IFOAM ORGANICS INTERNATIONAL

ORGANIC 3.0

for truly sustainable farming & consumption

Discussion paper ***by Markus Arbenz, David Gould and Christopher Stopes,*** *based on think tanking by SOAAN & IFOAM - Organics International and launched at the ISOFAR International Organic EXPO 2015, Goesan County*

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FOREWORD

We would like to welcome you to this important document, written to lead the global discussion on Organic 3.0.

Organic 1.0 was started by our numerous pioneers, who observed the problems with the direction that agriculture was taking at the end of the 19th century and the beginning of the 20th century and saw the need for a radical change.

Organic 2.0 started in the 1970s when the writings and agricultural systems developed by our pioneers were codified into standards and then later into regulatory systems.

Organic 3.0 is the third phase of the organic movement – the next paradigm. Organic 3.0 is about bringing organic out of a 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. It is about developing the new collective vision for the organic sector and about actively engaging with major global issues.

Many of these issues, along with strategies to address them, are outlined in this document. We encourage you to take the time to read it and contribute to shaping the future direction of our sector.

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BOX 1 | ACKNOWLEDGEMENTS

IFOAM – Organics International is grateful to the many people who contributed to the development process of this document and the many groups that discussed the concept of Organic 3.0 from their regional or sector specific perspectives. They all gave substantial input and inspiration into the process of the Sustainable Organic Agriculture Action Network (SOAAN) to describe Organic 3.0 in this booklet.

We would particularly like to thank Markus Arbenz, David Gould and Christopher Stopes for leading this process; the Goesan County for allowing us to continue our discussions by bringing the 'Organic 3.0: The Next Phase' to South Korea; Nürnbergmesse for, through BIOFACH, having allocated space in their annual trade fair to put this topic on the global agenda; the SOAAN Network for contributing their time and expertise; and the IFOAM - Organics International World Board for their guidance and leadership.

We would further like to acknowledge that we received and took into consideration the following reports from various think tanks:

- **Digests of the Organic 3.0 fora** during BIOFACH 2014 and 2015 by IFOAM - Organics International
- The **main track summary** and the **final declaration of the Organic World Congress 2014** in Istanbul by IFOAM – Organics International
- The report of a think tank group from FiBL, Bio Suisse, Naturland, Bio Austria and Bioland: **"Mit Bio 3.0 zu einer nachhaltigen Landwirtschaft"**
- The report on **"Transforming food & farming, an organic vision for Europe in 2030"** by IFOAM EU
- The **"Global Vision and Strategy for Organic Farming Research"**, by the Technology Innovation Platform of IFOAM, TIPI
- The German Agrarian Research Alliance's future organic research strategy events with the report: "**Zukunft des Systems Ökolandbau, Strategientwurf der DAFA"**
- **"Les Marché Bio à Horizons 2025"** by Organic Cluster
- The **Organic 3.0**, trend and potentials analysis of the Austrian Zukunftsinstitut
- The reports from the SOEL trainee program "**Die neue Generation denkt das neue Bio**"

1. EXECUTIVE SUMMARY

The organic timeline can be measured in approximately 100 years: from the early days of imagining organic by those who saw the connections between how we live, eat, and farm, our health and the health of the planet (what we call 'Organic 1.0'); to the forming of the movement and the codification of standards and enforced rules that have established organic in 82 countries with a market value of over $72 billion per year (what is termed 'Organic 2.0'). Looking to the future, this booklet is a call to action and a call for a paradigm shift to what the next phase of organic, 'Organic 3.0' can and should be.

Organic 2.0 shaped the visions of the pioneers into a practical reality. Organic has inspired producers and consumers alike and has changed unsustainable habits around the globe. There is evidence of positive impacts on a wide range of important issues including consumer health, biodiversity, animal welfare and the improved livelihood of producers. The standards maintained by state governments and private organizations mainly define minimum requirements for organic production and processing. However, they often fail to entirely meet the principles of health, ecology, fairness and care, at the core of the organic philosophy. The rules and regulations of Organic 2.0 have also resulted in the organic movement facing constraints on two fronts. First, we have excluded many producers who grow organically without organic certification: smallholder and peasant farmers - frequently women, and often in the least economically developed countries in the global south - who play a critical role in feeding much of the world's population. Second, we have limited our own opportunities to build bridges with other sustainability initiatives that share our objectives but do not aim at full compliance with our standards, including agro-ecology, fair trade, food movements, smallholder and family farmer movements, community supported agriculture, urban agriculture and many others.

Although the many achievements of the organic movement are significant and have gained recognition worldwide, the reality is that after a century of innovation and disruption, certified organic agriculture has not even reached 1% of global agricultural land or food consumption. As a movement for change, we must decide how to scale-up our impacts and share what we know with a wider base of farmers and consumers.

Agriculture is one of the leading factors in global issues of hunger, inequity, energy consumption, pollution, climate change, loss of biodiversity and depletion of natural resources. And yet, the positive, multi-faceted environmental, social and economic benefits of a truly sustainable agriculture can contribute solutions to most of our world's major problems. If mainstream agriculture were to adopt more organic practices and principles, the need for Organic 2.0 would cease to exist. Until now, though, organic has not been included - or inclusive - enough to contribute these solutions on a global scale. The Organic 3.0 concept seeks to change this, by positioning organic as a modern, innovative system which puts the results and impacts of farming in the foreground

ORGANIC 3.0: GOAL & CONCEPT

The overall goal of Organic 3.0 is to enable a widespread uptake of truly sustainable farming systems and markets based on organic principles and imbued with a culture of innovation, of progressive improvement towards best practice, of transparent integrity, of inclusive collaboration, of holistic systems, and of true value pricing.

The concept of Organic 3.0 seeks to adress the previously outlined challenges by positioning organic as a modern, innovative system which puts the results and impacts of farming in the foreground. Diverse priorities and challenges like for example climate change resilience and adaptation, access to capital and adequate income, animal welfare, availability of land, water, seed, healthy diets, and avoidance of waste in food and farming systems cannot possibly all be folded into an ever-expanding set of

standards and rules. Thus, a more holistic and dynamic model is needed.

At its heart, Organic 3.0 is not prescriptive but descriptive: instead of enforcing a set of minimum rules to achieve a final static result, this model is outcome-based and continuously adaptive to the local context. Organic 3.0 is still grounded upon clearly defined minimum requirements such as the ones maintained by many government regulations and private schemes around the world (and in the objectives of the IFOAM Standards Requirements). But it also expands outward from these base requirements: it calls for a culture of continuous improvement through private- and stakeholder-driven initiatives towards best practices based on local priorities (as described in the IFOAM Best Practices Guidelines).

ORGANIC 3.0: STRATEGY

The strategy for Organic 3.0 includes six main features, consistently promoting the diversity that lies at the heart of organic and recognizing there is no 'one-size-fits-all' approach:

1. **A culture of innovation**, to attract greater farmer conversation, adoption of organic practices and to increase yields;

2. **Continuous improvement toward best practice,** at a localized and regionalized level;

3. **Diverse ways to ensure transparent integrity,** to broaden the uptake of organic agriculture beyond third-party assurance and certification;

4. **Inclusiveness of wider sustainability interests,** through alliances with the many movements and organizations that have complementary approaches to truly sustainable food and farming;

5. **Holistic empowerment from the farm to the final product,** to acknowledge the interdependence and real partnerships along the value chain; and

6. **True value and fair pricing,** to internalize costs, encourage transparency for consumers and policy-makers and to empower farmers as full partners.

In order to see this paradigm shift take place within the organic sector, IFOAM – Organics International is publishing this booklet with the aim of informing debate and contributing to the vision for what comes next. This paper proposes six operational objectives against which progress will be monitored, and also indicates the pathways to implementation, which starts with internalizing Organic 3.0 into all organic stakeholders, our institutions and organizations. From there we must broaden outside of our traditional circle; we must build bridges to other groups, to the research community, to operators throughout the value chain, and to media, policy-makers and international bodies.

This is a call to action for farmers and processors, for governments, and consumers; but most importantly, it is a call to action for the organic sector itself: to find ways to integrate this vision for Organic 3.0 into all that we do. It is a bold vision; it challenges the very foundation of our current movement and its success is in no way guaranteed. But this paper is a critical step in starting this important conversation—it says to us: we have come too far to stay where we are. There is more to be done.

2. INTRODUCTION: WHAT IS IT ALL ABOUT?

Society today is challenged by the endangered state of our planet and the possible consequences for all life upon it.

Humanity relies on agriculture (and fishing/aquaculture) for food and other products to meet the most basic human needs. Sadly, hunger, food insecurity and obesity remain a threat for billions of people. Agriculture, as most widely practiced, significantly contributes to issues such as loss of biodiversity or climate change. Yet, when practiced differently, it is also a source of solutions.

Far-reaching changes in agriculture-based systems are needed without delay, if future generations are to have equal or improved preconditions for prosperity, particularly in view of a growing world population. The positive, multi-faceted environmental, social and economic benefits of truly sustainable agriculture can significantly reduce current problems and help us all rise to the challenges.

Sustainable means: meeting the needs of the present without compromising the ability of future generations to meet their own needs; conserving an ecological balance by avoiding depletion or destruction of natural resources.

