, cities are expanding, requiring more intensive industrialized food supply systems. And all these factors will decide whether your marketing is successful or not. And processing your product effectively, efficiently and within the organic principles could be the most critical point of success or failure of the organic food supply chain. When organic is increasingly mainstreamed and sales are continually showing double-digit annual growth, processing is definitely becoming more of an obstacle in the pursuit of true sustainability.

An organic agriculture product struggles to retain its environmental and health benefit in an industrial supply chain specifically developed to suit the processing, distribution and marketing of products coming from a conventional industrialised farming system.

Looking forward, it becomes increasingly clear that we need to completely overhaul the whole food system in order to achieve fairness and balance. It also becomes increasingly clear that farmers and consumers have to enter into a new conversation about food and farming.

The true conversion to organic starts with the farmer, but never forget all these ideals and the best practices will eventually be carried out, worked on and impacted by people - those who work on the farm, those who consume your products, those who appear in any link of your organic value chain:

Keep the following in mind:

- Learn from the pioneers and good practices;

- Ensure proper capacity building for people working in the farming system;
- Keep harmony with your neighbours and pass the benefit of nature from us to them;
- Build communities with local organic food systems and culture;
- Communicate with your consumers in order to share the same vision on the food system;
- Update yourself with policies and regulations that impact the food and farming system and
- Join the campaign for holistic, systemic change.

All these efforts can have a long-term positive influence on the food system.

When radical external systemic changes such as global heating, ecosystem collapse, accelerated urbanization and political unrest impact our food system, we can no longer afford to wait for the system to rebalance itself naturally. Necessity – or rather crisis – will require rapid and effective innovation. The window of opportunity is closing, and organic solutions need to be shared and communicated as a matter of urgency – well beyond the farmgate.



(Photo Credit : Hansalim)

Case study: PDS Spices, India

Farmer Innovations through Land to Lab – a Bottom-up Approach Towards Sustainable Farming

Author: Thomas Jacob

Introduction

Peermade Development Society (PDS), an NGO based in Idukki, Kerala, India, was established during 1980. Its mission was set seeing the marginalization and exclusion of small farmers, women and tribals of the remote district of Idukki in Kerala, which has been totally agrarian, and their only livelihood is farming.

With the industrialization of agriculture in India since late sixties, large and medium farmers were reaping the benefit of commercial agriculture, the phase known as “Green revolution” in India. Evidently, the weaker sections of the society, which include small and marginal farmers, women and tribals were left behind from this development due to their lack of resources, lack of skill and knowledge to adapt to the changing science and technology and market inaccessibility.

When rest of the country was leaping through the phase of Globalization, even the livelihood of small and marginal farmers became a challenge. The unsustainability of “Green Revolution” was foreseen by PDS.

Innovation

To address the sustainability of these vulnerable section of the society, one of the “out of the box” thinking was the “Land to Lab” approach, reversing the trend of introducing unaffordable, locally unsuitable technology from outside, to a phase of localization, where, the solutions for the relevant local issues are to be evolved locally.

Farmers’ abilities and capabilities in developing location-specific innovations and agricultural practices for maximizing their local limited resources are an unnoticed reality. This initiated an approach for the participatory technology development of farmers’ innovations and unique traditional knowledge practices.

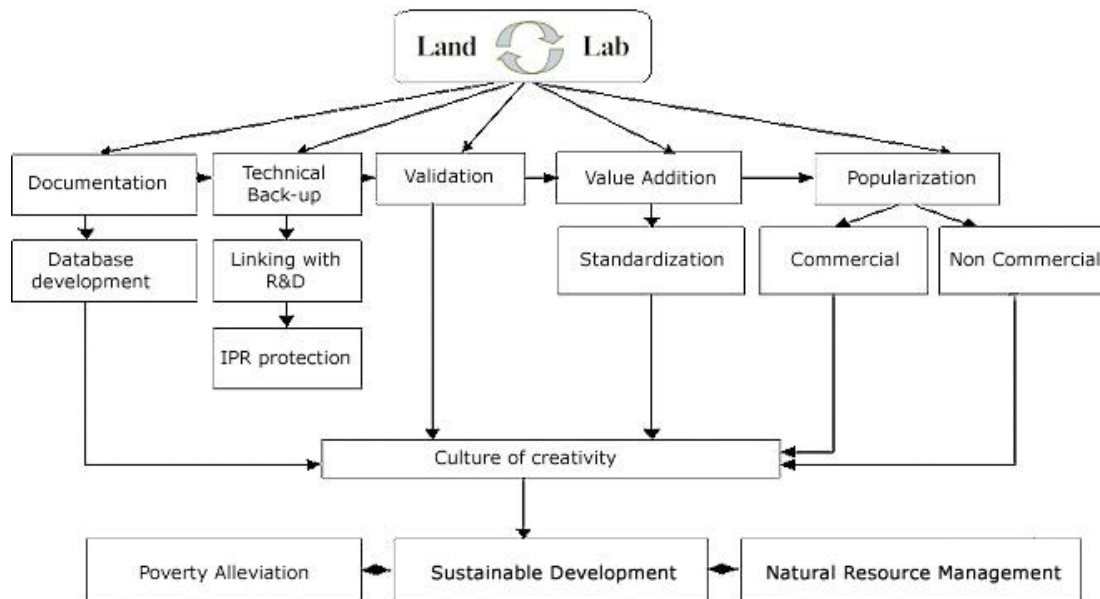
Documentation, development, and dissemination of farmers’ innovations are the major activities envisaged under this approach. In a span of eight years, we have been able to mobilize around 10,000 local practices and innovations from the region and more than 40 innovations received national awards from the National Innovation Foundations.

PDS organizes a competition specifically for women self-help groups (SHGs) for pooling women-based best innovative practices and outstanding women’s traditional knowledge and practices. PDS has recorded more than 8000 practices from a single block of the district. These included innovation/ traditional knowledge in agriculture, food, fish or agricultural processing, weaning foods, childcare, cultivation, non-chemical pest control, harvesting, storing, preservation, livestock, recipes, health, nutrition, mechanical technologies, housing, soil and water management, toys, herbal dyes and cosmetics, etc. Many of the innovations were developed as women enterprises so as to improve and sustain family income.

The gap between formal and informal research, documentation, validation, value addition, Intellectual Property Rights (IPR) protection and dissemination of local innovations and unique traditional knowledge practices are the activities undertaken in the ‘Land to Lab’ programme.

Intensive search was undertaken among rural communities to identify their farming problems and also documented several innovations, traditional practices and low-cost technologies from the farmers. Instead of building on local creativity and innovation, Government and Private Research and Extension institutions tried to impose technologies from outside, which many times failed to solve the location-specific problems.

Concept of Land to Lab approach for promoting farmers innovations



The need for a paradigm shift for technology development by putting farmer's innovation as a corner stone was adopted under "Land to Lab" programme. It was also realized that some of the local innovations, with further refinements and improvements, would result in viable low-cost technologies for rural agriculture.

Validation of Farmer Innovations

Farmer innovations are validated at the R&D Institute of PDS and also at other regional and national research Institutes. At the same time, the status of data on diffusion of the practice /innovation, feedback of other farmers and opinion of local experts are also collected. Subject experts undertake detailed technical documentation of the Farm Innovators. This collected data is cross-checked with the available scientific literature. Scientific testing with all parameters is done in collaboration with these R & D institutes.

Intellectual property rights (IPR) have been protected and patents have been filed with the help of institutions like National Innovation Foundation on the behalf of the innovators.

Dissemination and Sustainability

Value-added knowledge practices and innovations are disseminated through various commercial and non-commercial sectors. Non-commercial channels include various training programmes, workshops, publications, newsletters etc.

Development of Agri-preneurship of selected unique replicable enterprise models for disseminating local innovations and knowledge practices with people's participation. Enterprise models helped to sustain the activities of the farmer as well as helped to support the local sustainability of farming.

Selected farmer Innovations and impact of regional farming sustainability

1. Farmer Varieties.



Many climate resilient, locally adapted farmer varieties have been documented and farmers are encouraged to develop their own nurseries and increase their income through sale of these farmer varieties. Many of the farmer varieties are performing better than other high yielding varieties and also helped to maintain biodiversity within the cultivated crop.



Selected Farmer Varieties of Cocoa, Nutmeg and Pepper

2. Machines and tools

Farmer innovations like cardamom washing machine, cardamom polishers, cardamom dryers are used by all cardamom farmers and no other equipment have been developed by Research Institutions to tackle the local issues. So is the case with pepper threshers, Pepper dryers, nutmeg decorticator, arrowroot extractor, soil pit makers, water pumps etc.

3. Farming Practices

- a. Rooting hormones –using Moringa leaf paste by Mrs. Simi
- b. Multi rootstock grafting in nutmeg, rubber by Mr. Gopi

Conclusion

- The 'Land to lab approach' facilitates and calls for a collective approach from various stakeholders such as research institutes, innovative farmers, NGOs, women's groups for promoting local innovations in sustainable and scientific way.
- The analysis of documentation of local and farmer's innovations has brought out the tremendous potential of local innovation for developing location specific solutions.
- Lack of formal training helped the local innovators to break the rules of conventional research.
- Though traditional practices are community based, further improvement has been noticed by the individuals.
- Close association between formal and informal experts will improve both formal and informal research and will supplement each other.
- Development of localized Agri-preneurship.
- Increase in self-esteem and confidence of the farmers to tackle localized problems without external support.
- Increase in sustainability of farmer innovators through promotion and sale of their innovations.

5. Trade and Consumption

Organic Agriculture Around the World – A Snapshot

Authors: Julia Lernoud, Helga Willer and Sheikh Tanveer Hossain

Organic agriculture continues to be a dynamic and growing sector. From a market perspective or certified land, number of producers, diversification of crops and products, growth is seen all across the globe.

Introduction

Organic agriculture has shown to be a dynamic and continually growing sector. Since the first data was collected, certified land has grown by more than six-fold. However, the growth is not only noticed in the number of hectares, which today reaches to 71.5 million, but also in the number of producers, which grew by nearly 55 percent in the last 10 years, with almost 2.8 million organic producers around the world. Besides organic agricultural land, there are further organic areas, such as wild collection areas. The latter constitute more than 35.7 million hectares.

On the other hand, the organic market, especially organic retail, is now one of the highest growing sectors in the world. More and more consumers are choosing organic produce, and this is reflected in the market's exponential growth. Amarjit Sahota, from Ecovia Intelligence, has been studying the development of the organic market for several years and describes it as "a major sustainability success story in the food industry."

Organic agricultural land

In 2018, 71.5 million hectares were under organic agricultural management worldwide. Oceania was the region with the most organic agricultural land, with 36 million hectares, followed by Europe with 15.6 million hectares, Latin America (8 million hectares), Asia (6.5 million hectares), North America (3.3 million hectares), and Africa (2.0 million hectares).

² Julia Lernoud, IFOAM – Organics International, Bonn, Germany, www.ifoam.bio

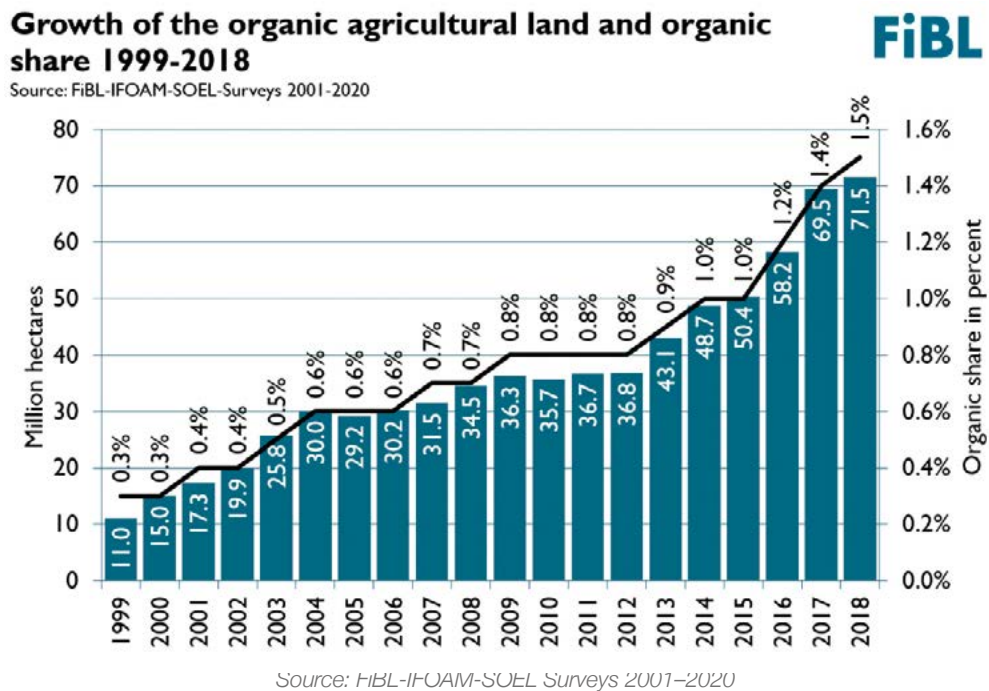
³ Dr. Helga Willer, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.fibl.org

⁴ Please note that the number of organic producers might be underestimated because many data providers only report the number of producers groups and not the number of producers involved in those groups, that in some cases can reach the thousands.

