IFOAM

Position Paper

Approved by the IFOAM World Board in August 2011

IFOAM Position on the Use of Organic Seed and Plant Propagation Material in Organic Agriculture

I. Executive Summary

1. The choice of high quality organic seed and plant propagation material of suitable varieties is an important key to successful organic farming, allowing for improved yield and product quality, for crop resilience, considerate use of non-renewable resources and for increased genetic and species diversity.
2. The overall goal of IFOAM is to increase the proportion of organically propagated plant material, the number of crops and varieties available as organic seed, and the quality of organic seed with respect to purity, seed health and vigor.
3. The organic sector together with committed organic seed suppliers need to take responsibility to ensure that the organic propagation and seed market becomes more independent from the market dominating companies and can further grow.
4. IFOAM recommends seed production to be done with greatest experience and care and under favorable climatic conditions as well as in the respective regional context. Seed production should be combined with on-farm variety testing in order to provide as much information for farmers as possible.
5. IFOAM acknowledges variety protection as long as breeder exemptions and farmers' privilege are guaranteed. IFOAM will strongly advocate against the patenting of living organisms that violate these rights.
6. IFOAM will promote the coexistence of the formal seed sector and informal farmer based organic propagation in order to favour the diversity of Organic Agriculture and to help farmers to better adapt to local conditions.
7. IFOAM supports all initiatives to improve the legal situation for farm-saved seeds and plant material as well as for the propagation of old and modern landraces, populations, and other accessions that are useful for organic cultivation but do not pass the present variety registration process or have lost variety protection.
8. In places where certified organic seeds of suitable varieties are not available in sufficient quantity or quality the use of non-organic seeds

should be allowed. As a first step, IFOAM strongly recommends the use of seed treatments that comply with organic principles.

9. IFOAM recommends the training of farmers, farmer groups, seed processors, and organic seed traders in all aspects of organic propagation and maintenance breeding.

II. Background

This paper has been produced in response to the following motion that was passed at the 2008 General Assembly in Vignola, Italy.

Motion 15.1: The GA instructs the World Board to develop a position paper on the use of organic seed and propagation materials in Organic Agriculture.

The IFOAM Basic Standards require that organic crops shall be grown from organically propagated seed, if available in appropriate varieties and quality. However, the propagation of varieties under certified organic production cannot meet the present quantitative and qualitative demand of the market to ensure a closed organic production system. Until now a considerable amount of organic production is based on untreated conventionally produced seed and propagation material. Therefore the General Assembly instructed the IFOAM World Board to develop a position paper on the use of organic seed and plant propagation material in Organic Agriculture in order to promote the formal and informal organic seed sector and to safeguard and improve the availability and biodiversity of organic plant material. The following questions should be addressed:

- How can organic seed production best be stimulated?
- How can farmers be asserted to use, sell and exchange seeds?
- How can organic standards ensure that organic farmers will have sufficient choice of varieties?
- How can organic standards ensure that the use of seeds from non-cultivated land, house-gardens, informal seed exchange is possible in organic farms?
- How can organic farming ensure the dynamic conservation of agro-biodiversity and its associated cultural value, including landraces, farmer's varieties and old commercial varieties?

IFOAM acknowledges the great importance of on-farm conservation of genetic resources and organic plant breeding for the development of suitable varieties (see box on page 5), but this paper is focusing exclusively on the promotion of the **organic propagation** of available cultivars including landraces, farmers' selections, populations, and varieties. A policy paper of the IFOAM World Board on organic breeding will be ready at a later time.

III. Present Situation

There are several reasons why organic seed and plant propagation developed so slowly.

- Economically it is not very attractive for commercial seed companies to produce for **a small and diversified market**. Therefore, only a few varieties of major crops are propagated for the organic sector.
- High quality and healthy starting material is of major importance for the organic sector. With good organic agricultural practices, propagation of such material is possible. However, the propagation of plant material can be more challenging under organic conditions, as seed and vegetative propagation material cannot be pushed with fast releasing synthetic fertilizers and no synthetic pesticides are allowed. Thus, the **organic propagation is often more risky** and therefore more expensive.
- Locally adapted varieties with a stable performance and a high quality are very important for a profitable crop production. The number of these varieties available from conventional production greatly exceeds the number of organically propagated varieties, and therefore offers a greater – and often cheaper - choice for the grower. If farmers are forced to use only organically propagated plant material, they will miss a large number of adapted varieties. The **lack of choice** and the **additional expenditures** compared to conventional seed might become more severe if the propagation of plant material needs to be certified organic.
- The commercial propagation of plant material is regulated by **national seed trade laws** in numerous countries. The commercial sale of seed is only allowed for registered varieties in many countries. Based on the widely accepted UPOV rules a variety can only be registered if the variety is new, distinct, uniform and stable, which is in conflict with the use of landraces or heterogeneous varieties. Propagation enterprises need a licence from the variety owner for the legal propagation and marketing of their registered plant material. These laws and rules constrain organic seed propagation.