The mission of IFOAM - Organics International is to lead, unite and assist the organic sector in its full diversity. It promotes the adoption of ecologically, socially and economically sound systems based on four principles: health, ecology, fairness and care. These principles are robust and meaningful, and can shape any farming and ecosystem, whether they provide us with food, textiles, body care products, energy, ecosystem services, leisure, or other products. They are the foundation for the proposal to implement Organic 3.0, as outlined in this document.

Alongside of the organic movement, an astonishing diversity of pioneers and a huge number of organizations and businesses, farmers and food producers represent many approaches to improve sustainability in agriculture: agro-ecology, fair trade, Slow Food, smallholder and family farmer movements, community supported agriculture initiatives, food movements, urban agriculture and many others. They all share the direction of the aforementioned vision of the organic movement and must be included in any thoughts around the development of Organic 3.0.

This booklet offers an overview of the new concept of Organic 3.0 and proposes a general strategy for its implementation. It is a call to action for all those working to improve the global sustainability of human society, which is largely based on agriculture[1]. It wants to galvanize and enable appropriate production and consumption patterns, market mechanisms, policies and regulations that are critical to many people, whether in the global north or south. Following consultation and revision, it can form the basis for a commonly shared and up-to-date understanding of the future direction of the organic movement.

1 Everything in the material world comes from something that either grows or is mined.

3. BACKGROUND, ORGANIC 1.0 – 2.0 – 3.0: A CONTINUING JOURNEY

BOX 2 | SOME ORGANIC PIONEERS:

Albert Howard (U.K.), **Anna Primavesi** (Brazil), **Bashkar Save** (India), **Efraim Hernandez Xolocotzi** (Mexico), **Eve Balfour** (U.K.), **Hans & Maria Muller** (Switzerland), **Jerome Rodale** (U.S.A.), **Rachel Carson** (U.S.A.), **Masanobu Fukuoka** (Japan), and **Rudolf Steiner** (Germany, Austria, Switzerland).

BACKGROUND

IFOAM – Organics International, the global umbrella for the organic movement, held its first global conference in Switzerland in 1977.

This was an important moment for the then young organization, but also for this new way in agriculture, that was trying to define exactly what was meant by the term 'organic'.

Many of the pioneers and visionaries of this early ecological movement directly influenced the thinking and practices of the first wave of organic farmers. This conference, and those that followed, helped to establish many of the rules and practices that have shaped the world's organic standards, regulations and markets as we know them today.

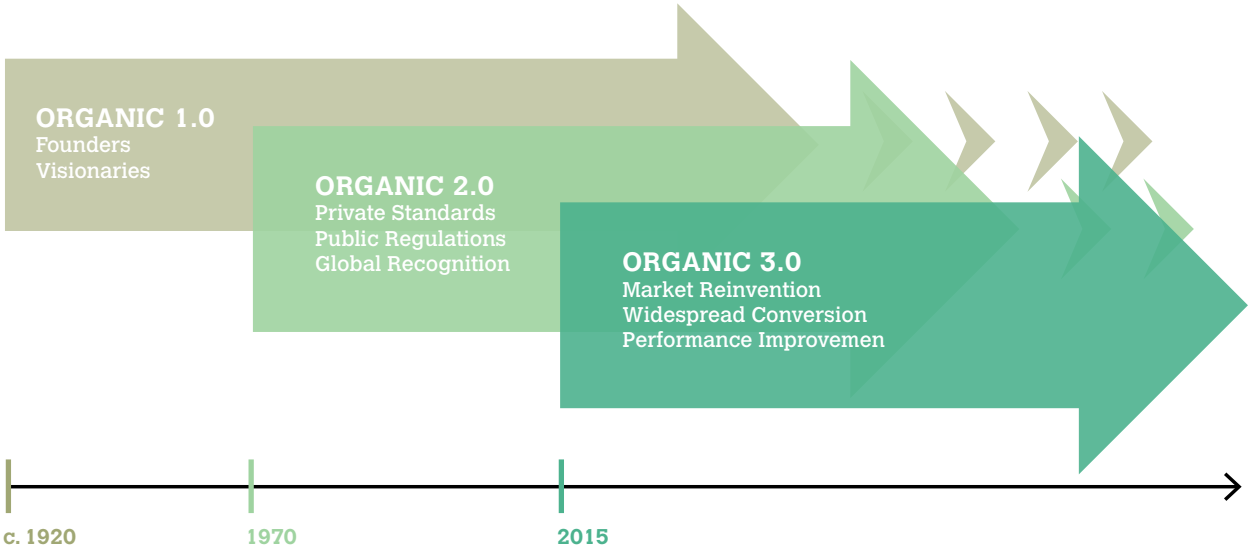
Yet, at the 1977 conference, Lady Eve Balfour delivered a speech that cautioned against too strict an adherence to a limiting set of rules.

> "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." [2]

An early pioneer of organic and a founder of IFOAM - Organics International, Balfour seemed to already fear that organic might box itself in, might define itself in an exclusive way, and so she argued for a famer-led approach which prioritized the outcomes and impacts necessary to foster the 'wholeness' of a diverse, 'living world'. This booklet represents a similar moment for today's global organic movement.

2 "Toward a Sustainable Agriculture: The Living Soil" By Lady Eve Balfour, delivered as a speech at the IFOAM–Organics International conference, 1977, Switzerland.

FIGURE 1 | Widespread Conversion Development Towards True Sustainability Inclusiveness



ORGANIC 1.0 – PIONEERS FROM AROUND THE WORLD

The organic movement was founded almost 100 years ago by visionary pioneers who 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. Indigenous movements in Latin America, Japan and India for example also recognized the value of biological and cultural diversity. A common organic movement emerged in the early 1970s with the establishment of IFOAM - Organics International in 1972 by several key organizations and individuals to better represent the interests of this way of thinking about food and farming. Looking back, one century on, we have termed this first phase of the organic movement Organic 1.0.

ORGANIC 2.0 – NORMING AND PERFORMING

With the establishment of IFOAM - Organics International, the early 1970s saw the emergence of Organic 2.0.

Over the following decades, production and processing standards were developed and certification schemes were introduced by 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 2015, 82 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[3]. There has been rapid growth in the area of certified organic land (around 78 million hectares in 170 countries worldwide by 2013), and in the value of the market for certified organic food ($72 billion worldwide in 2013)[4].

However, the importance of organic systems is much greater than these figures suggest, which only represent

3 Huber, B., Schmid, O. und Napo-Bitantem, G. (2015): Standards and Regulations. In: Willer, H. and Lernoud, J. (Eds.). The World of Organic Agriculture. Statistics and Emerging Trends 2015. FIBL-IFOAM Report, Frick and Bonn. Research institute of organic agriculture (FiBL), Frick and IFOAM Organics International, Bonn, p.126-133.

4 Willer, H. und Lernoud, J. (Eds.) (2015): The World of Organic Agriculture. Statistics and Emerging Trends 2015. FIBL-IFOAM Report, Frick and Bonn.

certified organic production and consumption. In practice, smallholder and peasant farmers – oftentimes women – in the least economically developed countries in the global south ensure that there is enough to eat for the majority of the world's families. Many of them do not have easy access to the purchased inputs that are the mainstay of industrial intensive and chemical-based agriculture. They are already largely organic at their core and could greatly benefit from improving the agro-ecological design of their farms.[5]

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.

BOX 3 | ACHIEVEMENTS OF ORGANIC 1.0 & 2.0: HIGHLIGHTED EXAMPLES

- The growth in scale from a very small recognition in policy to a widespread uptake of a clear and detailed legal framework.
- In some countries in Europe the area of certified organic land accounts for up to 20% of the agricultural land, while in some alpine regions there is even a majority of farmers managing their land organically.
- Organic baby food represents up to 80% of the baby food market in many countries.
- In some countries in Latin America exports of certified organic crops like coffee, cacao and banana are greater than non-organic.
- The introduction of internal control systems and group certifications has improved access to international markets and connections with smallholders.
- Some Himalayan states have pledged to become 100% organic.
- Many organic farming models are high yielding and provide a range of ecosystem services most effectively.[6]
- There is evidence that organic produce has improved health qualities.[7]

5 Niggli, U. (2015): Incorporating Agroecology Into Organic Research – An Ongoing Challenge. Sustainable Agriculture Research; Vol. 4, No. 3. http://dx.doi.org/10.5539/sar.v4n3p149, p.149-157.

6 Niggli, U. (2014). Sustainability of Organic Food Production: Challenges and Innovations. Proceedings of the Nutrition Society. DOI: 10.1017/S0029665114001438, p.1-6.

7 www.organicresearchcentre.com/manage/authincludes/article_uploads/Dossier_Quality_E_light.pdf

THE NEED FOR ORGANIC 3.0

FIGURE 2

1.0 **Organic 1.0** laid out how people can healthily nourish themselves whilst protecting the environment & biodiversity.

2.0 **Organic 2.0** enabled the market for certified organic products to develop and gain a significant foothold in many parts of the world.

3.0 **Organic 3.0** responds to the many challenges and opportunities that call for a fresh impetus. Organic 3.0 food and farming systems are more:

- ✓ Ecologically sound
- ✓ Economically viable
- ✓ Socially just
- ✓ Culturally diverse
- ✓ Transparently accountable

The Organic 2.0 strategy of developing a reliable certification system that is supported by government regulations enabled continuous growth from a few farmers in many pockets of the world to a globally consolidated sector with millions of producers and consumers.