⁵ For more information on Ecovia Intelligence and their research, please contact Amarjit Sahota, the Founder and President of Ecovia Intelligence (formerly Organic Monitor), a specialist research, consulting & training firm that focuses on global sustainable product industries. Contact: Ecovia Intelligence, 79 Western Road, London W5 5DT, Phone (44) 20 8567 0788, E-mail services@ecovaint.com, www.ecovaint.com

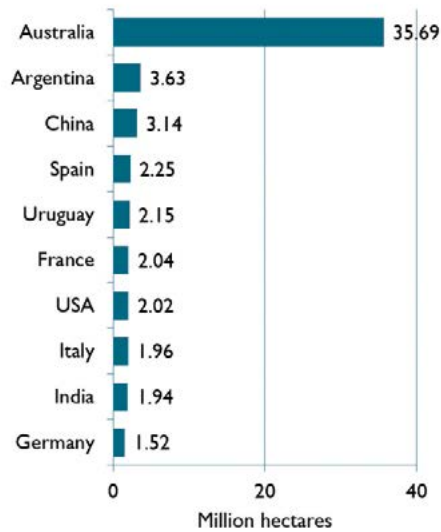
Australia, with the highest share of largest organic land, continued to experience growth in 2018 (+42'761 hectares), but it is important to note that an estimated 97 percent of the farmland is extensive grazing areas. Argentina is second followed by China in third place (Figure). The 10 countries with the largest organic agricultural areas have a combined total of 56.2 million hectares and constitute three-quarters of the world's organic agricultural land.

Sometimes the extension of the certified land does not show the complete picture of how organic agriculture develops in a country or region. This is why it is important to look at the share this organic land represents from the total agricultural land in the country. In 2018, the organic share of the global agricultural land reached 1.5 percent, representing a six-fold increase since the first available data. However, we see countries which reach far higher organic shares. In 2018, 16 countries surpassed 10 percent organic share. Countries such as Liechtenstein (38.5 percent), Samoa (34.5 percent), and Austria (24.5 percent) showed the highest organic shares (Figure 2).



When we have a closer look at the organic share by region, the highest organic share of total agricultural land was in Oceania (8.6 percent) followed by Europe with 3.1 percent and Latin America with 1.1 percent. In the European Union, the organic share of the total agricultural land was 7.7 percent in 2018. In the other regions, the share is less than one percent. (Figure 2)

The ten countries with the largest areas of organic agricultural land 2018
Source: FiBL survey 2020



Countries with an organic share of at least 10 percent of the agricultural land 2018
Source: FiBL survey 2020

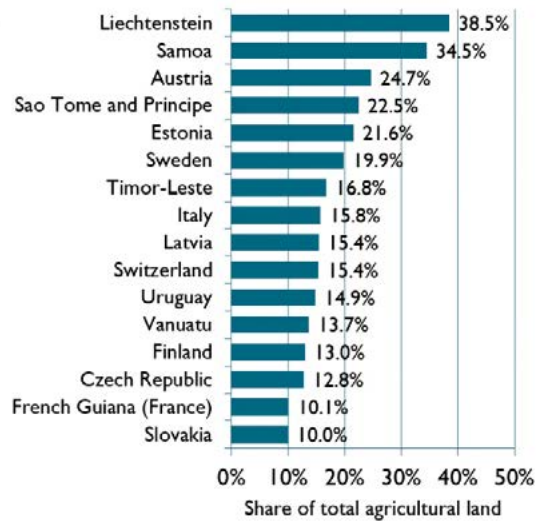
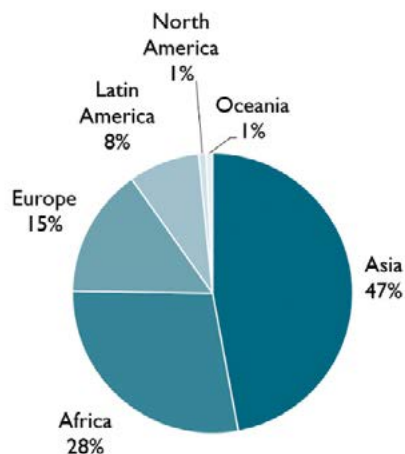


Figure 2: Top ten countries with the largest organic agricultural land and top 10 countries with the highest organic share
Source: FiBL Survey 2020

Organic producers and further operators

As mentioned above, in 2018, 2.8 million organic producers were reported. According to the data obtained, over 90 percent of the producers are in Asia, Africa, and Europe (Figure 3). The country with the most organic producers is India, followed by Uganda and Ethiopia (Figure 3).

Distribution of organic producers by region 2018
Source: FiBL survey 2020



The ten countries with the most organic producers 2018
Source: FiBL survey 2020

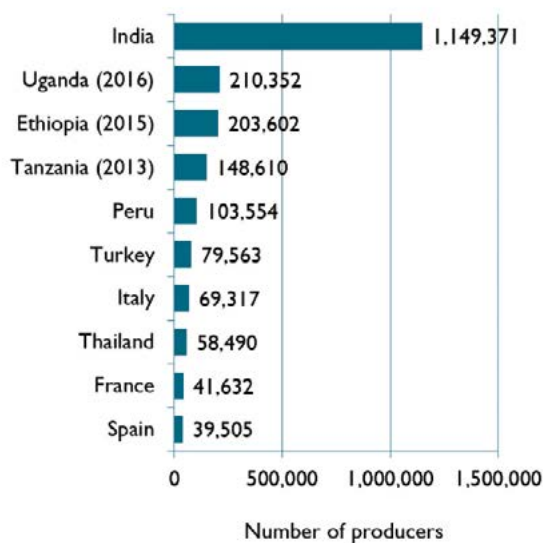


Figure 3: Distribution of organic producers by region and top 10 countries with the highest number of organic producers 2018
(Source: FiBL Survey 2020)

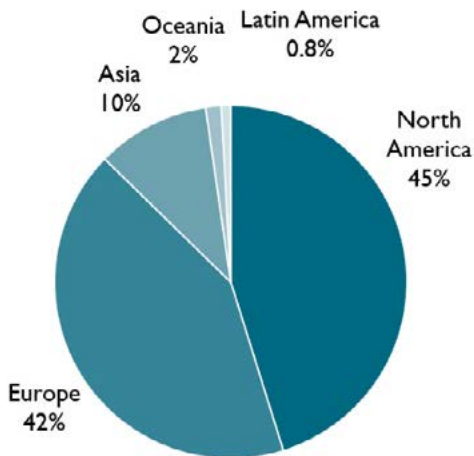
Unfortunately, data on other organic operators such as retailers, exporters, importers, etc., is difficult to collect; therefore, a full picture of the global situation is almost impossible to draw. However, from the data available, we can say that there are almost 96'000 processors and approximately 6'600 importers, most of them in Europe.

Organic market

The organic market is a success story but data on total retail sales value was available for only 56 countries in 2018 (30 percent of the total countries with organic data), which means that for many countries with organic farming activities, such data is missing.

In 2018, total organic retail sales amounted to almost 97 billion euros. The country with the largest market for organic food was the United States (40.6 billion euros), followed by Germany (10.9 billion euros), France (9.1 billion euros), and China (8.1 billion euros). For 2019, organic market data for these three main countries it is available and continues to show growth. The United States, with 44.7 billion euros, experienced a 4.6 percent growth, Germany (nearly 12 billion euros) showed a 10 percent growth, and in France (11.3 billion euros) the organic retail sales grew by 13.4 percent. The largest single market was the United States, followed by the European Union (37.4 billion euros) and China (Figure 4). By region, North America had the lead (43.7 billion euros), followed by Europe (40.7 billion euros) and Asia (Figure 4).

Global market: Distribution of retail sales value by region 2018
 Source: FiBL-AMI survey 2020, based on retail sales with organic food



The ten countries with the largest markets for organic food 2018
 Source: FiBL-AMI survey 2020

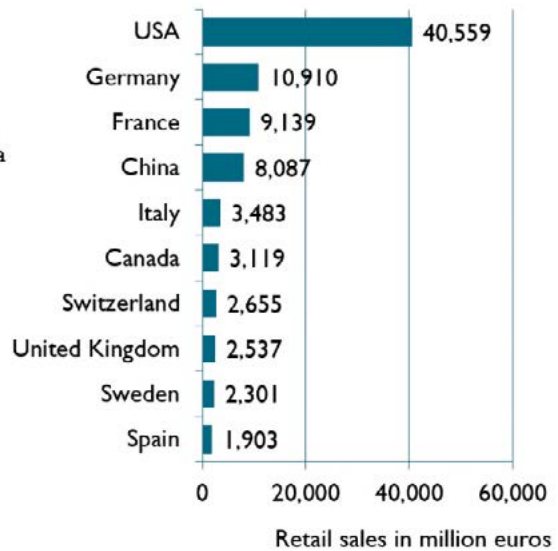


Figure 4: Distribution of organic retail sales by region and top 10 countries with the highest organic retail sales 2018 (Source: FiBL-AMI Survey 2020)

Market growth was noted in all countries for which 2018 data were available, even reaching double digits in some cases. France was the country that registered the biggest growth; the market increased by 15.4 percent. Whereas the highest per capita consumption by continent is in North America (120 euros), by country it is highest in European countries. In 2018, Switzerland and Denmark had the highest per capita consumption (312 euros) worldwide, followed by Sweden (231 euros) and Luxembourg (221 euros).

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The Status of Organic Agriculture in Asia

Author: Shaikh Tanveer Hossain

“One of the world’s biggest myths is that going organic is a choice. From the perspective of food security, there is no choice. Simple survival demands and requires it.”

- Former Bhutan Prime Minister Jigmi Thinley in the UN Conference on Sustainable Development Rio+20, 2012

Currently, 1.5% of the world’s agricultural land is under organic cultivation. Asia is not only the world’s largest continent, but 9% of the global organic agricultural area is in this region, comprising about 6.5 million hectares. Asia is home to the world’s most diverse cultures, has rich biodiversity, and boasts great potential for the growth of organic farming. The organic area increases significantly in Asia every year. China has the largest area of organic agricultural land (3 million hectares) in Asia, followed by India, which also happens to be the country with the most organic producers (835,200). Arable crops such as rice, wheat, cotton, and oil seeds and permanent crops like tea and nuts contribute the most to organic production in Asia. Seventeen Asian countries have legislation on organic agriculture, and eight are in the process of drafting legislation.⁽³⁾

The status of organic agriculture varies among Asian countries depending on their economies, citizens’ education, market development, technological innovations and readiness, government policies, and related factors. The situation in Asia is different than on other continents due to larger populations, high poverty levels, natural resource management styles, climate change vulnerability, food security levels, etc. Despite facing similar challenges, the economies of Asian countries are so diverse and varied that their organic agriculture movements and achievements vary widely as well. However, the organic market continues to occupy a niche position within the total volume of agricultural business. Some important factors with examples related to the status of organic agriculture are discussed below:

1. Yield

It is commonly believed that organic-farming yields are lower than those of conventional farming. This statement is mostly repeated by policy-makers who like to cite science-based evidence. This argument is valid as food security is a prime concern of governments that must ensure that their citizens are fed at any cost. People involved in organic farming could play major roles in conducting more science-based organic agriculture research and true-cost accounting of the sustainability of organic food systems and then discussing the results with policy-makers and other stakeholders. It is also necessary to clarify how organic agriculture maintains the core values underpinning the UN Sustainable Development Goals (SDGs) for long-term sustainability.

Example:

(Photo showing the author receiving the 1st OFIA Award in 2011)

The Organic Farming Innovation Award (OFIA) is a joint initiative of the Rural Development Administration (RDA) of the Republic of Korea and IFOAM Organics International. It was started in 2011 to encourage the adoption of successful organic practices and quality innovative research work.

Successful models and the results of comparative studies with conventional systems are shared through this unique platform. After OFIA initiation, a number of innovations

developed in Asia, e.g., Bangladesh, Japan, and the Republic of Korea, were recognized with awards.^(4,5)

2. Innovations

To become more competitive, organic agriculture must embrace innovation and incorporate modern smart farming technologies, particularly on commercial organic farms. It is widely agreed that unless organic farming is a profitable business, overall progress will not be achieved. The young are a key resource, and the aging of farmers is a pressing concern in many Asian countries. In efforts to replenish the farm labour supply or attract young people to farming, it is important to advocate both environmental sustainability issues and profitable farming enterprises and systems so that they will stay in agriculture over the long term or permanently. One obvious option is to introduce digitization for improving organic farm production and income when possible.

Example: Smart digital technologies can address the aging and agricultural succession issues in developed Asian countries, like PR China, Japan, and the Republic of Korea (South Korea), as well as developing ones. Some countries, like Vietnam, offer incentives to entrepreneurs for importing equipment necessary for smart digital organic agriculture practices.

3. Supply chain development and management

Supply chains are key in the development of organic agriculture. Many Asian countries are struggling to maintain organic product supply chain management in terms of quality and price control. Educating producers and establishing united farmers' cooperatives or organizations are factors that can strengthen organic food systems and supply chain management.

Example: Several countries like, Japan, PR China and the Republic of Korea have succeeded in improving organic supply chain management due to their strong cooperative structures such as Japan Agriculture and the Hansalim model of the Republic of Korea.⁽⁶⁾ Sustainable market development is also required to ensure effective communication between growers and consumers to achieve a win-win situation. Hansalim has been working under the slogan, “producers take responsibility for consumers’ lives and consumers take responsibility for producers’ livelihoods”.

4. Consumer awareness, trustworthiness, and local certification

Consumers are king. Unless organic products make consumers happy and satisfy their needs, the growers will suffer. Presently consumers are often confused about and lack trust in organic product quality. This gap in understanding creates mistrust, and eventually authentic growers lose market share to those following fraudulent practices. Sometimes consumers pay premium prices for inauthentic produce, or credibility is lost due to the lack of a transparent traceability mechanism. The consumers of conventional agricultural products do not require this type of verification process as they have little interest in this issue. The majority of organic farmers cultivate small parcels of land from which the output is small in quantity. This puts pressure on authentic growers to market their products successfully as they generally have little knowledge of consumer demand trends and distribution costs for low quantities of products are disproportionately high.

Example: For ensuring food safety and low-cost certification and traceability of organic produce, many growers focus on PGS and the QR code. Such practices increase trust among consumers and make supply chains more secure and transparent. However, it is also necessary to educate consumers in how PGS and QR codes function. The PGS Organic Council (PGSOC) and Masipag Farmers’ Guarantee programs in the Philippines are successful examples of this. Hansalim “Autonomous Certification” in the Republic of Korea is based on a participatory certification system in which consumer members are active.