The marked differences in seed propagation systems between developed and developing countries need to be considered. Many developed countries have established a formal system of seed production which has been influenced by a combination of legal systems and private seed producers. The formal system is characterized by official variety testing as prerequisite for registration and release of new varieties followed by official seed certification, i.e. testing the seed quality for purity, germination rate and health as regulated in the national seed trade laws. The rationale behind this legal framework was to safeguard an optimal food production system.

On the other hand, in developing countries there is still a large percentage of seed production based on farmers, knowledge (farm saved seeds) which are locally exchanged and distributed without any legal restrictions and represent the informal seed sector. Over the years due to globalization and compulsions of increasing food production the cultivation in developing countries is shifting from organic subsistence production towards conventional high input production of a few crops largely supported by public investments and private companies. This is accompanied by the adoption of the legal framework of the formal seed sector (UPOV, seed trade laws), strongly restricting the seed exchange among farmers. However, the informal seed sector is of major importance for food production and food sovereignty, especially in the developing world and needs to be strengthened.

The value of traditional seed systems cannot be overlooked. Traditional varieties contain a greater genetic variability than modern commercial varieties especially since they are developed under local input conditions. Throughout the organic movement the existence and value of traditional seeds needs to be taken into account. IFOAM recommends the use of traditional seeds as a means of maintaining crop genetic diversity on farm.

Traditional on farm seed systems are the norm in most developing countries, which means that practically all organic farms use their own organically propagated seeds, or locally available seed from other farmers.

In developed countries there is also an increasing awareness of reviving the informal seed systems, e.g. for the conservation of heirloom varieties by individuals and NGOs. Both formal and informal seed propagation systems are recognized by the seed policy of IFOAM.

IV. IFOAM's Position and Recommendations

The overall goal is to provide organic farmers with **sufficient quantity** of **excellent starting plant material of a wide range of suitable varieties propagated according to the organic guidelines**. Considering the diversity of Organic Agriculture with respect to farm size, crop rotation, intensification level, as well as the diverse range of markets around the world , different site specific strategies need to be developed to promote the organic propagation of seeds. For example, supermarkets in many countries demand uniform organic products with a long shelf life that are certified for compliance to organic regulations by an independent third party. On the other hand, consumers of local farmer markets or niche market are more interested in locally adapted varieties that have a cultural heritage. In addition, not all countries have established organic certification systems that would allow for certified organic propagation. However, **local seed production is essential for an autonomic organic farming and needs to be promoted**.

Ideally all plant production should be based on organically bred and organically propagated varieties. Where the number of organically bred varieties are very limited or non-existent for certain crops, conventionally bred varieties can be allowed, except for varieties derived from genetic engineering (GMO crops). However, the seeds of conventionally bred varieties should be propagated under certified organic systems.

A strict prohibition of non-organic planting material would be, at the present time, too restrictive for the organic farmers, endanger the economic crop production in some countries and would strongly limit genetic diversity of crops and varieties. To address this situation, IFOAM strongly recommends that the organic sector should **get actively involved in organic propagation of freely available varieties** to expand the choice of crops and varieties. This is especially true for crops like maize, soybean, cotton, where many varieties have already been genetically modified and are, therefore, prohibited in Organic Agriculture.

In addition to the formal seed market chain based on a few varieties produced in high quantities, **decentralized propagation programs combined with variety testing trials** that take care of locally adapted crops and varieties should be promoted. Farmers should be assisted in the testing, propagation and exchange of plant material. Political awareness as well as economic incentives are needed so that the business of organic propagation can become more attractive. The additional costs of organic propagation need to be shared along the market chain.

In countries were organic certification systems are standard, the organic propagation of seeds has to be certified according to these standards. In countries where no organic certification system is established yet or it is too expensive for small holders, the organic certification for plant propagation can be temporarily substituted by a **self monitoring system** to keep costs affordable and still guarantee the absence of pesticides. The monitoring system should also help to optimize the organic propagation (i.e., organization, production, processing, storage, and distribution) and **will therefore contribute to the improved availability** and quality of organic seeds on the local level.

In order to improve the quality of organically propagated seed and plant material and to make the propagation less risky, **the training of farmers' groups** that will specialize in this issue is required. Seed production should be organized on a regional level other than on a farm level to utilize the best conditions for cultivation, optimal equipment and the greatest experience and care. Training is needed in all aspects of propagation: maintenance breeding, avoidance of unwanted cross-pollination, seed and plant health, phytosanitary issues of vegetative propagation, cleaning and processing of seeds, short and long term storage as well as marketing strategies.

The restriction of propagation only to registered varieties for organic farming would cause a dramatic reduction of the available genetic resources, especially in developing countries, where farmers depend on locally adapted varieties for local markets. Therefore, IFOAM supports all initiatives that **improve the legal situation for farm-saved seeds** and plant material as well as for the propagation of old and modern landraces, populations, and other accessions that are useful for organic cultivation but do not pass the present variety registration process or have already lost variety protection.

IFOAM's position on development of organic seed production is to stimulate the importance of seed supply from the open pollinated varieties, **traditional sources, home gardens and on farm seed, as diverse populations that have evolved in response to local pressures**.