The practices envisioned by the pioneers have been tested, replicated and scaled up globally. There is evidence of positive impacts on a wide range of important issues such as consumer health, biodiversity and the improved welfare of producers. The holistic system view concentrating not only on the exploitation of short-term market opportunities proved to be robust and assured growth even in times of economic crises in many countries.

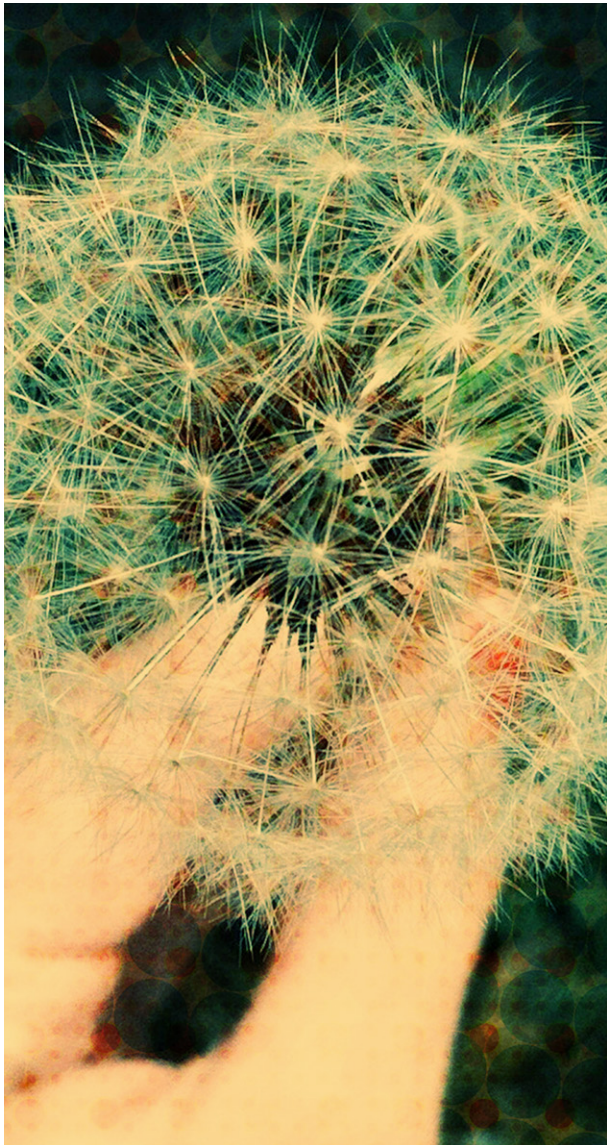
While there is sound development and wide prosperity in the organic sector, many stakeholders also state a need for reforms and call for a paradigm shift in order to make production and consumption truly sustainable. The most significant constraints of Organic 2.0 are summarized in Box 4 on page 8. The achievements are undisputedly impressive, but certified organic agriculture has not even reached 1% of agricultural land or of global food consumption.

Delivering on the ambitions to have impact on the sustainable development of the planet requires further scaling and mainstreaming. We must tap unexploited potentials and address constraints.

BOX 4 | THE NEED FOR ORGANIC 3.0 IS UNDERLINED BY SOME EXEMPLARY CHALLENGES OF ORGANIC 2.0

- In many countries, organic is too small to have a big impact.
- There is a low rate of conversion to Organic Agriculture and growth of organic agriculture land is much slower than the dynamic market development.
- Organic standards set minimum requirements and not a high target. In certain instances this led to operations that are standard compliant, but that neither fulfill the Organic Principles, nor progress towards them.
- Not all production techniques and standards have kept pace with modern science (e.g. inputs for horticultural crops, livestock medication, recycling of nutrients).
- Certification, third party verification and detailed standards in Organic 2.0 have imposed a burden on farmers and the value chain. Small-scale producers are mostly unable to shoulder this additional burden.
- The certification system is prone to fraud, especially in longer chains.
- Some high priority areas, for instance social requirements or fairness in trade aspects are not directly regulated in organic standards and cannot be claimed, although there are many farmer and business initiatives delivering very well on them.
- Effective delivery of ecosystem services and common goods often not rewarded.
- Organic is excellently positioned for high value and healthy products and trust is placed in its ecological processes and animal welfare. However, it is not sufficiently positioned in other sustainability dimensions and is rarely considered an option for mainstream agriculture strategies by policy makers.

4. THE ORGANIC 3.0 FRAMEWORK



OVERALL APPROACH AND THE GOAL OF ORGANIC 3.0

Organic 3.0 expands the options and enhances holistic system development, positioning organic as a modern, innovative farming system.

While Organic 2.0 focused on clearly defined minimum requirements and organic claims on products, Organic 3.0 puts the impact of the farming system in the foreground. Organic 1.0 and Organic 2.0 approaches and achievements are not abandoned; they are complemented by new features built into the paradigm and a repositioning of the organic movement.

Through the new Organic 3.0 understanding and strategy, we want to share how we are able to have a real impact on the concerns of critical importance to billions of people – ensuring climate change resilience and adaptation,[8] access to capital and adequate income, availability of land, water, seeds, healthy diets, and avoidance of waste in food and farming systems. Fertile soils, clean water, appropriate genetic resources, social and economic opportunities for both genders, and cultural heritage that provides identity and accessibility of traditional and scientific knowledge are just a few examples of vulnerable resources that matter to future generations. Organic 3.0 strategizes, implements and delivers with awareness of tradition, culture and science, and develops based on scientific evidence and on its principles of health, ecology, fairness and care.

The **overall goal of Organic 3.0** is to enable a widespread uptake of truly sustainable farming systems and markets based on organic principles and imbued with a culture of innovation, of progressive improvement towards best practice, of transparent integrity, of inclusive collaboration, of holistic systems, and of true value pricing.

The organic movement is ready and keen to ally with and to be seen as a partner of all those who share the vision of a truly sustainable agriculture.

8 Altieri M, C. Nicholls, A. Henao & M. Lana. 2015. Agroecology and the design of climate change-resilient farming systems. Agron. Sustain. Dev., 35:869–890.

THE ORGANIC 3.0 MODEL AND ITS KEY FEATURES

Organic 3.0 is a revised understanding and positioning towards a more ambitious and common-good goal, and therefore has a strong focus on the attitudes, values and strategic plans of stakeholders.

It also calls governments to create an environment conducive to empowering stakeholders by setting legal frameworks and public investments. It embraces a strategy of dynamic development towards increased uptake of best practices. With this 'more, deeper and better' approach (see Figure 3) it aims at increasing relevance and credibility not only for a limited organic niche, but also as an integral part of the societies of all countries. This strategy implies clearly defined minimum requirements such as the ones defined in many government regulations around the world and in the objectives of the IFOAM Standards Requirements. It also implies a culture of continuous improvement through private and stakeholder driven initiatives towards best practice adapted to local priorities as described in the IFOAM Best Practice Guidelines. Six features characterize Organic 3.0 as visualized in Figure 6 (p.14) and as further detailed below.