5. Local government

Local governments are key drivers of the organic movement and can promote it in local contexts. Recognizing the importance of this, IFOAM Asia has established the Asian Local Governments for Organic Agriculture (ALGOA) as a suborganization and is working with over 200 local governments in Asia for the expansion of organic agriculture at the grassroots level.

Example: Among the ALGOA members, the League of Organic Agriculture Municipalities and Cities in the Philippines (LOAMCP-PH) and Goesan County of the Republic of Korea are good examples of inclusive programs and initiatives by local government institutions. The Ministry of Agriculture, Forestry and Fisheries (MAFF) of Japan now supports local governments in promoting organic agriculture through platforms set up by them. In August 2019, 17 local governments joined this initiative.

6. Government initiatives and Policies

Government initiatives and programs are the most important methods for promoting organic agriculture in Asia. A few examples can be highlighted. The Government of India has begun to promote various initiatives that provide incentives for organic farmers such as Parampragat Krishi Vikas Yojana (PKVY) and Mission Organic Value Chain Development for North Eastern Region (MOVCDNER). Bhutan has signed numerous international agreements to protect its rich wildlife and biodiversity and to reduce its greenhouse gas emissions radically. The Ministry of Agriculture and Forests (MoAF) of Bhutan adopted an Organic Masterplan in 2012. All of these long-term efforts and commitments are based on the conviction that Bhutan has the potential to develop sustainable organic farming and food systems⁽⁷⁾.

7. Market size and potential

Currently China is the world's fourth-largest market for organic products (nearly 8.1 billion euros annually). Japan has a large domestic organic market valued at 1.4 billion euros, and that of the Republic of Korea is valued at about 330 million euros. It is clear that the organic market is continually growing throughout Asia⁽⁸⁾.

8. Regional organizations

IFOAM Asia is one of the regional bodies of IFOAM Organics International which consists of more than 270 members in 22 countries. IFOAM Asia aims to improve the life and conditions of its members while restoring nature's balance and working with different stakeholders by organizing different events and projects in Asia including ALGOA, the Organic Youth Forum, and Organic Asia Congress. IFOAM Asia aims to develop and promote regional and domestic organic markets as well as increase consumer awareness of organic food and its benefits. IFOAM Asia also recognizes the need for scientific research, education, and development in relation to organic production, processing, and marketing to benefit organic farmers/producers in Asia and networking for different stakeholders⁽⁹⁾.

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Photo Credits: Newsis

Case Study 1: Hansalim Movement

Author: Jennifer Chang

“Farmers shoulder the responsibility for the healthy lives of consumers and consumers shoulder the responsibility for the livelihood of the farmers” -Hansalim Manifesto

A New Paradigm of Sustainability



Towards the late 1980s, the South Korean agriculture was facing a crisis due to the decline in the local markets and rural communities caused by trade liberalization policies, urbanization and environmental destruction resulting from conventional farming. A new paradigm shift was needed for sustainability – to guarantee the “right price” for farmers, to provide safe and wholesome food for consumers and to re-establish the peaceful and harmonious “co-existence of human and nature.” To overcome this situation, the farmers’ movements realized that a new alternative was needed, and the so-called Hansalim movement started to take root.

At its inception in 1986, Hansalim was a humble grain store selling organic grain to consumers in Seoul, the capital city. According to its annual report, 2020 Hansalim Story, it has now developed into a federation consisting of organic farmers’ and consumers’ cooperatives with an annual sale of over USD 421.4 million of organic food at its shops and through internet sales. It serves over 695,997 households which is 3.11 percent of the national’s total. If we take an average household as consisting of four members, this amounts to a total of nearly 2.8 million individual customers!

Hansalim is based on the principle of mutual trust and common responsibility between farmers and consumers. Consumers regularly visit the farms and the food “comes with a face”- that of the farmers who produce them. Consumers are willing to pay the premium for their organic food -food produced based on good social values and which guarantee the “right price” for their farmers.

Hansalim implements direct sales of organic food working with its own farmers’ communities and its consumer cooperatives. Farmers connect directly to urban consumers through contract farming and are guaranteed on average a 76% in profits. There are no agents or middle-persons involved in the transactions.



Hansalim goes beyond the marketing and sale of organic food and much of its work is focused on advocating the benefits of organic agriculture, the importance of food sufficiency, local food and integrated farming systems with animal husbandry and the cycling of natural resources as a way of preserving Korean agriculture and sustainability.

Hansalim has been active in calling for policies for the use alternative and renewable energy instead of reliance on nuclear power plants. Members of Hansalim take to the streets campaigning for the closure of nuclear power plants and for more sustainable and renewable sources of energy.

Members also campaigned with other social groups for legislation to provide free, organic school meals. They often volunteer in organizing dietary education in schools to educate students on the health hazards of instant and processed food. Organic food supplied by Hansalim is all tested for GMO residues as the organization also leads the anti-GMO movements in the country.

The focus of the Hansalim movement are as follows:

1. A direct sales movement for organic agricultural product from farm to table and a shared living community movement between urban and rural areas.
2. A movement for saving food and agriculture based on the main principle of common responsibility that “farmers shoulder the responsibility for the healthy lives of consumers and that consumers shoulder the responsibility for the livelihood of the farmers”.
3. A movement focusing on the total system including not only distribution and consumption but also production methods and manifesting democratic governance and accountability in the relationship between farmers and consumers.

The main activities of Hansalim can be categorized by its three main slogans:

1. Save the Table - Hansalim produces and supplies sustainable and organic food.
 - Direct sales between farmers and consumers
 - Food education programs and campaigns to protect our health and the environment.
 - Active participation in governmental policy-making processes and the social movements to improve food safety regulations.
2. Save Our Agriculture - Hansalim respects the value of agriculture and supports sustainable and organic agriculture.
 - Produce organically farmed and environment friendly products.
 - Exchange site-visits and undertake activities of cooperation between urban-rural communities.
3. Save Our Life and Earth -Hansalim encourages a harmonious coexistence between Human Beings and Nature.
 - Education, research and publish to realize the peace of life
 - Demonstrate the alternative way of living in harmony with nature and our neighbours.

International Recognition

In 2014, Hansalim was the Co-Recipient of the Gold Prize of the One World Award given by Rapunzel and IFOAM-Organics International to honour the outstanding achievements in organic agriculture.



Source

1. 2020 Hansalim Story (Annual Report)

Case Study 2: The Case of Organic Fukushima Adachi

Author: Yoko Taniguchi



Introduction

Organic Fukushima Adachi is a group of farmers consisting of 25 members in the Nihonmatsu and the Otama areas in Fukushima prefecture, Japan. The group had lost more than 90% of their sales by the third year after the accident at the nuclear power plant, located 50 km east to the area. Faced with the crisis,

the group sought every measure to recover the farm economy, including the launch of a partnership with a local supermarket chain, Ichii.

Now the area had become one of the few places in Japan where consumers can easily access locally grown, fresh, and certified organic produce.

Unique Approach

1. Collaboration with local logistics and wholesale company, Dairy Service. The company's trucks collect vegetables at each farmyard, pack them immediately in their facility, and deliver them to the stores within the same day.
2. Low-risk contract with Dairy Service. Dairy Service purchases the produce from farmers, with the full transfer of property rights rather than on consignment basis and bears all the risk of the unsold stock. Farmers do not pay the cost of delivery nor handling fees.
3. JAS organic certification. Unlike many other local organic food initiatives, their approach is unique in the sense that they stick to third-party certification, thereby enabling their produce to be labelled as "organic" to be sold in supermarkets.
4. Stakeholder meeting. All those involved in the food chain get together once a year and get to know each other over a drink. This meeting has been helpful in altering the mind of buyers at the supermarket.

Impact

1. The produce of the farmers have gained popularity and the sales have grown rapidly as well as the number of stores selling the produce. Sales of the produce have recovered and reached beyond the level prior to the nuclear accident.
2. The Dairy Service's logistics system and the low risk contract arrangement allow elderly farmers and new farmers to supply their produce with ease.
3. Other players in the local food system including conventional farmers, retailers and consumers started to become part of their network, improving the truck loading ratio and strengthening the existing partnership.



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6. Organic guarantee systems

Author: Konrad Hauptfleisch

Supporting and ensuring organic integrity

“Contrary to the views held by some, I am sure that the techniques of organic farming cannot be imprisoned in a rigid set of rules. They depend essentially on the outlook of the farmer.

Without a positive and ecological approach, it is not possible to farm organically.”

- Lady Eve Balfour: Soil Association, 1977

What are organic standards?

It is important for us to reflect on the above quote before getting into some detail. Retailers and consumers tend to focus – understandably so – on the products of the organic agriculture system rather than focusing on the farming practice. It is important to them that these products are what the labels claim them to be: organic. But what does “organic” mean in this context? What makes a product “organic”? Does the product have certain intrinsic qualities that can be measured by a set of objective rules and be deemed organic?

We can take a product sample, do a battery of laboratory tests on it and declare the product to be free from pesticide or other residues. We can safely say that the product does not contain traces of certain chemicals, heavy metals, pollutants, growth hormones, etc. that will make it unsafe for human consumption. Does this mean that the product we are looking at is organic? The answer is very simple: no. The lack of pesticide residue does not mean the presence of an organically grown product.

The most important thing to understand about organic standards right at the outset is that they are production standards and not product standards. If we go back to Chapter 3 of this reader, we see very clearly that organic is described as a production system that supports the health of soils, ecosystems and people. It does not describe a product anywhere in the definition, nor the principles. Organic products are the result of an organic production system, and these products make it possible for farmers to make a living out of their activity, and it makes it possible for consumers to eat healthy food that was produced in a sustainable way.

That is why Eve Balfour was absolutely correct to stress the fact that the farmer (and, in my opinion the consumer, too) must first and foremost have a positive ecological approach. Only from such an approach can everything else follow.

And yes, organic standards are essential to the organic community and organic trade. Standards are not only production rules and guidelines for the farmer, they are also a set of positive statements about the values and principles organic agriculture. In the old days, the word “standard” also meant a “banner” or “flag”. It symbolised our belief and pride, and organic standards should be considered in the same way.

The history of organic standards

The first published organic standards, according to most informed sources, were published in 1967 by the Soil Association. It was 3 pages long and titled “Standards for organic food production”. Later, a fourth page was added for farmers and processors to declare that they would abide by these standards. The Soil Association set up a certification scheme a few years later, in 1973.

It is important to pause here and reflect: the first organic standards were developed by farmers and farmers’ associations for farmers to declare themselves as organic, based on a set of guidelines. The first certification of such farmers was also conducted by the farmers themselves in collaboration with their association. From these humble but proud beginnings, there developed a global system of standards, regulations and accreditation that became an area of business worth millions of dollars in its own right. This development was driven by the sharp increase in organic trade, as we have seen in previous chapters, and the need for a separate service industry to ensure that the organic brand and labelling remains credible as the market expanded.

What started as a set of guidelines for farmers, became a complete and quite complex guarantee system, in line with government regulations in many countries (the most well-known regulations – currently governing the largest markets for organic products - being the EU and USA), as well as international organisations like IFOAM-Organics International and Codex Alimentarius. These regulations focus on control, labelling and enforcement and can be extremely intimidating for small farmers and consumers. They are a far cry from the standards of the Soil Association and other pioneering groups over 50 years ago, but so is the market. As trade in organic products grew from a pioneering, locally focused cottage industry to a global marketplace dominated by large corporations and international trade agreements, so did the organic guarantee system.

It is important to understand that the system of guarantee has to be suitable and appropriate to the environment that the producer, supply chain and consumer is operating in. Organic control systems should be adapted to local conditions, just like organic practices. This is why IFOAM-Organics International and the global organic movement recognise not one, but three different ways to recognise and assure organic production:

Different approaches for different conditions

First-party assurance:



PGS farmers in Stellenbosch, South Africa (May 2016)

A local organic farmer sells her products directly off-farm, and also goes to a local farmers' market in the nearby town or village, and proudly offers her fresh, local products for sale to local consumers. She is well-known in the community, and she knows most of her customer personally. There is a strong social connection in the community, and a high level of trust. In such an environment, it is completely acceptable for this farmer to make a "self-claim" about the products. It is easy for the local community to verify, and frankly, their local social process is guarantee enough. In this case, the "first party" (namely the farmer) issues the assurance of organic integrity.

"First Party Assurance" or "self-claim" under these circumstances is recognised by IFOAM-Organics International

as a valid and acceptable form of assurance. Even the United States organic regulation allows small farmers to sell their products as organic if their annual sales are below USD 5,000.

"Second-party" assurance:

Let's consider the following scenario: a farmer or farmers' group are selling their products at a farmers' market individually or collectively. They might also be selling their products via a local small business or cooperative. These farmers do have strong ties to their community, but now their products are going through a more hands (a longer supply chain) than the farmer we described above. It is no longer so easy for the farmer to make a personal claim, and consumers might require a more comprehensive assurance.



Training visit to an "organic aimak" (PGS), Kyrgyzstan, 2017

These consumers can decide to link with the farmers' community and participate in the assessment and approval of the farmers. This kind of "second-party" participation in the organic assurance process has many faces – currently, the most well-known system where producers and consumers join hands to create an organic assurance system is known as Participatory Guarantee Systems, or PGS.

"PGS are locally focused quality assurance systems. They certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange" – Official IFOAM definition - 2008.

Third-party assurance:

Third-party assurance systems are currently the most widely used certification systems used in the trade of organic products worldwide. So much so, that when someone talks about “certified organic”, this is the system that they are usually referring to.

Third-party certification is a much more extensive system of inspection, auditing and verification, and it is performed by independent “third parties”, i.e. a qualified inspector, working on behalf of a certification agency.

This person is neither a farmer (the “first party”), nor a consumer (the “second party”) but a qualified and objective “third party”, specifically appointed by a certification body to perform an inspection of the production system, based on the relevant organic standard, and guidelines defined and developed for inspection and certification. After following all the required procedures, the inspector will issue a report. Based on this report, the certifying body will issue a certificate that will give farmers the right to describe and label their products as organic.