IFOAM acknowledges variety protection as long as (i) **breeder exemptions**, which allowed the breeders to use the protected varieties for research purposes and for breeding new varieties, and (ii) **farmers' privilege**, which allowed the farmers to use their own harvested material of the protected variety for sowing the next crop on their own farm, are guaranteed. To promote free exchange of genetic resources, IFOAM will strongly advocate against the patenting of living organisms that violate these rights.

IFOAM believes that patenting of the genetic information in seeds conflicts with core organic principles. This is not a socially or ecologically just management of resources, and it does not respect the integrity of living systems. It also limits the development of organic seed production, which depends to a great extent on continuous farm-level selection and exchanges of genetic material between farmers. IFOAM supports all initiatives to remove current legal restrictions on farm-saved seed and access to modern mainstream varieties for breeding.

IFOAM supports the coexistence of the formal seed sector in organic seed production and the informal (sm**all holder) propagation to favour the biodiversity of agricultural plants.** IFOAM calls for the establishment of a public domain (open source) for non-protected varieties that can be freely bred, propagated and traded by farmers.

V. Annexes

Definitions

Propagation can be based on generative propagation (seeds) as well as vegetative propagation derived from various plant organs like e.g. tubers, bulbs, cuttings, rhizomes.

The term **'seed'** is used throughout this document as shorthand for seeds, seedlings, and vegetative propagation material.

The term **'variety'** is used throughout this document to cover registered varieties, unregistered cultivars, landraces, and farmer's selections. This includes seeds and vegetative propagation material.

The term **'accessions'** is used in this document to cover all species, sub species, registered varieties, unregistered cultivars, landraces, and farmer's selections. This includes seeds and vegetative propagation material.

The term **'certified organic seed'** refers to seed or planting material that has been propagated under organic growing conditions. The propagation was certified for the compliance with organic guidelines by a third party. This definition is clearly distinct from the term **'certified seed'** which refers to the certification of plant material for its compliance with national seed trade law. Here, certification is granted if minimum requirements with respect to purity, germination rate and seed health is achieved.

The term **'double certified organic seed'** refers to plant material that has passed the certification for purity, germination rate and seed health, as well as the certification for the organic propagation. Within this position paper IFOAM refers to the 'certified organic seed' only.

The terms **'farm'** and **'farmer'** covers all forms of cultivation and the people engaged in these activities, whether it is horticulture, crop production, pasture production and on any scale from urban home gardens, rural small holders through to broad acre.

Organic Plant Breeding

To be able to guarantee that sustainable plant production meets all kinds of present and future challenges, organic plant breeding is inevitable. Presently, the number of suitable varieties for Organic Agriculture is limited because organic farming is still a niche market, and specific traits important for organic farming are rarely considered in commercial breeding programs. On the other hand many locally adapted landraces selected for generations by farmer's are being lost with the introduction of new varieties developed for high input farming. To improve this situation, a special emphasis of organic plant breeding should be put on the development of varieties that are adapted to diverse organic conditions (high nutrient and water use efficiency, polygenic resistance/tolerance towards pests, diseases and weeds, enhanced symbiotic interaction with microorganisms). Coevolution of plants within their biotic and abiotic environment should be considered and utilized. Participatory plant breeding including farmers and market representatives in the decision-making and practical breeding process (creation of genetic variation, selection and variety testing) shall be adopted to enhance the breeding efficiency, acceptance and distribution of new varieties. Traditional varieties and newly bred varieties should not exclude but complement each other. Traditional varieties conserve genetic diversity. However, new genetic diversity is created by breeding. Both together will allow for the maximum of genetic diversity.

IFOAM - Defining Organic Landmarks since 1972

The Definition of Organic Agriculture

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.

The Principles of Organic Agriculture

Organic Agriculture is based on the principles of health, ecology, fairness and care.

The Scope of Organic Agriculture

IFOAM regards any system that is based on the Principles of Organic Agriculture and uses organic methods, as 'Organic Agriculture' and any farmer practicing such a system as an 'organic farmer'. This includes various forms of certified and non-certified Organic Agriculture. Guarantee Systems may be for instance third party certification, including group certification, as well as participatory guarantee systems.

Standards & Regulations: That's Organic Worldwide

The IFOAM Family of Standards draws the line between organic and not organic. It contains all standards and regulations that have passed an equivalence assessment against a normative reference approved by IFOAM's membership. IFOAM encourages governments and standard users to recognize other standards in the Family as equivalent.

IFOAM Positions

IFOAM has developed positions on a range of topics. These include: Use of Nanotechnologies and Nanomaterials in Organic Agriculture; The use of Organic Seed and Plant Propagation in Organic; The Role of Smallholders in Organic Agriculture; The Full Diversity of Organic Agriculture; The Role of Organic Agriculture in Mitigating Climate Change; Smallholder Group Certification for Organic Production and Processing; Position on Genetic Engineering and Genetically Modified Organisms; Organic Agriculture and Food Security; Organic Agriculture and Biodiversity.

IFOAM Policy Briefs

IFOAM has policy briefs on 'How Governments Can Regulate Imports of Organic Products Based on the Concepts of Harmonization and Equivalence' and 'How Governments Can Support Participatory Guarantee Systems (PGS)'.

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