FIGURE 3 | Towards More Sustainable Agriculture

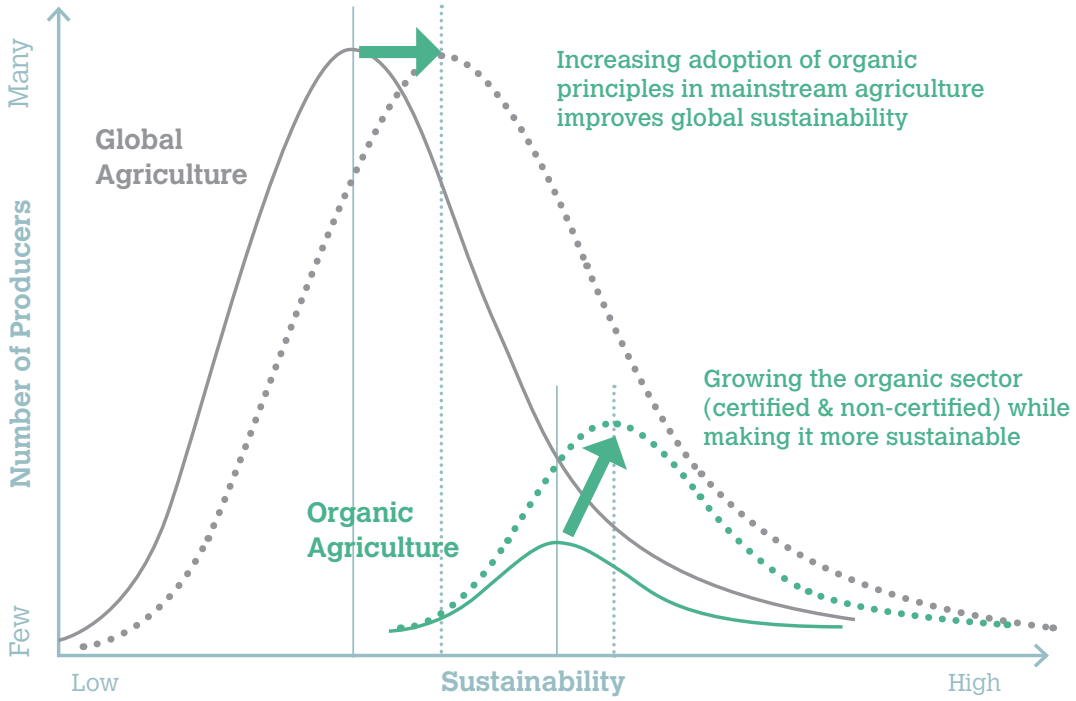
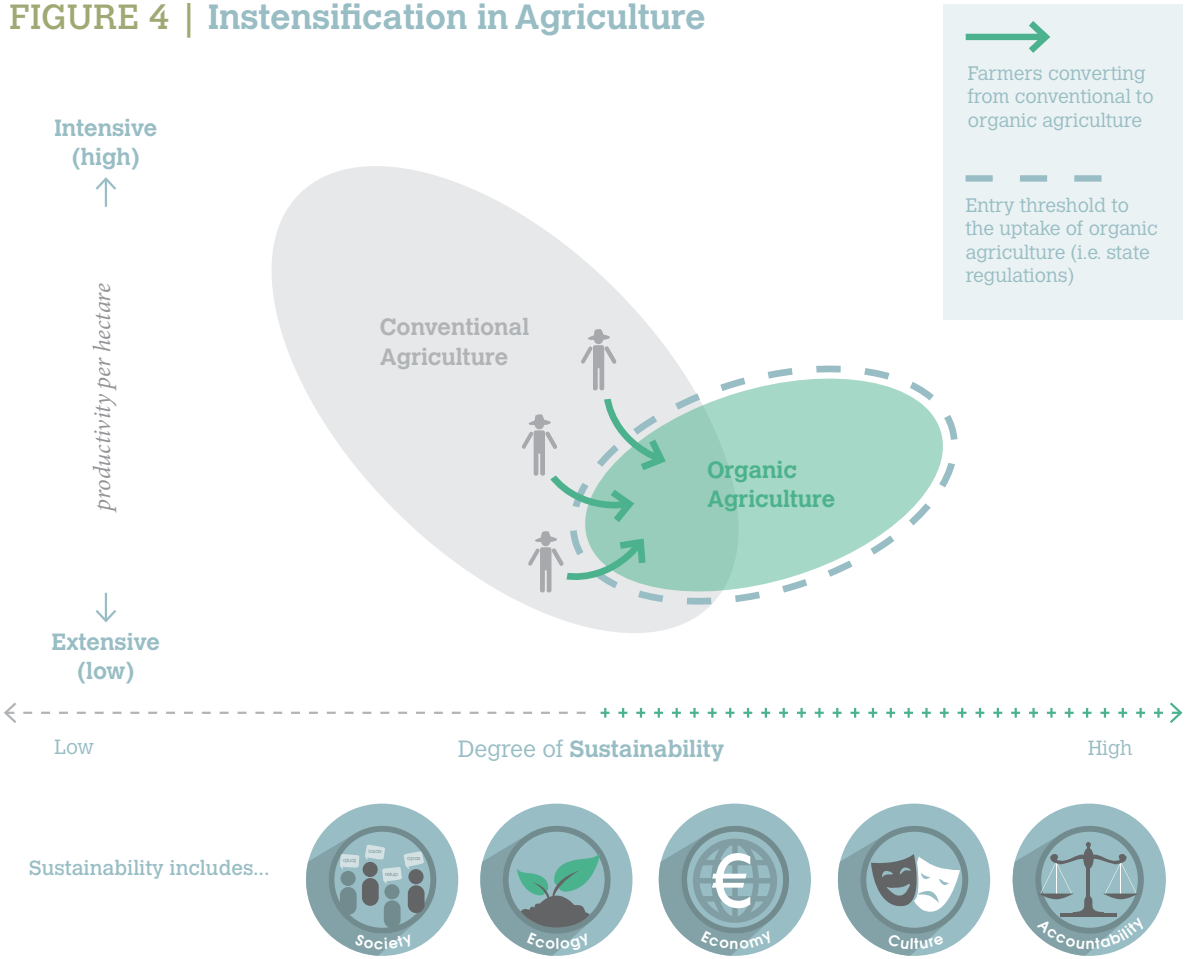


FIGURE 4 | Instensification in Agriculture



TO SUMMARIZE, ORGANIC 3.0:

- Is innovation-oriented and proactively assesses upcoming technology against evidence-based and scientifically evaluated impact potentials based on the Principles of Organic Agriculture (Organic 3.0 Feature #1: Culture of Innovation)
- Expects operators along the whole value chain to be committed to ongoing improvements and to address all of the following dimensions: ecology, society, economy, culture and accountability. (Organic 3.0 Feature #2: Continuous improvement towards best practice)
- Provides more options for credible assurance, with more opportunities for inclusive and transparent participation by all, and exposes and mitigates conflict of interest at all levels of the public and private sector. (Organic 3.0 Feature #3: Diverse ways to ensure transparent integrity)
- Is inclusive and proactively builds alliances with like-minded movements based on common visions rather than on competition and differences in detail. However, it also clearly distinguishes itself from unsustainable agriculture systems and 'greenwashing' initiatives. (Organic 3.0 Feature #4: Inclusive of wider sustainability interests)

- Takes holistic and system oriented stances for further developments in a community or a region. It particularly acknowledges the core position of smallholding family farmers around the world with a special focus on gender equity and fairness of trade. It realizes the driving potentials of good governance and of putting consumer needs and health in the foreground, particularly in view of a fast changing technology environment and rapid urbanization. (Organic 3.0 Feature #5: Holistic empowerment from farm to final product)

- Establishes a practical way to implement true cost accounting and strives for true value pricing, for creation of incentives for truly sustainable systems, with increased transparency, internalizing of external costs and benefits, and empowerment of all stakeholders to fair trade relationships. The proof of long-term societal benefit of such pricing models is brought into public policy discussions to correct current market distortions that reward unsustainable practices. (Organic 3.0 Feature #6: True value and fair pricing)

FIGURE 5

Visualization of the five dimensions and 20 criteria from the 'Best Practice Guideline for Agriculture and Value Chains.'