Third-party certification is particularly appropriate, especially when the product travels a long distance from the farm – in the case of national or international trade. This makes it very difficult for a consumer to verify the integrity or source of the product on the shelf. If the product is also packaged and repackaged, processed or used as an ingredient in another product, the link between the farmer and the final consumer no longer there. It is here where a third-party system is currently the best alternative we have, and over decades, certification has enabled and supported the growth and development of organic trade.

There are currently over 500 certification bodies offering inspection and certification services world-wide, either certifying products to one of approximately 150 private organic standards or over 68 fully implemented government regulations.

This is a very complex world of standards, regulations and legislation, that can make certification a challenging task, especially for smallholder farmers, in remote areas of the world, producing products in high demand, like tropical fruits, spices, coffee and tea, and wild-harvested crops like herbs and berries. It is therefore important for our young organic leaders to have an insight in this complex world of organic guarantee systems – to be able to lead and assist our farmers and small businesses so essential to the development and success of sustainable food and farming systems globally.

Case Study: Participatory Guarantee Systems Organic Council (PGSOC) of India

Authors: Roopa Prabhakar and Karthik Gunasekar

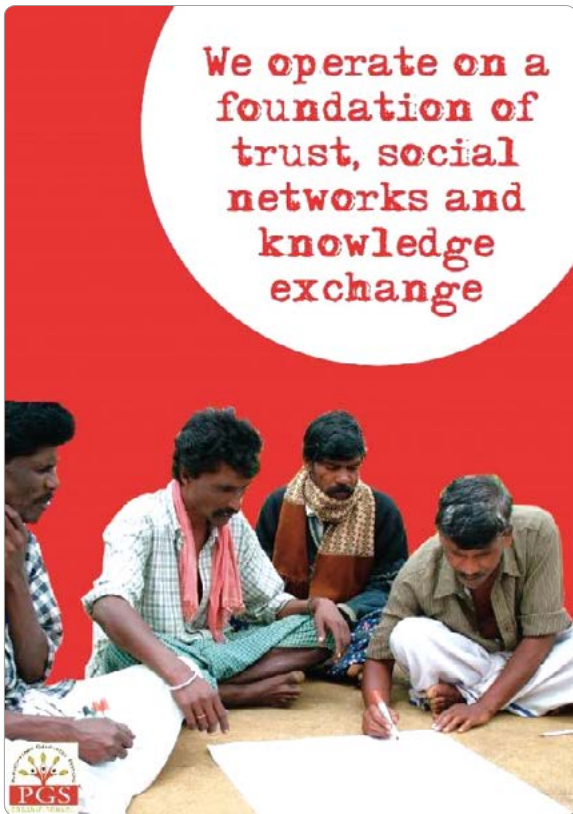
*“However they roam, the world must follow still the plougher’s team;
Though toilsome, culture of the ground as noblest toil esteem”
- Thiruvalluvar 500 BC, Thirukkural 1031 (English translation)*

History of PGSOC

Since the late 1990s, a few NGOs in India had been working on facilitating community based organic certification with the intent to bring traditional farmers within the ambit of organic certification. These certification processes were inclusive, adapted to local social and economic situations, and empowered the organic farmers – particularly the small farmers and peasants. Access to markets was the key underlying factor. The local organic standards, documentation systems, and measures to maintain compliance, were all decided by the communities involved.

As a country, India brought in standards in 2002 and the certification process was implemented in 2002. The late Dr. Alexander Daniel of the Institute for Integrated Rural Development (IIRD) was initially entrusted with draft strategy formulation and documentation of alternative certification processes until he passed away on 21st December 2005. Though these alternative certification systems followed the philosophy and principles of organic agriculture, there was no recognition that acknowledged this worldwide.

The International Workshop on Alternative Certification happened in 2004 at Torres, Brazil - an important milestone in the history of recognizing alternative approaches to organic certification. Dr. Alexander Daniel and Mathew John of Keystone Foundation were able to present their experiences in this Workshop – nearly 20 such alternative approaches were discussed and their key common approaches/principles formed the basis of a new worldwide umbrella and collaboration. It was in this workshop that the term Participatory Guarantee Systems (PGS) was first coined and the participants committed themselves to promotion of PGS at the local, national, and international levels.



In 2005, the Ministry of Agriculture in partnership with FAO embarked to explore appropriate certification systems that could be adopted by small and marginal farmers in India. Ajay Rastogi (FAO) and Ron Khosla, the founder of “Certified Naturally Grown” – an alternative certification system in the US – delivered a draft strategy document in 2006 after visits to sites where community-based certification was practiced and extensive consultations with key stakeholders.

As a follow-up to the strategy, a consultative meeting with Civil Society Organizations was held in September 2006 in Goa under the auspices of Organic Farmers Association of India (OFAI) and facilitated by the National Centre of Organic Farming and FAO. An informal coalition of Voluntary Organizations or NGOs committed to piloting and promoting PGS was set up at this meeting. In April 2011, it was formally registered as a society in Goa as Participatory Guarantee

Systems Organic Council (PGSOC) with 16 organizations as Founding Members.

PGSOC has evolved to become a cause-driven social organization dedicated to bring about an inclusive platform for small and marginal organic producers to collaborate and flourish in the domestic market through a process based on verifiable trust. Best practices and indigenous knowledge systems of the member farmer collectives are distilled as common standards and processes to ensure safe and healthy food for all. Today we have close to 6000 farmers and 450 local groups following the PGSOC.

Vision of PGSOC

We envision a future of socially, ecologically and economically just food systems guaranteed by trust and participation, driven by traditional ecological knowledge systems and co-owned and controlled by communities adhering to principles of co-operation.

Manifesto of PGSOC

In addition to PGSOC’s commitment to the core values and principles of PGS as articulated by IFOAM we manifest the following:

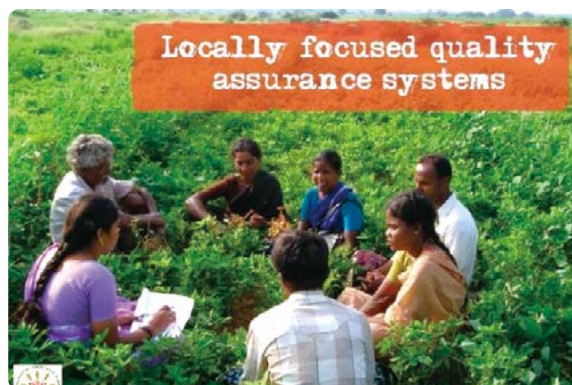
- i. Our system is based on trust, participation, peer review and localised market places and is not dependent on third party surveillance or regulations for authenticity and reliability. It empowers farmers and consumers to be an integral part of food systems and strives to place humans and nature over processes and systems.

- ii. We reject the idea of mono-culturing of agriculture, which often causes biodiversity loss and lesser nutrients in the food available to the common people.
- iii. We aim to challenge the idea that safe food is possible only through scale and shift focus to more efficient decentralised local food systems, co-owned and managed as collectives or co-operatives of producers and consumers.
- iv. Through co-operative participation of community-based organisations, voluntary organisations, non-governmental organisations and local governments we aim to connect urban consumers to their sources of food and clothing.
- v. We work collaboratively with various organisations, individuals, civil society members, artisans, farmers and consumer interest groups and aim to support and facilitate newer members and markets.
- vi. Our goal is to evolve as a think tank in the National Organic movement to support our core constituency of small farmers by identifying relevant issues, initiating dialogues and distil the essence of the broad discussions to build awareness and spur meaningful actions from relevant stakeholders.

Activities of PGSOC

Certification Process

The PGSOC guarantee system is derived by homogenizing the common values from the diverse social and cultural control systems and mechanisms existing in communities locally. Participation of all stakeholders, verifiable trust, shared vision, horizontality, transparency and knowledge sharing forms the pillars of this guarantee system. PGSOC have adopted the NSOP of Government of India as a minimum requirement for establishment of organic integrity.

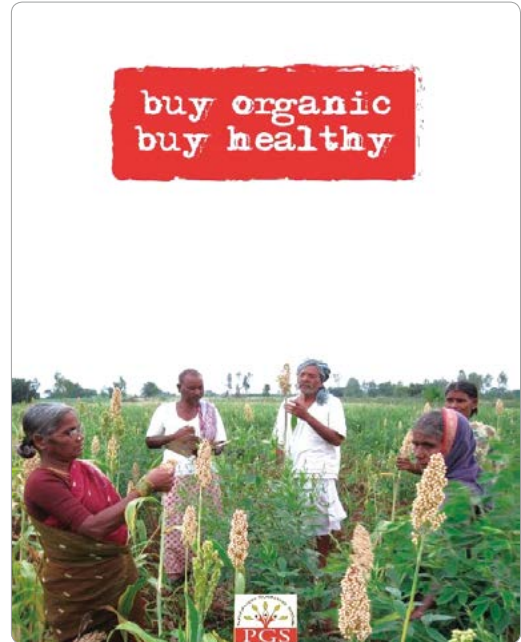


The “Local Group” of five or more organic farmers from the same locality is the fulcrum of the self-regulatory support system of PGS. Each farmer pledges that his/her production process is free from manufactured chemicals. The Local group provides assurance for the organic practices followed by each farming family based on their peer review system

along with involvement of consumers and other stakeholders. The activities of the Local groups are facilitated by a voluntary organization called “Facilitation Council”. Adherence to this guarantee system enables the usage of PGSOC label which acts as a mark of quality.

Promotion of PGS

PGSOC has around two decades of experience in the practice and implementation of PGS in various agro ecological zones of India. PGSOC also participates in various forums to promote PGS and also conducts trainings to farmers and civil society organisations. PGSOC is also engaging with local governments in India for developing a framework for local government enabled PGS. PGSOC leverages this expertise for promoting PGS among more farmers in India as well as across the globe. The founding members of PGSOC have also played an active part in spearheading PGS globally. PGSOC was also actively involved in promoting PGS in Sri Lanka, Bangladesh and Bhutan.



Consumer outreach Programme:

PGSOC’s Consumer Outreach Programme strives to deliver an effective public discourse on food among consumers that will increase awareness, knowledge and conscious consumption of food and agriculture-based produce along with consumers being active participants in the food and production system. This programme engages communities in the diverse set of values inherent in the agro-ecological practices of small and marginal farmers. These values enhance the quality, safety, security, accessibility and nutrition of food and environment that are normally invisible as product characteristics.

Through co-operative participation of community-based organization, voluntary organization, non-governmental organizations, and local governments we aim to connect urban consumers to their source of food.



7. Policy and advocacy

Authors: Konrad Hauptfleisch and Vic Tagupa Jr

“You cannot get through a single day without having an impact on the world around you. What you do makes a difference, and you have to decide what kind of difference you want to make.”

- Jane Goodall



Introduction to advocacy

The terms “policy” and “advocacy” are often thrown around where government officials, development agencies, NGOs, activists and community leaders get together. They are words used by politicians, by experts and in circles where we sometimes find ourselves intimidated and unsure. There is a lot of jargon related this very important work area, and it is important for aspiring leaders in the sector to have a good grasp of this topic. After organic standards and regulations, it is often the place where we falter, due to a lack of knowledge and understanding.

In order to demystify this very important work area, let’s look at a few terms that are used when we talk about the topic of advocacy – first there is the actual term “advocacy”. It is very important to understand that advocacy is an activity. It is a set of actions one takes in order to achieve something.

If we are unhappy with a state of affairs, if we want something to change from one state to another, if we want a better situation for our communities, or a better life for our children, or an end to the ecocide committed by unscrupulous companies converting common goods into private equity, we need to advocate for change. In those three words, it all comes together. In order to make a real change to any given situation, one has to convince the person or organisation that has the decision-making power to consider your position on the matter, review their position on the matter, and ensure that change happens.

Who are these “decision-makers”? Usually, the first ones that come to mind are senior government officials who can develop policies, make laws, and drive change from the top down. Our focus as concerned citizens, farmers, consumers, or activists will often be to convince the government to change legislation and regulations to favour our position on any specific topic. We will bring arguments, logic and science to bear on these decision makers – if we can find them and get them to listen to us. We will appeal to their sense of value, fairness, justice, and humanity to help us change the world. And they will listen, reconsider their current position, and change the rules, laws or policies we object to. And we can go home, congratulate ourselves on a job well done, and look forward to a brighter and better future.

In some cases, this can be the case: concerned communities have a valid issue with some situation that can be improved by changing a law or writing and implementing a new policy. And when they bring this problem to the appropriate authority, the above scenario might play itself out.

But sadly, more often than not, the decision-maker will not listen to our very good arguments or appeal to his sense of fairness, justice and a better life for all. It is because policy decisions are not only made based on facts, logic, science, and humanity. Policy decisions are more often made on the considerations of ideology, vested interest, economy, political affiliation, and personality. If we only look at the world’s inability to make real, effective, and lasting changes to policies relating to climate change, this becomes painfully apparent. Many political leaders do not accept the overwhelming scientific evidence on the topic. Or, if they do, they might be bound by the position of their party or blinded by their own ideological bias. Or, they might bow to the pressure coming from large companies that employ thousands of people and stand to lose millions if an environmental policy is implemented that will affect their ability to do business.

This is why our work in advocacy has to be multifaceted. We have to bring a message across to more than just the politicians and government officials at national level. Behaviour change has to happen at all levels of society, as people at every level make decisions every day that will influence our planet’s future. A consumer is a decision-maker when they accept a price in a store or choose to buy a product that was unsustainably produced. A voter is a decision-maker when they vote for a climate-change-denying megalomaniac. A farmer is a decision-maker when they purchase a pesticide and a businesswoman is a decisionmaker when she chooses to invest in a company.

This collective power of decision-making is immense, and powerful, and very difficult to harness. Especially by small, under-resourced organisations that make up the organic movement worldwide. This is why we need to make sure that we create networks, partnerships and alliances in our communities and countries, on our continents and around the globe to ensure that we all work toward the common goal of positive change towards truly sustainable agriculture and food systems.

And that is why our advocacy and behaviour-change activities need to work at many levels of society. That is why we need to ensure that our message stays clear, simple and consistent, whether we are talking to a consumer, a farmer or a president of a country. We might use different terms, more appropriate words or examples depending on the audience, but we need to make the world hear our message consistently. And we might also find that different partners are better suited to addressing specific audiences: and international NGO, working closely with global organisations like the United Nations or some of their bodies like the FAO or WHO, will be better equipped to advocate at that level, while a community organisation will be much better suited to influence behaviour change in a village, town or city.

In the remainder of this chapter, we will take a look at a few examples of such organisations, in order to get an understanding of what they do and why.

IFOAM-Organics International's work on global advocacy:

IFOAM-Organics International is the largest single global membership movement representing organic agriculture. It therefore makes sense that it focuses on global advocacy and collaborates with its regional and local partners to spread the same message at their level of influence, while they focus on the global organisations and opinion leaders.

Their advocacy influences agriculture, food and other relevant policies of important international and global governmental and non-governmental institutions. This is done in the context of the supported farming systems and value chains in order to mainstream Organic Agriculture and true sustainability for people and the planet. It also assures that IFOAM's positions and strategic guidance reach the movement.

Why do they focus on this level and at these issues? Very simply, because that is what is relevant at a developmental and grassroots level, but also because it addresses global concerns. As a global organisation, they campaign for the "Organic Alternative". The work is aimed at addressing poverty and hunger, climate change, land and natural resource degradation, wild and agricultural genetic diversity loss, toxic food and farming, farmers rights including land tenure and right to a fair price - and it creates opportunities for the organic world.

IFOAM-Organics International focuses on 5 key work areas to influence global policy:

1. Developing content – advocates and ambassadors need good information, facts, studies and arguments to convince often sceptical policy makers. A large part of the work focuses on collecting, compiling, simplifying and disseminating content.
2. Networking and institution building – as mentioned above, partnerships and alliances are key to advocacy success, and IFOAM spends a lot of time lining and creating networks.
3. Lobby for policy changes – IFOAM is active within a number of UN bodies and panels, and
 - officially co-leads the Farmers' Major Group in the United Nations Environment Programme (UNEP),
 - unofficially leads the Farmers' Constituency at the UN Framework Convention on Climate Change (UNFCCC),
 - is a member of the Farmers' Major Group and has a seat on the FAO Committee on World Food Security (CFS),

4. Think-tanking and internal communications: the advocacy department is active in supporting its internal bodies through capacity building (training, strategic recommendations, presentations at trade fairs, conferences and events) They also support position development, and the development of new ideas and approaches to support organic development.
5. External communications and outreach: a lot of work is currently being done to develop and support external communication to consumers, retailers, and public-facing organisations to create awareness, and drive behaviour change. Examples of this work are the [Honest Food](#) and [I Grow your Food Campaigns](#), and the [Organic Without Boundaries](#) blogsite.

Advocacy at continental and regional level:

While the work of an advocate at a global organisation can sometimes be seen being very far removed from the grassroots, and from the people that matter, it is crucial in the campaign towards a fairer and more sustainable world for all. But this work cannot be done in isolation and must be supported by a network of organisations working at regional level, like IFOAM-Organics Asia, IFOAM-Organics Europe, IFOAM North America, IFOAM Latin America and AfrOnet.

We will focus more on their work in the next chapter on the organic network, as their work goes beyond advocacy.

Here, we will look in more depth at case studies of Asian networks and organisations working for policy change and organic agriculture development at local and community level.

Case Study 1: The League of Organic Municipalities, Cities and Provinces in the Philippines (LOAMCP-Ph)



LOAMCP-Ph is an alliance of 168 mayors and governors in the Philippines with the aim to accelerate the implementation and promotion of sustainable organic agriculture in the Philippines. LOAMCP-Ph recognizes that the local government units, through the implementation of local policies is one of the fastest ways to spread organic agriculture in the country. What makes this organization unique from other organic organizations is that membership is limited to mayors and governors only. These local leaders spearhead the implementation of policies in their communities. They, with the assistance of the rest of local government units see to it that their communities strictly adhere to the principles of organic agriculture. Implementation varies from municipality to municipality, with some mayors completely banning the use of synthetic chemicals in their domain.

Membership Requirements

Membership of LOAMCP-Ph is only limited to elected mayors and governors in the Philippines. He/She must embrace organic agriculture as a core of his/her programs and must be endorsed by an existing member. The first step of acquiring membership is for the interested mayor of a city or municipality or a governor to submit a Letter of Intent to LOAMCP-Ph. Among many requirements, the most important one is for the interested member to submit at least one Organic Agriculture Plan with corresponding implementation report within three months from the application. This process ensures that the interested member will already have a concrete organic agriculture program before formally joining the League.

Partnerships with local and international like-minded organizations

LOAMCP-Ph has great partnerships with different local and international organizations that share the same values and principles. Globally, LOAMCP-PH agenda is in parallel agenda with the International Federation of Organic Agriculture Movements (IFOAM-Organics International), established cooperation with Regeneration International (RI), Naturland Germany and World Goetheanum Association and recently with the Global Alliance for Organic Districts.

In the Asian region, LOAMCP-PH forged a strategic partnership with IFOAM Asia and Asian Local Governments for Organic Agriculture (ALGOA) and Biodynamic Agriculture Association India (BDAAI).

In the Philippines, LOAMCP-PH solidifies significant alliances with the Department of the Interior and Local Government (DILG) with national policy mandating all city and municipal mayors as members of LOAMC-PH, National Organic Agriculture Board (NOAB), Department of Agriculture-National Organic Agriculture Program (DA-NOAP), Seaoil Foundation Inc., Department of Agriculture- Agricultural Training Institute (DA-ATI), Greenpeace South East Asia and Life Bank Foundation among others.

LOAMCP-Ph is recognized around the world

- Founded as League of Organic Agriculture Municipalities (LOAM) in 2012 by 17 Local Chief Executives, the founding president, Mayor Nacienceno Pacalioga Jr. of Dumingag, Zamboanga del Sur received the Gold One World Award of Rapunzel on the same year.
- The incumbent President, Mayor Rommel Arnado of Kauswagan, Lanao del Norte received the 2016 Gold Award on International Peace and Development Initiatives of the United Cities and Local Governments (UCLG) in Bogota, Colombia. In 2018, Mayor Rommel received the Honourable Mention of the Future Policy Award in Agroecology in Rome, Italy
- The City of Bislig, Surigao del Sur, led by former Mayor, now Vice Governor of Surigao del Sur hosted the 3rd IFOAM Asia Congress in Interrelated International Events on September 16th – 21st, 2018.



The LOAMCP-Ph General Assembly during the 3rd Organic Asian Congress in Bislig City, Philippines in 2018

Source

<https://www.youtube.com/watch?v=KN6UxcoML30>

Case Study 2: Pregnant Women Food Scheme: Linking Local Farmers to Consumers

Author: Jennifer Chang

Introduction

In 2019, the South Korean organic movements in partnership with the Ministry of Agriculture, Food and Rural Affairs submitted a proposal to the Ministry of Economy and Finance for the provision of environmentally friendly food to pregnant women and new mothers.

The proposal has been submitted as part of the “citizen participation budget” scheme through which the public can submit proposals for new projects. It is an open and transparent process and the public are asked to vote on the proposals submitted. Hence, the more popular proposals get budget allocation and implementation from the central and local governments.

Unique Approach

The proposal called for the delivery of a box of local environmentally friendly food to pregnant women and new mothers, twice a month. The aim was to target forty-thousand women in 2020 with the purpose of safeguarding the health of pregnant women and new mothers, and newly born babies. The other purpose was to expand the sales of environmentally friendly food and uphold the values of ecological services and organic farming. The method is direct e-commerce linking up the women with the local farmers.

The project started from January 1st, 2020 with the aim of providing environmentally friendly food to 45,000 pregnant women and new mothers. But with the onset of the COVID-19 pandemic, the number has been extended to 80,000 beneficiaries. The areas under project implementation are two cities, one province and twenty-three other local governments throughout South Korea.

The project is implemented through online orders in specific websites set up by the local government authorities. The beneficiaries can go online to do the one of the following:

- 1) Put in orders for individual items of food,
- 2) Put in orders for a box of food (no individual selection),
- 3) Choose a food package that automatically delivers food from 3 months to 12 months (no further selection needed throughout the year)

⁶ This article by the author originally published in the IFOAM website. <https://www.ifoam.bio/news/launch-pregnant-women-food-scheme-south-korea>

⁷ The “Environmentally-Friendly Promotion Law” of South Korea, “environmentally-friendly food includes both organic and pesticide-free food.

Impact

The beneficiaries can order food up to 480,000 Korean won (360 euros) annually. 20% of the costs are self- paid while the rest of the costs are supported by the central and local governments.

This project has received a very good favourable response from the Korean public especially in this COVID-19 pandemic and is a good example of the government taking a pro-active approach to help the local farmers and provide safe, and nutritious local food to its people.

새 생명을 위한 자연의 선물
임산부 친환경농산물 지원사업

임산부와 아이에게 친환경농산물 꾸러미가 배송됩니다!
 임산부와 아이에게 친환경농산물 꾸러미가 배송됩니다!

■ 지원대상: 임산부라면 누구나
 2020년 1월 1일 이후 출산한 산모와 현재 임신상태인 일부

■ 지원내용: 12개월간 48만원 상당의 친환경농산물 꾸러미 공급
 지정된 온라인 쇼핑몰을 통해 친환경농산물을 80% 할인된 가격으로 구매, 20%는 본인부담
 ex) 5만원 구매시 1만원 본인부담

■ 제출서류: 신청서, 임신·출산증명서류
 ※ 임신·출산증명서류는 신분인국에서 발급받은 임신확인서나 출산증명서를 말함

■ 신청방법: 신청서를 작성하여 읍·면·동 행정복지센터에 제출

농림축산식품부 at 한국농수산식품유통공사

2020 안성맞춤 예산안

임산부 친환경 농산물 지원 시범사업

연 48만원/1인

모든 임산부에게 친환경 농산물 꾸러미 택배 배달

90.6%
 '19 예산 '20 예산

대한민국정부

Source

Ministry of Food, Agriculture and Rural Affairs, South Korea.

8. The organic movement

Authors: Vic Tagupa Jr & Konrad Hauptfleisch

“Many little people, in many little places, doing many little things, can change the face of the world.”

- Eduardo Galeano

The anatomy of movements

When we talk about the “organic movement”, what is it we understand? What does “it” look like? Where do we find it? How did it start? How is it organised? Who belongs to it?

Organic agriculture is by its nature practical and down-to-earth. It is a production system that has tangible outputs, feeding people, animals, plants and, most importantly, the soil. Organic farmers are practical people working with and in an agro-ecosystem to nourish the world.

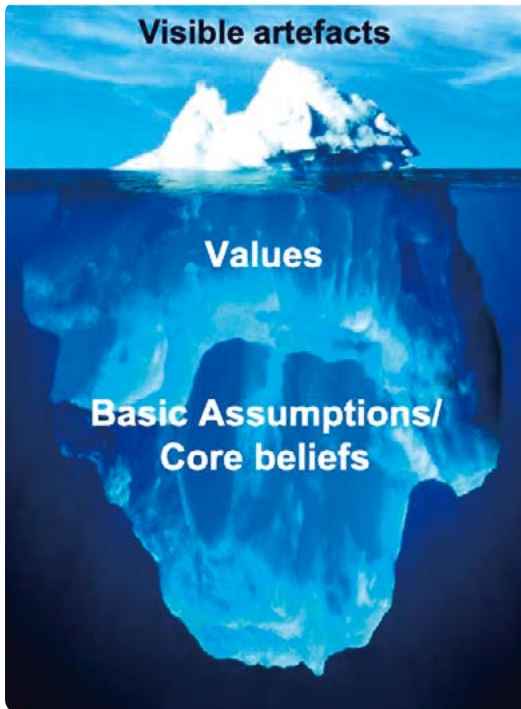
The output from their farming systems end up moving through some form of supply chain involving many actors to end up on our plates.

Why, then, are we so focused on the concept of an “organic movement”? Is it not simply a production sector linked to a market?

My opinion is that the organic sector is quite unique in the way that the “market” and the “movement” still is – for now, at least – very closely linked. In the preceding pages, we have read about the definitions, the principles, the practices, the pioneers, and the market. We have seen that people choose to be part of this not only because they are farmers or processors or businesspeople, but because organic represents more than the sum of these parts. It has its origins in a worldview, and it is exactly because of this worldview that organic can be described as a social movement. It is a social movement because it engages with the discussion of values and principles beyond the practical and economical supply chain discussion.

Let us consider the clichéd example of an iceberg. What we see and describe as the iceberg, is only the tip – only a very small part of a much larger object under the surface. Without that very large part of the iceberg displacing the water, the tip will not be visible. It is the same with societies, movements and organisations. The invisible, underlying parts of the organisation are larger and more important than the visible. The structure, management, procedures, and public face of an organisation are all underpinned by basic values and core beliefs driving the organisation.

In this way, the organic movement is no different. In fact, its values and principles are right up there as a visible and public artefact. The banners under which the organic movement marches – the organic definition and the 4 Principles -



Organisations are like icebergs (Graphic - Konrad Hauptfleisch - Inspired by Edgar Schein, MIT)

were fine-tuned and published by an entity called the International Federation of Organic Agriculture Movements (IFOAM). It was a long and intensive process of sharing thoughts, values, and ideals of all the stakeholders of IFOAM, and it really represents the core of the movement. So much so, that these landmarks are often adopted by people who are not members of the IFOAM organisation, but who subscribe to the same core values and principles represented by this definition and those principles.

And these values and principles are connected to a core mission and belief: that the way we interact with and influence our environment needs to change. The way we discuss, define, and manage farming and food systems has to align with the underlying values, otherwise the iceberg will tip, melt, and disappear.