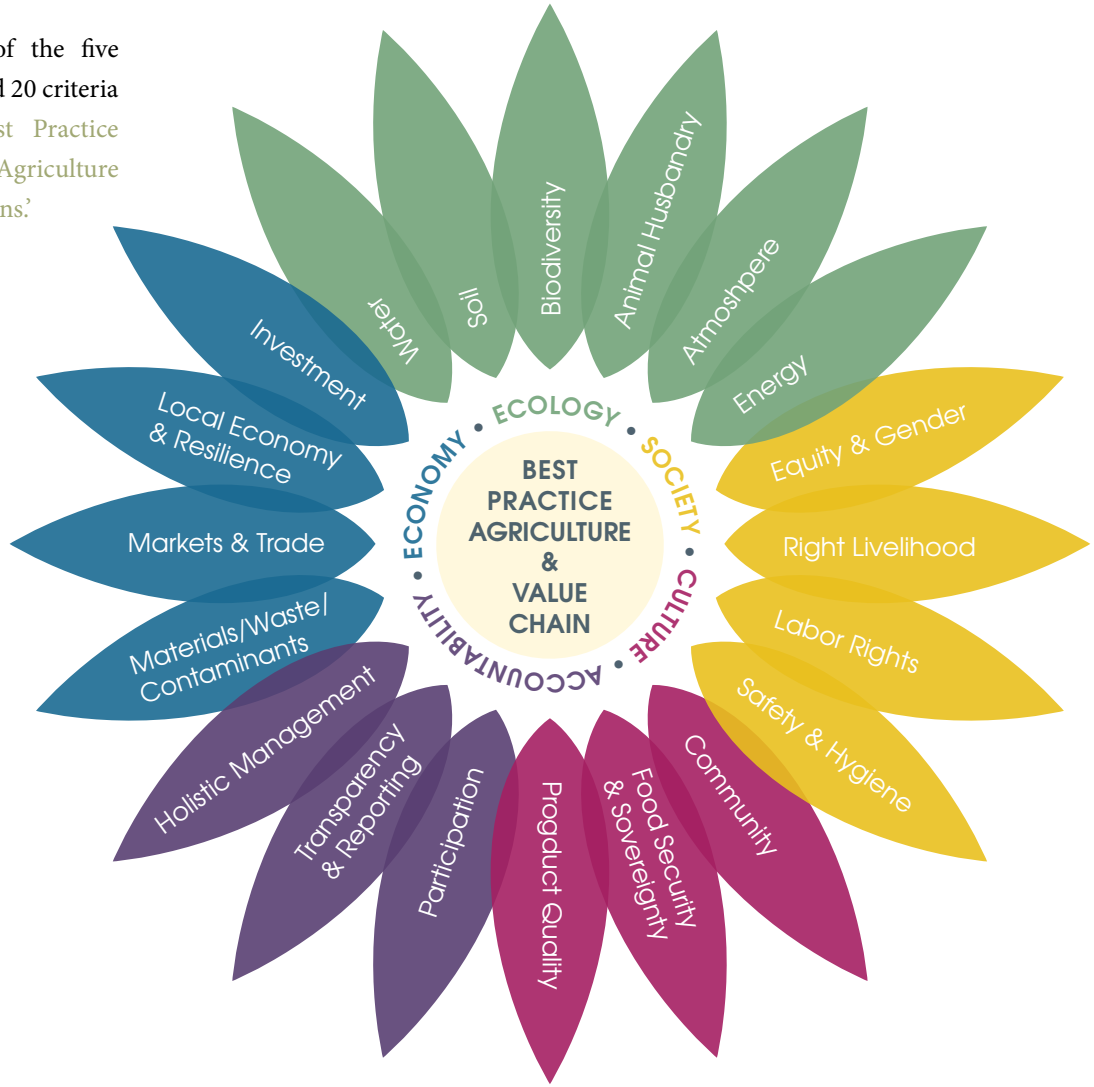
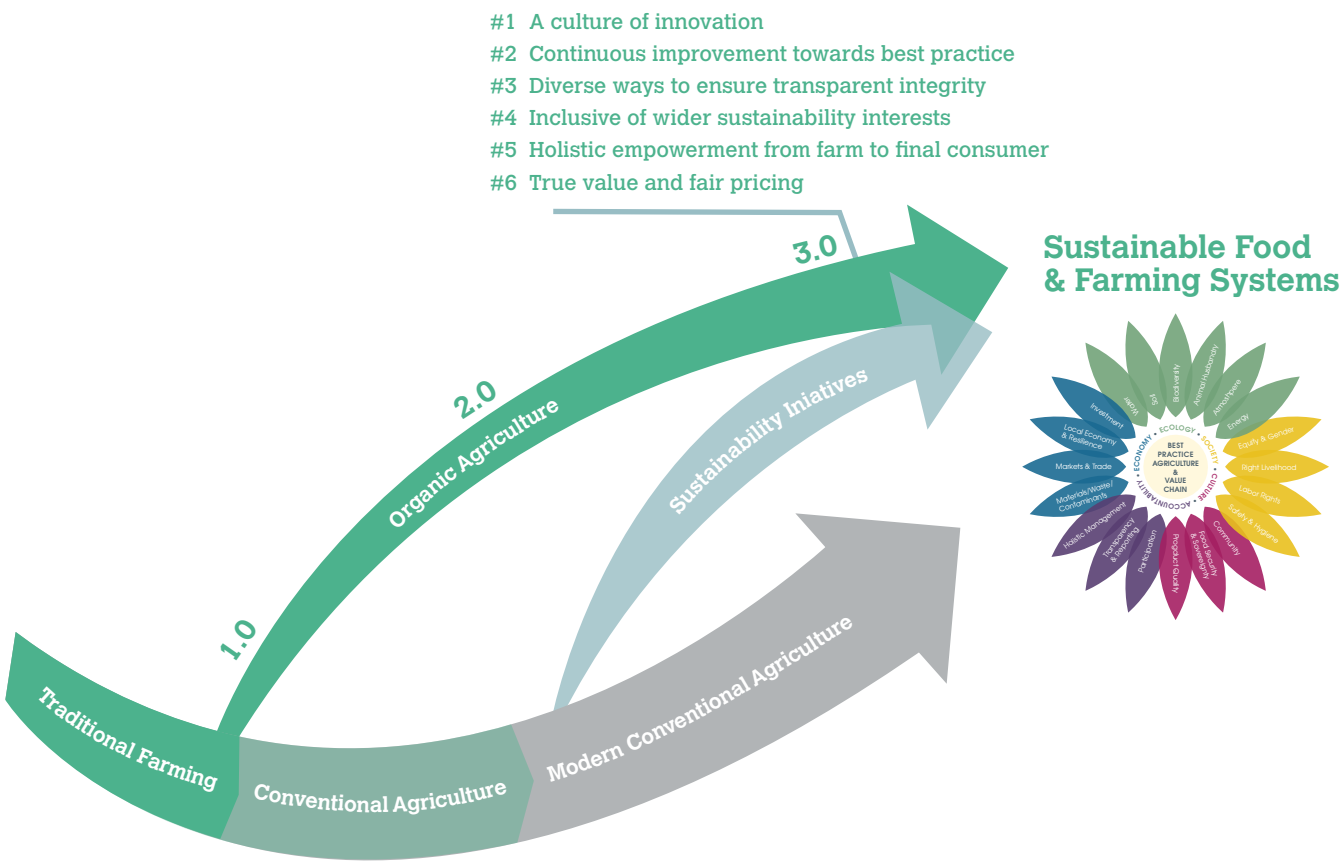


FIGURE 6



THE 6 KEY FEATURES ONE BY ONE

FEATURE #1: A CULTURE OF INNOVATION

In the context of Organic 3.0, innovations are needed to address the multiple challenges society faces. This will involve critically re-examining, on a scientific and evidence basis, the prescriptive standards of Organic 2.0 to determine which elements should be retained to deliver improved outcomes and greater impacts.

Two of the priorities are innovation to overcome the present very low rate of farmers' conversion, and to increase yields while maintaining ecosystem vigor. Organic farmers need viable answers to their challenges particularly since they do not have the option of quick technology fixes with synthetic inputs to 'solve' fertilization, pest, livestock health, or weed problems. Practical tools such as soil tests to ensure the correct nutrient balance or monitor pests and disease pressure need to become common practice, so that farmers can consistently get high yields and perform according to the concept of eco-functional intensification. Public-sector research and other pro-poor efforts are needed to assist producers especially in the global south.

To successfully address the tremendous challenges of the 21st century, a combination of social, ecological and technological innovation is essential. Organic agriculture is not a farming system that is disrupted by new technology

and dominated by conservative thinking. Rather, in present-day context it is a leading-edge concept that will bring substantial change to solve major social and environmental issues that the planet is facing.

This may also include new high potential technologies of which the organic movement is presently rather skeptical, but that are in line with holistic system approaches and the Principles of Organic Agriculture. Innovation will not only concentrate on technology aspects but also purposely address all the sustainability dimensions including e.g. social aspects or institution building and governance. Some examples illustrate the way in which a culture of innovation will help:

- Advanced agroecological and ethological methods, working with natural systems and behavior studies of animals will improve crop and livestock production to narrow the yield gap between Organic 3.0 and conventional systems and help ensure good animal welfare. These may be for instance i.) 'habitat engineering' in crops and soils in order to increase and manage beneficial insects[9] and microorganisms or ii.) mother-bonded and fostered calf rearing in dairy farming in order to prevent diseases in young farm animals.[10]
- Smart technologies such as robots and precision farming (e.g. the combination of contour farming with strip cropping for broad-acre arable farms), information and communication technology, smart crop and livestock breeding with advanced marker-assisted selection tools, biocontrol and botanicals for the support of plant and livestock health or fermentatively manufactured amino acids for feed stuff.
- Systematically extract, evaluate and preserve indigenous or tacit knowledge of farmers and farm communities.[11]
- Further development of methods that provide assurance of compliance to sustainability criteria and that enable value chains, from farm to final product, to demonstrate how key issues are addressed, quality and authenticity assured, and impact achieved.
- Extensive use of modern internet technology and the reputation economy by social and food movements, the fashion, cosmetics, personal care, and health industries, urban farming, community supported agriculture, collective land ownership initiatives etc., to democratize the value chain.
- In Organic 3.0, innovation committees explore potentials and develop positions on the use of upcoming technologies, assuring a fast uptake and getting the same type of importance as standards committees in Organic 2.0.

FEATURE #2: CONTINUOUS IMPROVEMENT TOWARDS BEST PRACTICE

Certification requirements based on private standards and government regulations – the core of Organic 2.0 – will not be the most important focus any more, but will continue to play an important role as they identify the 'no go' and the minimum requirements. There is no particular strategy to steadily increase the minimum requirements for instance in government regulations in order to assure broad access and to avoid further constraints to new conversions around the world. Standards may however become broader and address neglected aspects in order to underpin the holistic rather than just the environmental benefits of organic agriculture. And they may evolve to play an important role in facilitating continuous

9 Zehnder, G.; Gurr, G.M.; Kühne, S.; Wade, M.R.; Wratten, S.D. and Wyss, E. (2007): Arthropod pest management in organic crops. Annual Review of Entomology, 52, p. 57–80.

10 Spengler Neff A., Ivemeyer, S. Schneider, C. (2015) Mother-bonded and Fostered Calf Rearing in Dairy Farming. FiBL technical leaflet. www.fibl.org/de/shop/artikel/c/rindvieh/p/1660-mother-bonded-calf-rearing.html, pp. 24.

11 Disler, M.; Schmid, K.; Ivemeyer, S.; Hamburger, M. and Walkenhorst, M. (2013). Traditional homemade herbal remedies used by farmers of northern Switzerland to treat skin alterations and wounds in livestock. Planta Medica, 79 -PL24. Doi:10.1055/S-0033-1352332. Available at: orgprints.org/25312/1/disler-etal-2013-PlantaMedical-79-PL24.pdf

improvement by integrating tools for monitoring individual progress of the operators.

Continuous improvement of operations and systems may address any of the ecological, social, economic, cultural or accountability dimensions. It is up to producers to identify the priorities in their specific context – diversity is essential and desirable. The Organic 3.0 framework should provide guidance for prioritizing innovations that have the most impact according to available financial and human resources. Meaningful criteria and credible targets will be agreed by stakeholders and used to evaluate and communicate improvements in a transparent way. Not everything can be accomplished at once by any given enterprise; over time more and more will be achieved.