But all movements, no matter how “grassroots”, popular and fundamentally sound their values and principles are, do need structures to represent them. These structures have shapes, have an anatomy, and have a physical presence in order to interact with other, similar structures and with its supporters. This is why social movements tend “organise” themselves, create processes and structures and membership criteria. While this is not the only way that movements can be structured – in fact, most movements are not started by creating organisations. They emerge because a real need becomes apparent, and people start collaborating to address this need. But, in the evolutionary process, the movement eventually get a name, defines a structure, registers itself as a legal entity, moves into an office and prints a letterhead.

These structures then become the representation of the movement and the core values that created it. In this way, the organic movement is no different. There are multiple organisations around the world representing the organic ideal, organic farmers, traders, consumers, researchers, and so on. They all play an important role in bringing together like-minded people and representing their needs in a public and structured manner. What is important, in my view, is that these organisations remain conscious of and connected their underlying principles and the core values that is embedded in the DNA of the organic movement.

For the remainder of this chapter, we will focus more deeply on examples of these organisations: who they are, what they do and why they exist. In many ways, they are the outward face of this movement, and give substance to the underlying values.

IFOAM-Organics International :



IFOAM-Organics International is the current name of the organisation that developed and adopted the Definition of Organic Agriculture and the 4 Principles – landmarks often adopted by the organic movement worldwide. It is the largest global organic federation, with worldwide membership of over 800 organisations in more than 130 countries worldwide.

IFOAM-Organics International describes itself as an agent of change, with the vision of the “broad adoption of truly sustainable agriculture, value chains and consumption in line with the principles of organic agriculture” and a mission of “Leading change, organically”.

IFOAM-Organics International is served by ten World Board Members elected for a 3-year term and in 2017, for the first time in its history, the elected World Board members were equally balanced in gender and geographical distribution. The current term of the World Board has been extended to one year until 2021 due to the unique situation of COVID-19.



Global membership of IFOAM-Organics International (source: website)

IFOAM-Organics International, as a global organisation, represents the organic movement globally. A major part of their work is to promote, campaign and advocate for change at the level of global organisations like the United Nations and its structures, for example the FAO, UN Development, etc. This is work well-suited to an international organisation and remains a key component of the work. As a membership organisation, it is important for IFOAM-Organics International to consult its base regularly, and at the same time support its base with the development of content, messages and arguments for the adoption of organic agriculture practices and principles.

In order to achieve these ambitions, IFOAM-Organics International currently focuses on the following areas:

- [Biodiversity](#)
- [Climate Change](#)
- [Food & Nutrition Security](#)
- [Gender Equity](#)
- [Health](#)
- [Soil](#)
- [Strengthening Livelihoods](#)
- [Sustainable Development](#)

A significant level of work is done through IFOAM's International Office, located in Bonn, Germany. This is the headquarters for the departments implementing the activities to achieve impact in the work areas mentioned above. These departments are [Capacity Development](#), where most of the development projects are managed – it is also the home of the [Organic Academy](#), responsible for training programs around the world.



The first Organic Leadership Master Class in Goesan, 2017 (Photo:Konrad Hauptfleish)

The [Policy and Guarantee](#) department focuses on advice, content development and advocacy to change global policy and regulation to favour organic agriculture. We discuss this in more detail in our chapter on Policy and Advocacy.

The [Communications](#) Department is responsible for making the content and messaging visible, attractive and understandable for the broader global audience, and represent the public face of the organisation through [blogs](#), social media, events, [awards](#) and fairs.



A participatory fishbowl discussion amongst representatives from 5 countries, discussing food and nutritional security during a meeting of partners in the IFOAM-led NMA Project (Nepal, 2018 – photo: Konrad Hauptfleisch)

While IFOAM has a global presence and aims for global impact, it cannot achieve this alone. It depends on a wider, global Action Network, representing the global movement in its full diversity. It is here where regional, national and local impact can be achieved.

The remainder of this chapter includes looking at a few key examples of these Sector Platforms and Regional Bodies that brings the work to the people, so to speak.

Intercontinental Network of Organic Farmers Organizations (INOFO) - Sector Platform

INOFO is an autonomous self-organised structure within IFOAM - Organics International. INOFO is a sector platform that was created specifically to organic farmers organizations so that they can communicate with one another wherever they may be around the world and collectively form a legitimate common voice in behalf of all their members.

It envisions to have a World of Regenerative and Sustainable Food Systems for All and strives to unite organic farmers and support their voices at all levels of food systems development, towards producing healthy, nutritious food and preserve mother earth.



INOFO Objectives:

1. The organisations establish their own network of convenors and deputy convenors from the grass roots upwards, that is, mandated by the full consent of existing organisations in each convenorship.
2. Convenors facilitate a relationship, specifically between organic farmers organisations within each continent in the first instance.
3. Each organisation mandates a farmer and a staff member to be commonly responsible for external relations, thus relating to the network via the convenors mandated by the farmers organisations in each country.

Source

<http://www.inofo.org/>

IFOAM Asia - Regional Body



IFOAM Asia is based in Seoul, South Korea and was established as a regional group of IFOAM Organics International in 2012. There are more than 270 members in 22 countries and territories all over Asia including Central Asia.

IFOAM Asia is the only regional umbrella organization of the organic movements in Asia and is officially registered as a legal entity in South Korea as a non-profit organization.

IFOAM Asia organizes annual events that are participated by hundreds of organic leaders from all over the region.

- The Asian Organic Youth Forum is an initiative of IFOAM Asia which gathers organic youth leaders from all over Asia to discuss updates and issues in the organic sector and how they can, as future leaders of the industry, contribute to the propagation of Organic Agriculture in Asia. In 2020, the Asian Organic Youth Forum has gone global through the Young Organics Global Network, which will be discussed in the Organic Movement section.



(4th Asian organic Youth Forum, New Taipei City, April 2019 / Photo Credit: New Taipei City)



(5th Asian Organic Youth Forum, Nagaland, India, November 2019 /Photo Credit: Nagaland Organic Konnect)

- The Organic Asia Congress (OAC) brings forth the local governments and the organic sector together in different countries in Asia to discuss the major trends in organic agriculture. The 1st OAC was sponsored by Goesan County, South Korea in 2016 and the 2nd OAC by Xichong County, Sichuan Province, China.
- In 2018, the largest AOC to date happened in Bislig City in the Philippines. More than 4,000 people participated into the week-long activity of IFOAM Asia including the Organic Rice Conference, the Organic Trade Fair, ALGOA Philippines Members Forum and the Asian Organic Youth Forum.



(2nd OAC, Xichong County, China / Photo Credit: Xichong County)



The 3rd Organic Asia Congress drew more than 4,000 people across IFOAM Asia's week-long celebration in Bislig City, Philippines in 2018. Phot Credit Bislig City

- For the Asian Local Governments for Organic Agriculture (ALGOA) please refer to the following section.

Source

<http://www.asia.ifoam.bio/>

Asian Local Governments for Organic Agriculture (ALGOA)



Established on 19 Sept 2015 by IFOAM Asia, ALGOA works with more than two hundred local governments all over Asia to promote the expansion of Organic Agriculture. Under the full sponsorship of Goesan County, South Korea since 2016, the annual ALGOA events have become one of the largest organic

events – the largest gathering of the organic movements and local governments with a common objective.

The ALGOA Summit is an annual gathering of local governments, IFOAM Asia members and other stakeholders in the region to exchange best practice and to discuss ways to enhance government action, support, and policy to foster growth in the organic sector. The ALGOA Summit has grown tremendously over the years, with the 5th ALGOA+4 Summit in 2018 going global, bringing in more than 100 foreign delegates from around the world, including delegates from IFOAM Organics International (IFOAM OI) from Germany, the Intercontinental Network of Organic Farming Organizations (INOFO), the Organic Food Systems Program (OFSP), International Network of Eco Regions (IN.N.E.R) and Food and Agriculture Organization Asia and the Pacific (FAO).



Photo Credit: Goesan County / 5th ALGOA+4 Summit, with more than 100 delegates from all over the world

ALGOA Organic Foundation Course

The ALGOA Organic Foundation Course (OFC) is another annual event of ALGOA which brings organic leaders from all over Asia and is focused on the basics of organic agriculture. For more than 1 week, the delegates are trained by the organic pioneers and undergo extensive learning modules in organic agriculture. More than a hundred people from local governments, IFOAM Asia members, partners and farmers have received the ALGOA OFC training under the ALGOA project in Korea, Japan, and Kyrgyzstan.



Photo Credit: Goesan County / Graduates of the 2018 ALGOA OFC

More than 200 IFOAM members, local government officers and organic stakeholders have been trained under the OFC. Spontaneous groups (“starfish” groups) of trainees have evolved – the Asian Organic Youth Forum in 2016 and this has even evolved further into the Young Organic Global Network in 2020.

Source

ALGOA website: www.organicgovts.com

The Global Alliance for Organic Districts (GAOD)



One of the positive things that happened during the ALGOA+4 International Summit on Organic Agriculture Policy in 2019 is the discussion on the cooperation between ALGOA and IN.N.E.R or the International Network of Eco Regions

On 6 February 2020, ALGOA, led by its President, Mayor Lee Cha Young of Goesan County, South Korea and IN.N.E.R. signed a Memorandum of Understanding (MoU) to facilitate the sharing of the experience from processes, examples and knowledge from the work done by both parties and Invite other local governments of the world to form an example of a dynamic global organic food system.

The MoU was signed with the support of IFOAM-Organics International, IFOAM Asia, IFOAM EU, Mouans-Sartoux/Un Plus Bio, Baltic Foundation of Lithuania and Organic Food System Programme. This partnership is now officially known as the Global Alliance for Organic Districts (GAOD). <https://gaod.online/>



Photo Credit: Goesan County/ ALGOA and IN.N.E.R. signed the MoU

⁸ INNER was officially established as International Association in 2014 in Italy where the Cilento eco-region model was implemented in 2004 and successively disseminated worldwide. At present about 40 bio-districts/eco-regions are operating in Italy. Other countries where the eco-regions have been implemented are Portugal, France, Austria, Switzerland, Spain. Eco-Regions acts based on the principles of organic agriculture of health, ecology, fairness, and care and are applying a food system approach facilitating interactions between all actors. More at: <https://www.ecoregion.info/>

The Young Organics Global Network



The success of the Asian Organic Youth Forum attracted the attention of many other young and innovative leaders from other parts of the world and in 2020, the minds behind Young Organics established in Europe in the early 2000s and the Asian Organic Youth Forum decided that it was time for the youth to connect the boundaries in the name of Organic Agriculture. Discussions started for the formation of a global network – Young Organics Global Network (YOGN).

The members of YOGN are a group of young, innovative leaders from across the world who are passionate about living a life that embodies holistic Principles of Organic Agriculture of Health, Ecology, Fairness, and Care. YOGN is currently hosted by IFOAM Asia and fully sponsored by Goesan County, South Korea.

YOGN will be officially launched at the 5th anniversary of ALGOA in September, 2020. For more YOGN information, visit its website at: www.yoglobalnetwork.com



Photo Credit: IFOAM Asia

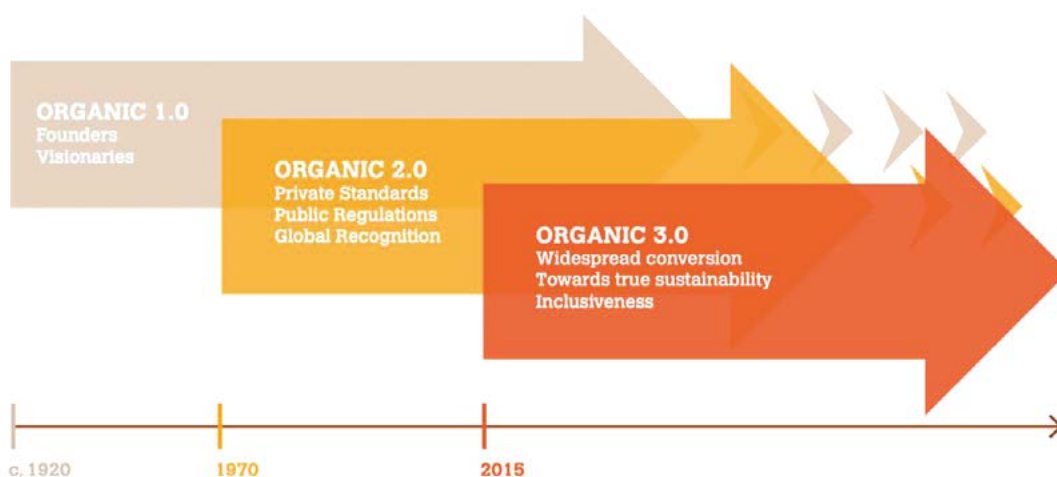
9. Towards a truly sustainable future: Organic 3.0

Authors: Konrad Hauptfleisch, Jostein Hertwig and David Gould

“Organic 3.0 is about bringing organic out of its current niche into the mainstream and positioning organic systems as part of the multiple solutions needed to solve the tremendous challenges faced by our planet and our species.”

-“Organic 3.0: For Truly Sustainable Farming & Consumption”

Background and history:



Organic 1.0

Earlier in this Reader, we celebrated our history and the pioneers that made the development growth of organic agriculture possible. The modern organic movement has its roots around 100 years ago, when these visionary pioneers saw the connections between the way we live, the food we eat, the way we produce that food, our health and the health of the planet. The concept arose in several places around the world. “Organic” was one of a number of terms the visionaries used to describe and define their diverse approaches. Looking back, one century on, we have termed this first phase of the organic movement “Organic 1.0.”

During this phase, an increasing number of farmers started adopting these practices and gradually, consumers who supported these principles, started purchasing these pioneering farmers’ products in greater quantities. The vision and philosophy of the pioneers became the driving force of an emerging market for sustainably produced, healthy and safe products.

Organic 2.0

This “First Wave” culminated around the time of IFOAM-Organics International’s founding in 1972, and over the following decades, production and processing standards were developed and certification schemes were introduced by emerging organic organizations around the world. Organic claims became regulated in great detail. Official regulation was first introduced in Europe and the United States of America in the 1980s. By 2016, 87 countries in Africa, the Americas, Asia, Europe and Oceania had implemented organic regulations.

Organic standards and control through inspection and certification has gained the trust of consumers and policy makers. There has been rapid growth in the area of certified organic land (around 81 million hectares in 172 countries worldwide by 2014), and in the consumer purchases of certified organic food, textiles and body care products (over \$100 billion worldwide in 2018).

In additions to these market figures, there are also non-certified organic production systems, which should not be underestimated. Numerous smallholder and peasant farmers (often women) are largely organic at their core and ensure that there is enough to eat for their families and communities. The past decades have also seen a concerted effort to enable political and administrative support, market development, and therefore access to and availability of better food, textiles, personal care, and other healthy products. Many technical challenges have been overcome through research and development, in institutes, universities and on farmers’ fields in participatory programs.

“Organic 2.0” can deservedly be seen as the success of a “niche movement” becoming a market and making a noticeable impact not only on farming systems but also developing an extensive supply and value chain within the global food system. The Organic 2.0 strategy of developing a reliable certification system that is supported by government regulations has enabled continuous growth from a few farmers in many pockets of the world to a globally active sector with millions of producers and consumers. There is evidence of positive impacts on a wide range of important issues such as consumer health, biodiversity, response to climate change and the improved welfare of producers. A holistic system view that concentrates on more than the exploitation of shortterm market opportunities has proved to be robust and has assured growth even in times of economic crises in many countries.

Organic 3.0

While there is sound development and wide prosperity in the organic sector, many stakeholders also see a need for reforms, or they call for a paradigm shift in order to make production and consumption truly sustainable. Even though achievements are undisputedly impressive, certified organic agriculture has not even reached 2% of agricultural land and of global food and fibre consumption, and there are many organic operations that need to improve their practices to become truly sustainable for their environment, their society, their tradition and their business.

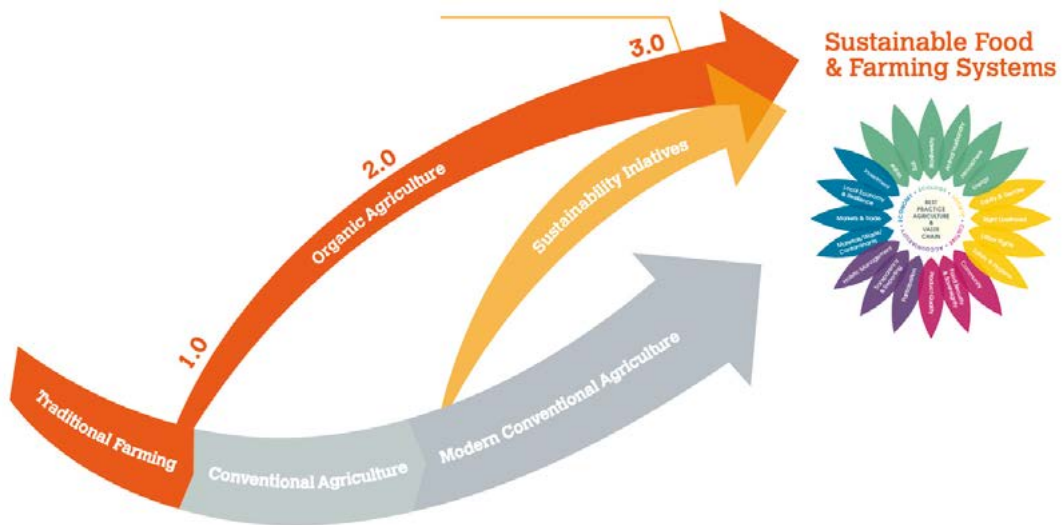
Organic agriculture has offered many of opportunities for farmers. Many managed to escape the poverty trap and bankruptcy that can accompany being a pioneer in their communities. However, in recent times organic farmers are

often forced, due to the dominant economic paradigm, to specialize and scale up production, at the cost of biodiversity and sustainability.

The envisaged reforms are rooted not only in problems but also in the huge opportunity that the organic world has to serve as an approach for global sustainability issues. Farming the planet using living soils; farm organisms and integrated ecosystems; farmers who are empowered and self-aware and who function as caretakers; processors and traders who act as social entrepreneurs - this is a viable alternative for caring for people and the planet. Delivering on these ambitions requires further scaling up, to tap unexploited potentials and address constraints

The third wave, or “Organic 3.0” can be seen as organic moving to the next paradigm. It is about bringing organic out of its current niche into the mainstream and positioning organic systems as part of the multiple solutions needed to solve the tremendous challenges faced by the planet and species. The overall goal is to enable a widespread uptake of truly sustainable farming systems and markets based on organic principles, and aligned with the following 6 key features:

1. A culture of innovation – Organic farming is by its nature innovative, but we need to do more research, create more opportunities for innovation to identified, shared and implemented.
2. Continuous improvement towards best practice – conventional agriculture needs to become more sustainable, and attempts at improvement should be recognised, but at the same time, organic agriculture’s must continually strive to become better at what it is already doing well.
3. Diverse ways to ensure transparent integrity – the current certification system has constraints with accessibility, transparency and applicability to diverse systems. It needs a rethinking and revisioning if we want to be able to certify millions of hectares more.
4. Inclusive of wider sustainability interests – The organic movement strives anew to include like-minded movements and civil society organizations
5. Holistic empowerment from farm to final consumer – the current food system is not always suitable for the management of organic products, and actors at either end of the supply chain often end up as “price takers”, without having the power and insight to positively engage with the actors holding the power in the supply chain.
6. True value and cost accounting - It is essential to account more fairly for the costs and benefits to the environment, biodiversity, human health, society and culture of our production systems and farming methods. Organic agriculture, with its history of contributing value to the ecosystem, should be rewarded fairly by a fairer system of accounting and accountability.



Organic 3.0 is a roadmap towards true sustainability in food and farming systems. Every member of the movement can contribute, and already there are initiatives around the globe taking up the challenge and giving substance to the vision expressed in the Organic 3.0 landmark document.

Below, we take a look at two areas of activity that deserves attention: The Organic Food System Programme and True Cost Accounting. These two topics address Features 5 and 6, respectively. They are not the only activities that can be recognised as being under the banner of Organic 3.0:

Many of the initiatives mentioned in this Reader (Participatory Guarantee Systems, short supply chain initiatives such as Hansalim and Tekei, the winners of the One World Award like the Timbaktu Collective and Dumingag Municipality, are all taking up the challenge. The Pioneers' torch has now been handed to us, the new organic generation, and we need to carry that steadfastly towards a truly sustainable future.

Organic Food System Programme

Author: Jostein Hertwig



The Organic Food System Programme (OFSP) was established following a joint workshop on sustainable diets by Food Quality & Health Association (FQH), Council for Agricultural Research and Economics (CREA) and Food and Agriculture Organization (FAO) in Rome in 2014 and was formally launched in February 2016. In February 2017 the United Nations Food System (SFS) Programme endorsed the OFSP as a “Core initiative” of the SFS Programme.

The programme intends to contribute to global activities related to Organic 3.0 and give a contribution to the building of new networks such as the Global Alliance for Organic Districts initiated by Asian Local Governments for Organic Agriculture (ALGOA) and International Network of Eco-Regions (IN.N.E.R.) Leading partners of OFSP are Food Quality and Health, IFOAM- Organics International and BERAS International Foundation.

Rationale for Organic Food System Programme

Sustainable food production and consumption are key to increasing both human and ecological capacities to cope with major challenges such as health, food and nutrition security, climate change and loss of biodiversity. The transformation of global food and farming systems is also key towards achieving the United Nations Sustainable Development Goals (SDGs) and to this end, building effective partnerships and scaling up examples of practical solutions is highly important. The OFSP is a programme on taking and further developing the organic food system as a pilot model and living laboratory for sustainable food systems. The central question is:

How do we make food systems more sustainable, including the concept that sustainable diets are also healthy diets?

As food systems link production and consumption, a systemic and holistic approach following the value chain is necessary. Here the OFS offers a global food system with local multi-stakeholder initiatives. The change in consumption patterns is a crucial issue in the transformation to sustainable food systems. Therefore, major questions for shifting food systems towards sustainability focus on how to change consumption patterns and how to improve the nutritional quality and related health characteristics of food.

Governance of OFSP

OFSP involves individuals or institutions from research, authorities, multi-stakeholder networks, farmers associations and NGOs, education and business. The structure is as follows:

- Partner: Any person from an institution engaged in OFSP projects or committee or its coordination (formally linked via the coordinators). A Partner may contribute via participation in OFSP meetings, leading tasks within projects or by sharing results and information from other (non-OFSP) projects. <https://organicfoodsystem.net/our-partners/>

- Steering committee: Active Partners form the Steering Committee which will ensure the overall development of the OFSP including meetings of Partners, evaluation of project proposals, the contribution of all activities to achieving the goals of the OFSP with a special focus on communication with the target groups. The Steering Committee consists of the responsible Partners for each identified work area as well as the coordinators. Steering committee members represent the OFSP in their interaction with other groups, networks and programmes. <https://organicfoodsystem.net/our-steering-committee/>
- Advisory Board: The aim of the Advisory Board is to improve interactions and synergies between all individual actions and projects and to advise the Steering Committee. The board is composed of members with competence in science, stakeholder engagement and policy development. The Advisory Board should not have more than 15 members. The members are nominated by the partners and formally linked via the Chair of the Advisory Board. Those representing the various stakeholder perspectives on the Advisory Board can be members of the Steering Committee.
- Core Areas and 8 concrete deliverables: The interaction between the OFSP partners is organized with written Partner Agreements. In order to structure our work, we developed two Core Areas and defined 8 deliverables for the first 5 years period with which we want to contribute making food systems more sustainable.

Core Area 1 – Conceptualizing and modelling Sustainable Food Systems

- organic as a model for sustainability
- converting existing diets to more sustainable diets
- engagement of actors – those connected along the value chains, researchers, policy makers, consumers, educators
- assessment of and disseminating methodologies

Core Area 2 – Sustainable Food Systems in practice

- state-of-the-art of the existing case studies
- identifying and developing new cases
- start-up/implementation of new SFS
- learning and improvement of SFS
- Scientific papers

Here are our 4 most important papers:

- Strategies for feeding the world more sustainably with organic agriculture
- New FAO report: The future of food and agriculture: Trends and challenges
- The new science of sustainable food systems
- Planetary boundaries: Guiding human development on a changing planet

<https://organicfoodsystem.net/papers-and-reports-2/>

True Cost Accounting – an introductory perspective

Author: David Gould

“If the real cost of food was included in the price, we wouldn’t even need organic certification because organic food would cost less than conventional.”

- Gunnar Rundgren, 2012 GOMA Conference, Biofach Germany

The Main Idea

True Cost Accounting (TCA), Full Cost Accounting (FCA), or the Organic 3.0 feature called True Value and Fair Pricing – these terms are used interchangeably when trying to answer the fundamental question: What are the real costs of production and consumption? We must ask this question because society runs on an economic model that is dangerously unsustainable. Simply put, there is more financial profit by ignoring our negative effects on the natural environment and disregarding disadvantaged persons. We need to change this if we do not want to see increasing hardship and political instability, and a bleak future for next generations.

Our growing population puts demands on natural resources and begs for more and more production. But the way most farming and food production is done degrades soil fertility, pollutes the environment and contaminates our food, reduces biodiversity, and causes more climate change. It’s as if the Earth’s resources are a huge bank account and humanity is running up its credit card. Our account balance is going down and the bill is coming due.

As the saying goes, “Nothing comes for free.” Somewhere, somehow, everything in our material world has a cost. The problem with the way we produce and consume goods is that we almost never pay the full cost involved. Take food as an example: when a consumer buys a monoculture commodity crop grown with chemicals, they pay at the cash register. That’s usually the only payment the customer thinks about. But they have already paid before that with their tax dollars, in the form of the government subsidy given to the farm (and/or the chemical company) to produce the food through an unsustainable method. Then there is a third cost associated with cleaning up the environmental damage (again with tax dollars) caused by agrochemicals and poor practices. On top of this, a fourth payment is due when a person, after eating food with toxic residues or devoid of nutrition (too much junk food) for too many years, ends up sick at the doctor or in the hospital, and unable to work – often another huge cost to the individual or the state in terms of direct costs for health care, lost labour and income losses.

For better or worse, money makes the world go round. Our local and global systems reduce trade to monetary terms. Farmers need to make money to stay in business. People need money to buy food, clothing, other goods, and pay for services like visits to the doctor or the repair shop. Companies need to pay for materials, equipment, and labour. Governments pay for infrastructure, public works, and all kinds of other activities. Only when it becomes cheaper to stop degrading the planet and exploiting people will mainstream practices change.

TCA is an attempt to even the playing field, to hold everyone responsible for their own role in production and consumption and pay the costs they incur. It intends to be usable as a common measuring stick for any actor in a value

chain regardless of their production style, or by any government or other entity setting financial incentives through policy or other decisions.

Challenges, Solutions, and Getting to the Changes We Need

The basic idea behind TCA may be relatively easy to understand, but the global discussion on how to implement it is far from simple. Several challenges and solutions exist:

Numerous different frameworks are being developed, and they have their differences. Exactly what to measure and how to measure are not yet universally agreed. The point is not necessarily to create the “one” framework for every user and every situation, but there should be equivalence in scope and measurement methods, so that they are comparable to each other. Better agreement by different groups about what and how to measure would focus collective energy and lead to more common and credible results. There are efforts toward harmonization across frameworks, most notably as led by the Global Alliance for the Future of Food's Community of Practice on True Cost Accounting (<https://futureoffood.org/impact-areas/true-cost-accounting/>).

Perhaps even more challenging than these differences between frameworks is the level of complexity of any single framework. What needs to be included to get a “true” or “full” cost accounting? There is a dynamic tension between theory and practice. How far must one delve into the system? Does one need, for example, to account for the metal that went into the shovel or the tractor or the processing equipment? The fossil fuel needed to produce the synthetic nitrogen fertilizer, or to run the tractor? The days off from work that the labourer lost because he got poisoned? The too-low wages the farm or factory worker was paid and the effect on her family's quality of life? The carcinogenic effect and health impacts of the pesticide residues in the food?