The IFOAM Best Practice Guidelines[12] show in which direction operations can be developed. Farmers, processors and traders shall use an appropriate tool to benchmark own operations, in order to demonstrate their improvements year by year. Proudly reporting those self or third party assessed progresses increases transparency and creates client and government trust. An attitude of continuous improvement towards best practice rather than an economic optimization on the minimum standard also supports the above-described culture of innovation.

12 Best Practice Guideline for Agriculture and Value Chains, developed by SOAAN and approved by IFOAM – Organics International. www.ifoam.bio/en/organic-landmarks/best-practice-guideline-agriculture-and-value-chains

FEATURE #3: DIVERSE WAYS TO ENSURE TRANSPARENT INTEGRITY

Organic 2.0 successfully developed standards and implemented certification systems validated in a legally enforced system of compliance verification. It has enabled the growth of the production base and the market for certified organic products. This will continue to be important as the supply and demand for certified organic products continues to grow. However, a broader uptake of organic agriculture cannot be based on third party certification alone. Tools from Organic 1.0 like self-claims based on personal relationships and trust may regain importance. Fast-growing Participatory Guarantee Systems (PGS) that rely on the relationships between famers and consumer groups are proving to be engines of social development particularly in the global south.[13] Peer assessments and social control of producer groups that share a common reputation and brand value will be equally acceptable if consumers positively respond. In various parts of the world, short chain markets and consumer cooperatives manage conformity assurance with a very high level of consumer trust.

Different, new verification schemes may become practiced depending on the length and complexity of value chains. Reputation economy and web-based communication technology offer new opportunities; the organic movement must be open to this. For long chains, the process-oriented paperwork might be complemented and reduced by modern tracing and tracking technologies, which will become widely used as they become more affordable (remote sensing, highly improved analytics).

13 Bouagnimbek, H. et al. (2014), Global comparative study on interactions between traditional social processes and participatory guarantee systems (PGS). www.ifoam.bio/en/global-comparative-pgs-study

Third-party certification will remain important particularly for marketing in large quantities in retail chains. The Organic 3.0 model in this case must mean reforms to lower the burden of producers regarding onerous reporting requirements.

Greater transparency across the value chain and among all associated relationships will also help ensure that potential conflicts of interest are more readily exposed. Organic 3.0 communications systems will enable parties to identify and address such concerns.

FEATURE #4: INCLUSIVE OF WIDER SUSTAINABILITY INTERESTS

The goal to become more relevant and to increase impact includes alliances to the many movements and organizations that have aligned goals and complimentary approaches to sustainable food and farming systems. The organic movement is a pioneer but not any more alone in working for a paradigm of ecological and social

intensification based on natural processes and closed cycles. The organic movement is inclusive by collaborating with other like-minded movements and civil society organizations. But just as important is to be included: The organic movement seeks to be an active partner in the diversity of the worldwide new pioneers pushing for sustainable food and farming systems that share common objectives. These movements and organizations include for example agro-ecology, fair trade, smallholder and family farmers movements, community supported agriculture, food movements, urban agriculture and many others.

Organic 3.0 is to be used as a tool for achieving true sustainability, a shared journey with others, respecting differences and working with diversity. To achieve this means proving the benefits of organic practices through evidence-based findings and helping others to adopt such practices into their systems.

Beyond market success, the organic movement must develop substantial leadership in the development of up-scalable truly sustainable farming and value chain systems. Such leadership could be for instance in offering best farm practices or best food handling practice packages and informing consumers about healthy diets. It could also take the shape of assistance to the private sector meet the rising demand for organic and ethically sourced goods, i.e. guide the private sector on its path to sustainability. Another form of leadership could be the role of the organic movement as a guide and guardian of a modern, responsible and caring innovation culture.

Being inclusive and taking leadership and responsibility also means naming limits and taking clear positions against policies and practices that go against the objective of a truly sustainable agriculture and value chains that provide equal opportunities for future generations and that do not mine and deplete non renewable resources. The organic movement must be inclusive to all on the journey towards true sustainability – regardless of whether they comply with minimum organic requirements – but it must also make clear and pointed positions against greenwashing, against greedy exploitation of the planet and society, and against unsustainable farming, value chain and consumption patterns. Issues may for instance include the use of inputs with adverse effects, creation of vulnerable stakeholders' systemic dependency on big corporates or powerful countries, genetic engineering, patenting of life, and food waste.

FEATURE #5: HOLISTIC EMPOWERMENT FROM FARM TO FINAL CONSUMER

Organic agriculture is based on production but also engages in processing and trade. It allies with consumers – the force that ultimately pulls developments. An orientation to objectives, and improvements aiming at true value and best practices (see Feature #2), with a holistic view, reposition organic as a process addressing all sustainability dimensions.

These objectives also imply interdependence and real partnerships along the value chain. This demands empowerment of disadvantaged stakeholders such as smallholding family farmers in difficult ecological, economic and governance environments, or of women who largely carry the burden of assuring decent livelihoods for their families in critical conditions.

The focus on empowerment of deprived stakeholders in the whole system may imply for example:

- A shift towards designing agro-ecological, low input, closed looped, high yielding, resilient systems in value chains that will mean less costs for farmers with better production outcomes. Farmers must be active partners with researchers and involved in designing and implementing systems.
- Farmers are one of the lowest socioeconomic groups in many countries. They must be empowered to be drivers of change rather than the current situation in which production systems are imposed on them through a top-down system of standards, checklists, and financial obligations. Many farmers live in constant debt to banks and/or traders that compel them to sell their crops at low prices and/or pay high interest

rates. They risk losing their farm if crops fail and are often consequently forced to give up their farms to live in abject poverty on the fringes of the rapidly growing cities.

- The majority of farmers and the majority of consumers – the two primary stakeholders in organic systems – are women. Their critical role must be acknowledged. In many countries, numerous women have no property, financial or reproductive rights and on top of that are the object of physical violence. Even in developed countries and in institutions of the organic movement, women are grossly under-represented in leadership roles. The principles of fairness and care mandate that organic 3.0 actively address gender equity.

- The present food system does not serve the more than 1.5 billion people who show temporary or chronic symptoms of malnutrition including stunting, wasting and obesity. There is a stagnation of the growing life expectancy through 'civilized' diseases that are highly correlated with people's lifestyle and eating habits. Consumer health, well-being and healthy diets are included as a high priority in Organic 3.0. Communications broaden from production processes and products only to also include consumption patterns.

FEATURE #6: TRUE VALUE & FAIR PRICING

Organic 2.0 achieved a diversity of supply chains including direct marketing schemes such as community-supported agriculture and farmers' markets where the link between producer and consumer is short and direct. Specialty natural food, textile and cosmetics shops and large-scale supermarkets made organic products widely available in many countries (primarily in cities). In some countries, organic has reached high coverage not only in retail but also in catering and public meal supply. Mainstreaming requires further development in Organic 3.0 by assuring availability of organic options in the full diversity of market chains. The relationship between consumers and producers – oftentimes facilitated by the transparency efforts of the traders – needs to be strengthened. Consumer demand is not only essential to trigger private sector supply but also government decisions to create policies and conditions that are conducive to truly sustainable agriculture development.

Promoting interdependent value chains, where farmers are empowered as partners, is essential for market transformation towards mainstreaming organic consumption, whatever the route to market. Due to the fact that currently 54% of the consumers live in cities (by 2050, it will be 80% according to forecasts of the United Nations), supermarkets with efficient logistics will remain the predominant trade concept. Thus even more, fair prices throughout the value chain must be an essential component of Organic 3.0 – producers should be price makers, not price takers, in all supply chains.

It needs to be economically viable for farmers, processors and traders to do the right thing and for consumers to make better food choices. If the positive and negative externalities are not reflected in the price then inevitably the marketplace becomes distorted and the consumer is unable to comprehend the true value. A key is thus to more fairly account for the costs and benefits to the environment, biodiversity, human health, society and culture of any production system and farming method. This depends on developing tools for True Cost Accounting (TCA) and pricing. From the consumer's point of view, it is the perceived true value matters, so a premium price can easily be associated with clear benefits.

Examples of distortion that true cost accounting would help resolve include the abolishment of fertilizer subsidies (often practiced through hidden energy subsidies), the full implementation of the 'polluter pays principle' via taxing (e.g. of energy, CO_2, pesticides, nitrogen) and clear labeling of unsustainable practices (for example GMO, pesticide use and intensive animal rearing practices) so that consumers can make informed choices. In addition, public subsidies and direct payments to farmers must be entirely coupled to farming methods providing public goods and ecosystem services.

5. ORGANIC 3.0 – OUTCOMES AND IMPACTS

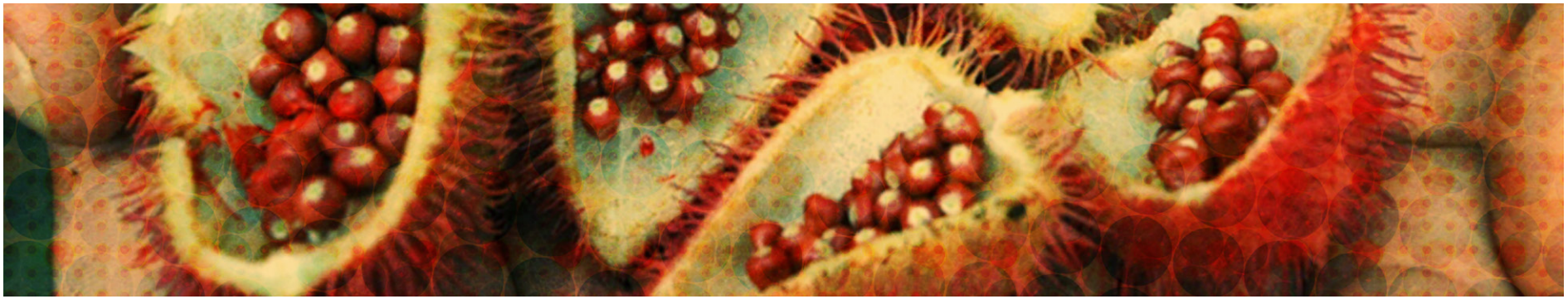
Organic 3.0 means moving towards a set of features that more comprehensively delivers across the five dimensions of sustainability: ecology, society, economy, culture and accountability.

Eight examples (Figure 7) illustrate the direction of travel and outcomes of the transition.

The diversity of situations will lead to a diversity of outcomes and impacts. Examples of outcomes and impacts include:

- Contribution to reversing the effects of human-induced climate change;
- Preserving & stewarding biodiversity;
- Protection of genetic diversity and improve breeds of plant varieties and livestock suited to agroecological production;
- Reduction of dependency on non-renewable resources and close nutrient loops in production systems;
- Improvement of ecosystem health and resilience;
- Improvement of productivity (yield and nutrient quality) of organic systems;

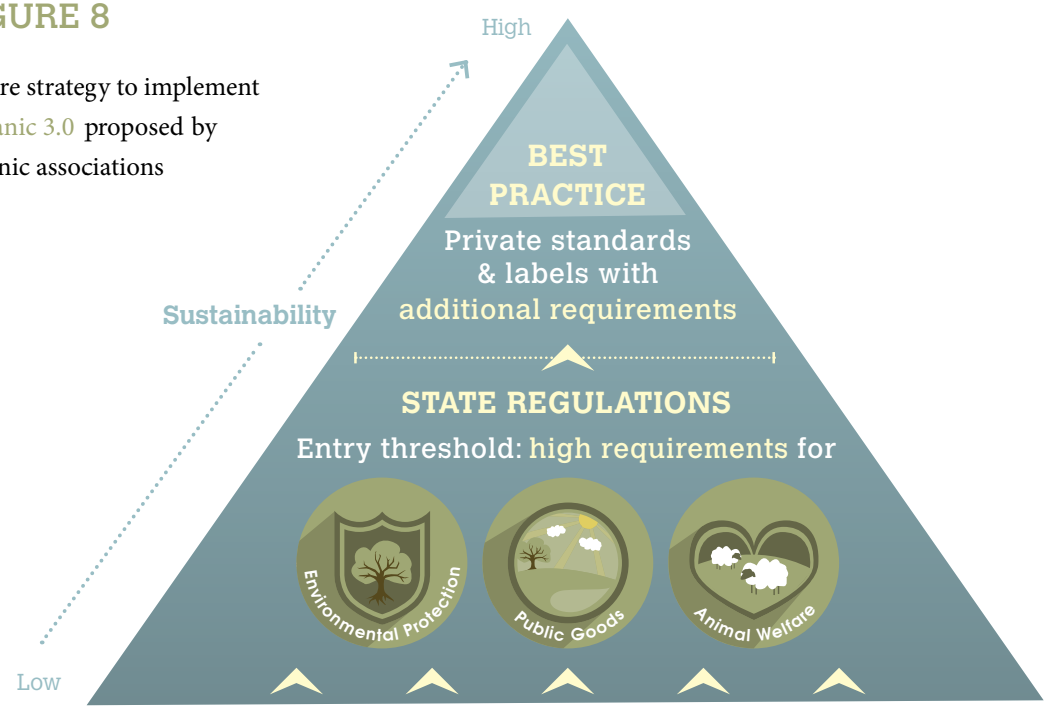
FIGURE 7



- Maintenance and enhancement of water, air quality and soil fertility;
- Improvement of human health through avoidance of hazardous substances in food production (on farm and in processing);
- Assurance and support of fair and decent livelihoods for all;
- Improvement of gender equity;
- Preservation and support of cultural diversity and development;
- Minimization of risks through comprehensive application of the precautionary principle and the principles of true cost accounting of food and farming value chains.

FIGURE 8

Future strategy to implement Organic 3.0 proposed by organic associations



6. ORGANIC 3.0 – RESPONDING TO THE POTENTIAL, DEFINING OBJECTIVES

Organic 3.0 has great growth potential. Many organizations with food security and sovereignty at the top of their agenda recognize that organic agriculture is a key pathway to sustainable food and farming.

It can help secure livelihoods of the small farmer and provide a good opportunity for larger farms as well. Feeding the growing population in cities is also essential, as is establishing a more mutually invested link between urban and rural dwellers, so a link with urban and peri-urban agriculture must be a target of Organic 3.0. Consequently, some aspects of organic standards within Organic 2.0 may no longer be applicable .

Most farmers in the world are smallholder peasant farmers; they have a fundamental role in the stewardship of biodiversity. Based on the scientific discipline of agroecology, organic agriculture can help improve ecological, agronomic and socio-economic intensification of smallholder agriculture . We need to reach the small farmer and the young farmer with the right techniques and technologies before they adopt unsustainable practices. Cooperation among farmers is essential, particularly for the small farmer, where size means that working in isolation and independently is not always viable. Extension to farmers must be based on developing and cooperatively sharing knowledge that assists the poor and is gender neutral. The apparently fast results of chemical based technologies and the industrial agricultural model are failing; an alternative approach should ideally predominate.

Strong advocacy for Organic 3.0 by IFOAM – Organics International, based on clear evidence and coherent arguments will be essential.

There are six operational objectives related to the six features for the organic sector to transition from Organic 2.0 to Organic 3.0:

1. Achievements are evaluated, impacts assessed and bottlenecks to future developments identified in order to define innovation opportunities.

2. Operations working towards best practice through continuous improvement is common understanding of organic agriculture.

3. A diversity of appropriate methods for ensuring transparent integrity is developed and promoted.

4. Organic 3.0 is part of a wider sustainability debate and the organic movement works with like-minded movements to pursue common goals.

5. Empowerment of the most vulnerable stakeholders through the system happens so that they become real partners.

6. Simple true cost assessment methodology is applied and recognized as a base for fair pricing.

Achievement of these six objectives will depend on the response from stakeholders in diverse conditions and situations around the world. There are different systems and environments, different cultures and expectations – there is no 'one-size-fits-all' solution – diversity is at the heart of Organic 3.0.

7. IMPLEMENTATION – A CALL FOR ACTION

This document is a draft to inform a broad stakeholder discussion. Once amended and approved by the global general assembly of the organic movement (intended to be held virtually end of 2016) all stakeholders are invited to make the idea a reality and be the attitude and change that is needed.

TRANSITIONING FROM ORGANIC 2.0 TO 3.0

The paradigm shift from Organic 2.0 to Organic 3.0 means evolution not revolution – a change in thinking inside and outside, a reform of structures and institutions by all stakeholders. The call for action includes a call to six key target audiences:

1. ALL ORGANIC STAKEHOLDERS & INSTITUTIONS

All organic stakeholders introduce changes in their own governance and operations and adopt needed reforms. They participate in all of the six Organic 3.0 features and jointly lead Feature #5, "holistic empowerment from farm to final product." The call for actions includes to:

- Accept and adopt the principles and features of Organic 3.0 and mainstream in internal policies and strategies.

- Develop action plans, benchmark, crosscheck and monitor internal policies and strategies for coherence with Organic 3.0.
- Acknowledge and consequently follow up on the priority for systemic empowerment of the most vulnerable stakeholders from farm to final product.

2. LOCAL, NATIONAL, REGIONAL & GLOBAL UMBRELLA ORGANIZATIONS

Local, national and international umbrella organizations, including IFOAM – Organics International and its self-organized structures are responsible for transition in their own sphere of influence, i.e. the geographical scope or the sector they coordinate. They participate actively in all of the six Organic 3.0 features and take a lead in implementing the overall Organic 3.0 concept and also lead Feature #5, "inclusive of wider sustainability interests."

The call for actions includes to:

- Create awareness and showcase willingness to transition.
- Agree with own stakeholders on a transition strategy that includes own system changes and advocacy for Organic 3.0 contents. Advise and facilitate stakeholders in implementation. Monitor progress and communicate achievements and barriers.
- Clarify the non-negotiable elements of organic standards that are central to delivering the required outcomes and create systems and a culture for continuous improvement towards best practice.
- Build and host innovation committees on national and international levels of outstanding organic and agroecological specialists including farmers and food handlers/traders forecasting, track and critically assess emerging innovations and potential conflicts.
- Recognize, critically appraise and value the objectives and achievements of like-minded organizations and movements. Be included and inclusive: creating bonds, incentives and strategic alliances based on common vision/goals.
- Assure participation and empowerment of vulnerable stakeholders, respecting their rights and their power.