Elaborate case studies have attempted to make comprehensive assessments. These exercises are informative for the building of the science and theory of TCA. They help to understand ways to draw system boundaries so we can better know what to measure and how to measure. They propose metrics and other key performance indicators (KPIs), which in turn can be monetized to calculate costs. These methods however have so far been much too complicated for adoption at scale, and so uptake of TCA is still way too slow to have the impacts that is intended by it.

Which brings us back to the real reason for taking a TCA approach in the first place: It is not that the fair price is the end goal. The price is just the translation of the change we need to see in the world. A truer price would reflect and incentivize the behavioural changes people and organizations need to make for humanity to live within our planetary boundaries. This is the end goal: to change our practices to be more sustainable – ecologically and societally, especially for those parts of society that suffer under a poorer quality of life. If systems for TCA are too complicated to use, then they will not be useful enough to make sweeping changes across society. Frameworks must therefore be simplified so that more people and organizations can use them as a lever of change. More people tangibly acting in a common direction causes more change in that direction.

True Enough, Full Enough – Not Perfect, but Good Enough and Improving

The Principles of Organic Agriculture and the organic sector have a natural affinity for True Cost Accounting, as IFOAM – Organics International describes in its paper on the topic (https://www.ifoam.bio/sites/default/files/2020-05/tca_paper_final.pdf). Organic practices such as soil building, non-use of toxins, and biodiversity stewardship all lead to an enhancement of natural capital.

Furthermore there are increasing studies showing that increased consumption of organic foods leads to greater health and disease prevention, especially non-communicable diseases (see https://pubmed.ncbi.nlm.nih.gov/?term=Lairon+D&cauthor_id=30422212). Best practices based on organic principles, as described in IFOAM's Best Practice Guideline for Agriculture and Value Chains (https://www.ifoam.bio/sites/default/files/2020-03/best_practice_guideline_v1.0.pdf) naturally lead to a more inclusive accounting of costs and benefits of production. These guidelines depict a holistic set of practices that can be implemented across the value chain and enabled through policy reform to become more economically viable and adopted by more producers, leading to an enhancement of natural capital (ie management of natural resources).

Beyond this, consumer behaviours must also be taken into account; the “power of the purse” is a key motivator for many consumers, and this can be leveraged by the market itself as well as by public policies that influence more sustainable choices.

In its paper mentioned above, IFOAM explicitly uses the term Full Cost Accounting instead of True Cost Accounting. Why? Real sustainability is a holistic phenomenon. It must take into consideration a full spectrum of factors such that, if something gets excluded, the entire system will not sustain itself over the long term. One of the most notable of such factors is biodiversity. It is the basis of ecosystems. The more we lose of it, the more endangered the sustainability of that whole ecosystem and everything that stems from it. But what is the “true” cost or value of a given species? How much, for that matter, is a ton of CO₂ worth, or a litre of fresh water? We can measure these things, agreeing on valid methodologies for measuring them. We can agree on how such metrics are translated into monetary values. But those monetary values are in a sense arbitrary, even if we agree what they should be. These topics are at the heart of the global discussion on developing and harmonizing TCA frameworks. Whether it's called TCA or FCA, the intention of having a holistic framework is the same.

Given the need for a full, holistic approach, with all the complexities of trying to have a full enough and true enough accounting that brings about the changes in the world we need – and at the same time is practical to use at scale – how can we move forward?

Whatever system we begin with does not have to be “perfect” all at once. Indeed, the complexity of the topic defies such an achievement. Practice and theory must feed each other in a dynamic learning cycle. Identifying the most critical practices to assure that we move holistically in the right direction – positively toward sustainability instead of negatively away from it – is a key strategy. Looking across the value chain from primary production to final consumption, there can be distilled from the global inventory of TCA frameworks a common “full enough” set of KPIs.

Clarifying, prioritizing, and effectively requiring “positive directionality” in this set through financial incentives will lead to

more sustainable performance. (As one example, a “polluters pay” principle could be enacted.) The key is in making sure that this set of distilled KPIs is holistic enough to reverse our unsustainable course. (Refer to the IFOAM paper.) In cases where monetization is elusive, such as the example of biodiversity, a basic principle can be to require positive directionality or disqualify other achievements because a holistic system is not being addressed. Such changes will start to bring our unbalanced production and consumption practices back towards an equilibrium that would sustain society. Seeing improvements on the ground and monetizing these changes will enable us to reform the unsustainable economic model under which society runs and improve it over time.

For more information on TCA, please refer to the following sources:

[True Cost Accounting for Food, Farming and Finance](#)

Videos

[The True Cost of Food - why organic is not too expensive, but conventional too cheap](#)

[True Cost of Food; we need to redefine profit!](#)

10. Organic Agriculture and the Sustainable Development Goals

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“Some people say that we are fighting for our future, but that is not true.

We are fighting for everyone’s future.”

- Greta Thurnberg, at the European Economic and Social Committee, Feb 2019

According to the United Nations, the Sustainable Development Goals (SDGs) are a collection of 17 global goals designed to be a “blueprint to achieve a better and more sustainable future for all”. The goals address the major global problems that everyone is facing, including poverty, environmental degradation, climate change, peace, justice, and inequality. They were adopted in 2015 and are set to be achieved 15 years later in 2030. More than 193 countries have agreed to work towards achieving these goals.

There are 17 Sustainable Development Goals, and these 17 goals are defined by 169 targets. To monitor the progress towards these targets, 232 unique indicators are listed to further guide everyone. Full details on the indicators can be downloaded at <https://unstats.un.org/sdgs/indicators/indicators-list/>.

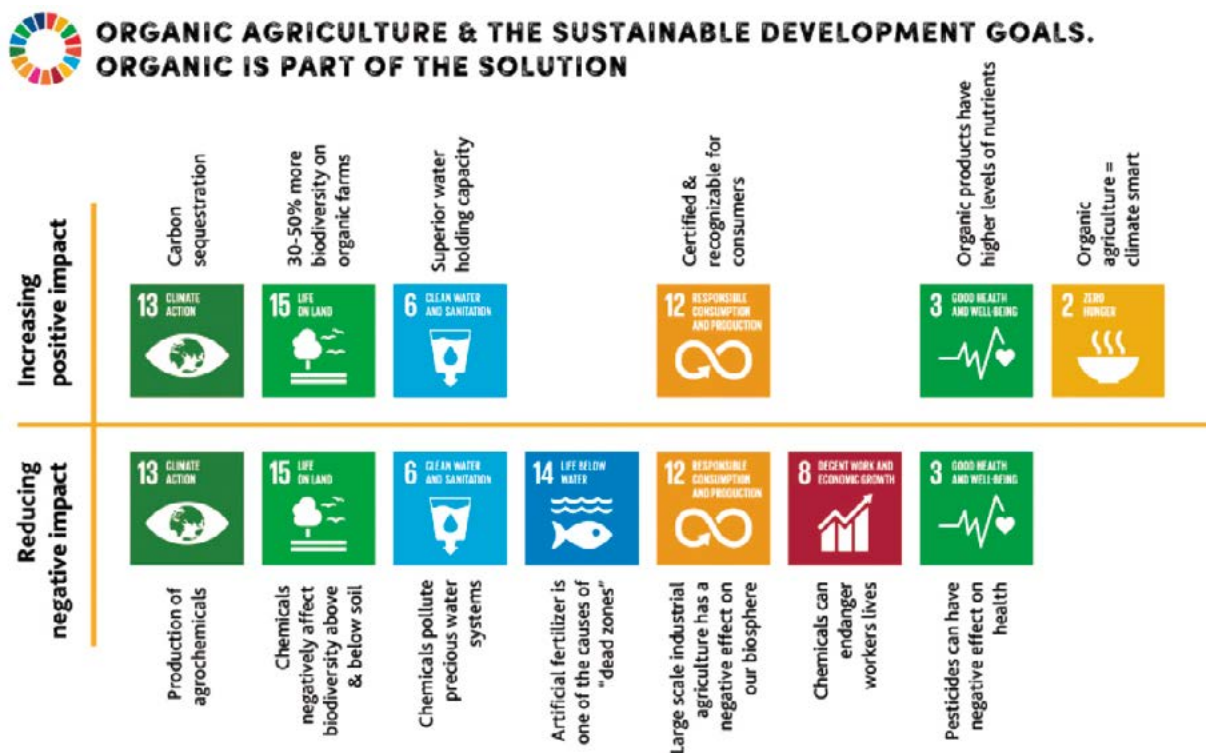


The 17 SDGs. Source: United Nations

Organic Agriculture is part of the Solution

Several studies and scientific literature have stressed that there is a need to modify current practices of conventional agriculture in order to provide enough food to feed the world's growing population while minimizing the environmental impacts. Because organic agriculture can solve both, it is proposed as part of the solution.

Organic Agriculture as a part of the solution can be seen in most SDGs. However, we will be discussing eight goals in which Organic Agriculture increases the positive impacts of these goals while reducing the negative impacts.



Source: EOSTA

SDG #2: Zero Hunger



Increase Positive Impact:

- There is an increased yield for organic agriculture products in low-input regions – a +116 to 128% in Africa (UNCTAD/UNEP 2008). Organic Agriculture is diversified, hence there is more available food for homegrown consumption. With diversification, food security is improved. Organic Agriculture also reduces farmers debt which happens when they have to purchase expensive chemical inputs.
- The use of organic soil management practices can also reduce yield variability and vulnerability to drought and other weather extremes (Meemken & Qaim, 2018).

SDG#3: Good Health and Well Being**Increase Positive Impact:**

- A convincing study in 2016 showed that 12 out of 15 literature reviews and meta-analyses showed that organic products are more nutritious because they contain higher levels of anti-oxidants, vitamin C, Omega 3 fatty acids and omega 3 to 6 ratios ([Reganold & Wachter, 2016](#)).
- Organic agriculture supports farmers by applying holistic practices that prevent the use of synthetic inputs, which reduces their harmful effects on people and all life forms and contribute to the wellbeing of all.

Reducing Negative Impact:

- Recent findings ([von Ehrenstein et al., 2019](#)) suggested an offspring's risk of autism spectrum disorder increases following prenatal exposure to ambient pesticides within 2000 meters of their mother's residence during pregnancy, compared with children born in the same agricultural region that were not exposed to pesticides.

SDG#6: Clean Water and Sanitation**Increase Positive Impact:**

- Organic Fields contain more soil organic matter, and this causes the soil to form stable soil aggregates resulting to a better soil structure ([Nichols, 2015](#)). This eventually improves the capacity of the soil to absorb and hold more water during rainfalls.

Reducing Negative Impact:

- The tradeoff between water pollution and food production in organic agriculture is significantly reduced because synthetic pesticides are not being used ([Pimentel, Hepperly, Hanson, Douds, & Seidel, 2005](#)).



SDG#8: Decent Work and Economic Growth

Reducing Negative Impact:

The United Nations estimate that pesticides are responsible for approximately 200,000 acute poisoning deaths yearly. It is important to note that 99% of these cases occur in developing countries, where safety regulations are not being strictly followed.



SDG#12: Responsible Consumption and Production

Increase Positive Impact:

- Certified organic products around the world ensure consumers that the products that they buy follow strict regulations before they are sold. Consumers are assured that they are not only taking up products that are nutritious, chemical and pesticide free but products which reduces negative effects brought about by conventional agriculture.
- Organic Agriculture creates value chains and supports the local economy through short organic value chains, public procurement and participatory guarantee systems.

Reducing Negative Impact:

Large scale industrial agriculture is one of the major causes of the degradation of the environment through the constant use of harmful chemicals and synthetics, destroying life from all forms in the process.

SDG#13: Climate Action



Increase Positive Impact:

- Carbon sequestration is the process of capturing and storing atmospheric carbon dioxide through biological, chemical or physical processes. Soils contain more carbon than the atmosphere and terrestrial vegetation combined. Numerous studies find higher carbon sequestration in organically managed soils (Scialabba & Müller-Lindenlauf, 2010; Ziesemer, 2007).

Reducing Negative Impact:

- Synthetic inputs such as chemical pesticides require significant amounts of fossil fuels are prohibited in organic agriculture, cutting carbon dioxide emissions on a large scale. Synthesis of nitrogen fertilizers consume energy of up to 0.4 to 0.6 gigatons of carbon dioxide, which is around 10% of the direct global agricultural emissions (Scialabba & Müller-Lindenlauf, 2010).

SDG#14: Life below Water**Reducing Negative Impact:**

- Marine dead zones, the areas where the water doesn't contain enough dissolved oxygen to support life is exponentially increasing. One of the leading causes of dead zones is the leaching of agrarian fertilizers and pesticides finding their way to the water systems. Organic Agriculture slows marine dead zones by preventing the use of synthetics which causes them.

SDG#15: Life on Land**Increase Positive Impact:**

- Organic Agriculture enhances biodiversity in agroecosystems (Gabriel & Tschardtke, 2007). According to FIBL, depending on altitude, organic farms have between 46 and 72 percent more semi-natural habitats and host 30 percent more species and 50 percent more individuals than non-organic farms.

Reducing Negative Impact:

- A study concluded that “the environmental benefits attributable to reduced chemical inputs, less soil erosion, water conservation, and improved soil organic matter and biodiversity were consistently greater in the organic systems than in the conventional systems” (Pimentel et al., 2005).

Organic agriculture can play an important role in achieving the UN Sustainable Development Goals (SDGs). Thus, a shift to organic agriculture is needed if the global community wants to maintain its sustainable food systems for future generations and tackle the many challenges facing our planet, including the climate crisis.

Sources:

<https://www.eosta.com/en/news/sustainable-development-goals-and-the-link-to-organic>

<https://www.un.org/sustainabledevelopment/sustainable-consumption-production/>

<https://orgprints.org/20247/1/1548-biodiversity.pdf>



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