3. RESEARCH AND DEVELOPMENT (R&D)

R&D leads Organic 3.0 Feature #1, "a culture of innovation" and supports the other features with systemic advice and innovative solutions. The call for actions includes to:

- Evaluate our achievements and assess our impact honestly and openly, in the context of the scale of the global challenges society and the planet faces and support advocacy and communication with evidence.
- Identify the key bottlenecks that hold back the scope for organic that could be resolved through more and better research, development and practice. Assess opportunities for science- and evidence-based innovation (including both natural and social sciences) to realize alternative approaches that are consistent with the organic principles.
- Support operators and verification bodies in their efforts for continuous improvements and demonstration of transparency through developing better benchmarking and other tools.
- Innovate, test and scale up integration approaches of smallholding family farms in organic opportunities on household, local, national or international levels. Develop low-investment cost conversion and integration methodology to improve performance by enhanced system design.
- Enable introduction of a True Cost Accounting system for simple and for complex value chains that is practical to implement, and robust enough for scientific analysis.

4. OPERATORS ALONG THE VALUE CHAIN

Operators take a lead in Feature #2, "continuous improvement towards best practice" in feature 3, "ensuring diverse ways of transparent integrity" and in Feature #6, "true value and fair pricing." They also play important roles in the Features #1 and #5. The call for actions includes to:

- Build internally and externally more awareness for best practice and for the need to address all sustainability dimensions. Adopt a strategy for continuous improvement rather than optimization on the standard. Benchmark against peer and own past performance and report about own improvements.
- Reassess own current scheme for organic guarantees and innovate for customer relationship building. Transparency and common interest should become the fundamental organizing principles of assurance systems.
- Acknowledge true costs, publish and advocate for true value and fair pricing. Expand application where possible and empower stakeholders to negotiate true value and fair prices.
- Working with umbrella organizations for sector coordination and strategy building. Working with R&D for technical, social, and policy innovations.
- Empower partners up and down the value chain and mainstream gender equity in own operations including in high-level positions.

5. CONSUMER & CITIZEN ORGANIZATIONS

Consumer and citizen organizations guide consumers, the force that eventually pulls organic developments. These organizations play a crucial role in explaining the transitions and to represent the voice of consumers and citizens. They do not lead a feature, but play a role primarily in Features #1, #3, #5 and #6 and lead communications about consumption patterns. The call for actions includes to:

- Be receptive to the far-reaching interests of consumer and citizen perspectives and be in a dialog with the Organic Movement.
- Contribute to a culture of innovation and continuous improvement amongst all operators by understanding and welcoming the Organic 3.0 concept and by supporting it with ideas and feedback. Show openness to new ways of demonstrating transparency and integrity and engage in relationship-building with organic operators.

- Focus on holistic performance, overall impact, consumption behavior and healthy nutrition based on agreed criteria, not only on single issues, single products and single failures.
- Inform consumers about the reality of farming and thereby foster relationships with farmers and creation of understanding about the power of consumption choices.
- Building values that are impacting fairness of trade interactions along the value chain.
- Acknowledgement of the empowerment of vulnerable groups, which includes fair pricing. Make political claims for true cost accounting, polluter-pay principles and true value setting.

6. SERVICE PROVIDERS

Service providers support all features and take a co-lead in feature 3, "ensuring transparent integrity." The call for actions includes to:

- Inspire and support all stakeholders with advise for the transition to Organic 3.0.
- Enable operators to choose appropriate assurance concepts thus adding to the quality of assurance and integrity. Transparency and common interest should become the fundamental organizing principles of assurance systems.
- Improve information infrastructure to enable collaboration and access both regionally and globally on topics of common interest, e.g. reporting platforms, registries of evaluated production materials, reviews of technologies, certification and trade data, risk assessment matrices, peer review criteria, etc.
- Specialized media promote the Organic 3.0 strategy on a daily basis and help build awareness amongst stakeholders including producers and consumers.

7. GOVERNMENTS & ORGANIZATIONS – NATIONAL AND SUPRA-NATIONAL (E.G. FAO, UNEP, UNCTAD ETC.)

Governmental and intergovernmental organizations set the regulatory framework and play a very important role in all the features, since policy and legal changes may be required. The call for actions includes to:

Review agriculture policies, recognize the opportunities of Organic 3.0 and adopt an updated organic strategy in consensus with the sector. Reform organic policies in coherence with Organic 3.0. This includes particularly innovative farming practices, adoption of the principle of continuous improvement in organic regulations, expansion of the options of conformity assessments, expansion of scope to a holistic understanding, and the institution of true cost accounting.

- Invest in the Organic 3.0 culture of innovation with its research agenda and budget and invest in rewarding public goods provision of farmers.
- Support the development of diverse accountability initiatives, enabling development by individual operators and of the sector as a whole.
- Mandate the purchase of organic in public procurement policies.
- Evaluate the impact of organic agriculture for social equity and environmental sustainability and use it for solution building in government priorities.
- Apply financial instruments that take into account the positive and external effects of agriculture production. Reward common-good provisions accordingly.

8. WHAT IS NEXT?

After one year of preparation in close collaboration with SOAAN, IFOAM - Organics International presents this booklet at the International Organic EXPO 2015 in Goesan, Korea to the organic movement.

The purpose is to inspire and to fuel the debate about the future of organic agriculture under the title "Organic 3.0", a debate originally launched at the beginning of 2014.

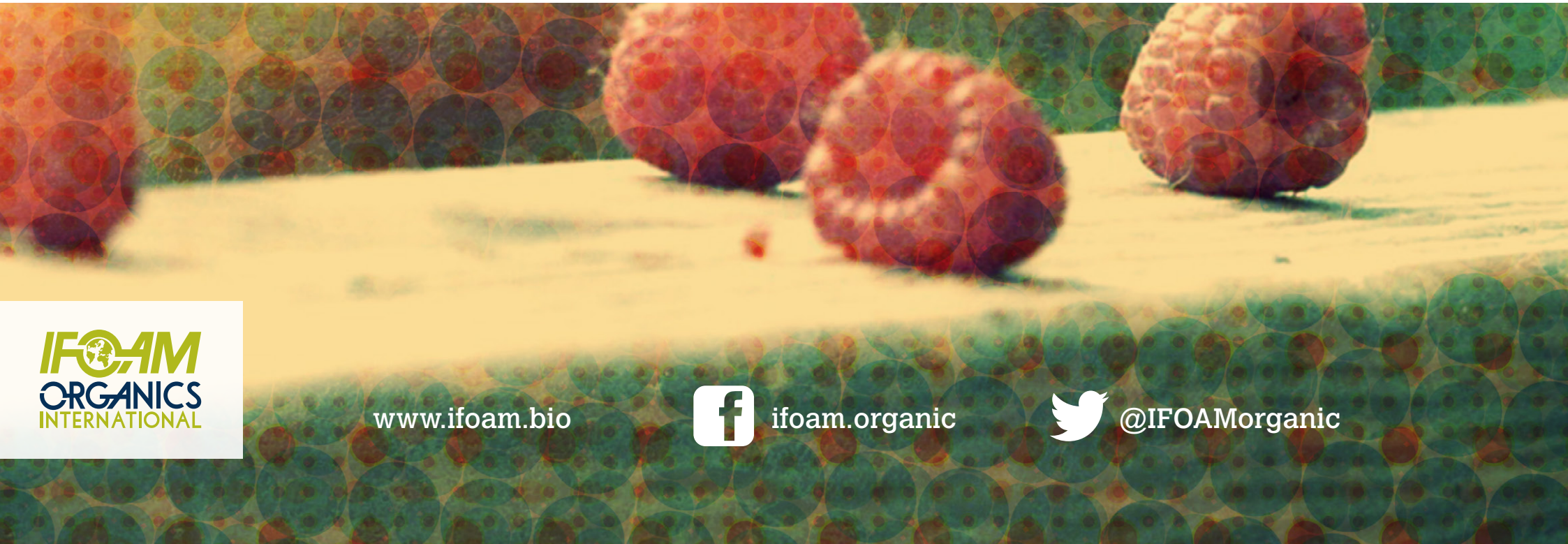
For the first time, concrete answers are provided to the question "What is Organic 3.0?"

"Organic 3.0: the next phase of organic development – visions, trends and innovations" is the title of the conference at the ISOFAR International Organic EXPO, with many national and international participants traveling to Goesan to shape the future of the organic sector. This discussion forum is a first 'test' of the ideas presented in this booklet. The discussions will guide us to further develop this document, showing us which parts of the Organic 3.0 concept are endorsed and which parts need revision.

Soon after the EXPO closes its gates, the discussion will be continued globally through abroad web consultation, calling for feedback. BIOFACH in Nuremberg, Germany in February 2016 with its over 40.000 visitors will mark another milestone in the development of ideas for concrete action; the global movement, politicians and journalist will be waiting, receptive to the ideas of global organic leaders, ideas like the ones summarised in this booklet.

Later in the year, IFOAM - Organics International will continue its efforts to distill and polish the collected information by inviting its constituents to submit motion proposals. These motion proposals will ultimately be voted on by the global General Assembly of the organic movement, meaning that a decision on what the concept of Organic 3.0 entails and a course of action to reach activists and decision makers will be made.

THANK YOU TO OUR SOAAN CONTRIBUTORS:



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