Both urban residents and farmers have shown their keen interest in the ISOFAR 2015 Organic Expo and Industry Fair, with over 1.1 million visitors to the expo - making it the most successful organic event in organic movement history. Read the closing address made by the Honorary President of ISOFAR, Prof. Dr. Sang Mok Sohn:

"Greetings. I am Dr. Sang Mok Sohn, the honorary president of ISOFAR. I am delivering this closing address on behalf of Prof. Gerold Rahmann, the co-chairman of the expo organizing committee and the current president of ISOFAR. Prof. Rahmann could not participate in this closing ceremony because of his important commitments in Africa.

ISOFAR jointly held the 1st ISOFAR 2015 Goesan International Organic Expo and Industry Fair to illuminate the organic life for modern people and to share the latest scientific research on organic agriculture with the public.

Both urban residents and farmers have shown their keen interest in the organic expo, with over 1.1 million visitors to the expo - making it the most successful organic event in organic movement history.

ISOFAR is committed to educating citizens and promoting the benefits of organic agriculture based on scientific evidence from our research.

The organic researchers and professors who are members of ISOFAR from all over the world are devoted to conducting organic research for securing food to feed the world, providing clean water, preserving ecosystems, mitigating climate change, and realizing animal welfare and organic life for human beings.

With these goals, ISOFAR will continue to hold the international organic expo and provide its active support to citizens globally.
I thank all the people who committed their efforts for the success of this organic expo.

I would also like to now share with you the congratulatory message of the founding president of ISOFAR, Prof. Dr. Ulrich Köpke, at University of Bonn, Germany, who provided his expertise in the 10 thematic exhibition halls on the scientific basis, history, facts, and future vision of global Organic Agriculture with Prof. Sang Mok Sohn, Prof. Gerold Rahmann, and Prof. Peter von Fragstein for this organic expo:

Excellencies, Dear Governor Lee, Ladies and gentlemen, Friends of Organic Agriculture

Four years of preparatory work lie behind us. A successful and fruitful cooperation between responsible campaigners of Chungbuk province and ISOFAR have resulted in this event that has seen more than one million interested visitors.

I congratulate you Governor Lee and your staff for having realized this famous Expo that also has been acknowledged by the General Secretary of the United Nations, Mr. Ban Ki-Moon, and the prominent political leaders of the Republic of South Korea.

It has been an honor for me to be part of the expo, as the founding president of ISOFAR and as its authorized representative for preparing 10 exhibition halls, and as a nominated Honorary Ambassador of Chungbuk province.

In the last two decades, during my several stays in your wonderful country and by welcoming numerous Korean visitors and TV teams in our Institute and on our organic experimental farm in Germany, I have come to appreciate the friendliness of my Korean friends and their enthusiastic interest in Organic Agriculture. These experiences and my friendship with my Korean colleague Prof. Sang Mok Sohn, who first raised the idea for this expo, were for me the starting point and the cornerstone for this successful ISOFAR 2015 Goesan International Organic Expo. In addition, it is the diversity and quality of organic Korean cuisine, which I consider to be the best in the world, that I believe will help to carry our mission further.

May the ISOFAR 2015 Goesan International Organic Expo become the acknowledged pivotal step for the establishment of an organic agricultural nucleus in Chungbuk province. May its growth result in a healthy evolution for all of us.

Wholeheartedly thankful, I send you my best wishes!
Photos from the ISOFAR 2015 Organic Expo and Industry Fair

October 11, 2015

Prof. Dr. Sang Mok Sohn, Honorary President of ISOFAR

Prof. Dr. Ulrich Köpke, Founding President of ISOFAR

Prof. Dr. Gerold Rahmann, President of ISOFAR

The 3rd African organic conference (3AOC) was held in Lagos, Nigeria during 5 – 9 October, 2015, with 220 participants from 28 countries.

Acknowledging contributions to organic agriculture

Sheraton Hotel and Towers, Lagos, Nigeria was the venue for the 3AOC, which had the overarching theme “Achieving Social and Economic Development through Ecological and Organic Agricultural Alternatives”. The participants, totally 220 from 28 countries, comprised governmental officials, international research organisations, farmers’ groups, NGOs, national organic agriculture movements, women groups, youth movements and students.

The high point of the Conference was the recognition of thirteen Organic Champions from seven different countries of the world for their outstanding contributions towards the development of organic agriculture in the world as whole and Africa in particular. The list of Champions included two past Presidents of Nigeria (Chief Olusegun Obasanjo and General Abdulsalam Abubakar).
International Society of Organic Agriculture Research
The organization of the Conference was chaired by the African Union Commission (AUC). Active support was also acknowledged from IFOAM, FAO, Forum for Agricultural Research in Africa (FARA), African Organic Network (AfoNet), FiBL, Swiss agency for Development (SDC) and others.

ISOFA R Activities
The International Society for Organic Agriculture Research participated actively at the 3AOC. ISOFAR Board was well represented by President Gerold Rahmann and board member Victor Olowe. Gerold Rahmann was invited as keynote speaker on the topic “Ecological Organic Agriculture Knowledge, Information and Experiences”
Gerold Rahmann gave a keynote presentation on “Ecological Organic Agriculture Knowledge, Information and Experiences”.

While rounding up his presentation, the President of ISOFAR seized the opportunity to announce the next World Organic Congress scheduled to hold in India in 2017.
The next World Organic Congress, with ISOFAR scientific contributions, will be in India in 2017, as presented by Gerold Rahmann.

ISOFAR was able to attract a total of 31 new members during the event. 23 came from Nigeria, 4 from Ethiopia and one from each of the countries Ghana, Mali, Benin, Kenya and Uganda. Eight of the new members were students. In total, 38 regular ISOFAR members and eight students participated in the conference. The ISOFAR booth was manned by Profs. Victor Olowe and Nkiru Meludu, and the place became a bee hive of
activities throughout the Conference because many of the participants wanted to know more about ISOFAR. Promotional items such as Proceedings of the 4th Organic World Congress in Istanbul 2014, the ISOFAR Organic 3.0 Scientific Symposium, Goesan, Korea 2015, and ISOFAR flyers were displayed and distributed.

**Organic livestock in focus**

The Scientific Track Proceedings of the 3AOC featured 49 scientific papers, distributed on the topics agronomy – 21, socio-economics – 13, livestock production – 5, crop protection – 4, seed technology – 2, applied science – 1 and aquaculture – 1. There were also four posters. The spread of papers underlined the need to expand the scope of organic agriculture beyond the use of manure, compost or organic fertilizers into other aspects such as organic livestock and aquaculture within the continent of Africa. ISOFAR is proposing to publish a special issue of Organic Agriculture Journal with emphasis on use of organic soil amendments in organic crop production. About 10 – 12 papers will be selected and authors will be contacted to upgrade their manuscripts before they are subjected to the peer review process of the Journal. The aim is to publish these papers as issue 3 in September 2016.
Acknowledgments

The significant contributions of ISOFAR to the successful organization of the 3AOC was publicly acknowledged by the Chair of the Organising Committee, Prof. Dr. John Omueti when he introduced Prof. Dr. Gerold Rahmann as the President of ISOFAR. The contribution of the International Centre for Research in Organic Food Systems (ICROFS), Denmark in facilitating the submission of papers through the platform of Organic E-prints (www.orgprints.org) is also highly appreciated. The organizers are grateful for ISOFAR funding of printed conference proceedings, roll up banner and hiring of the booth.
Country report: Organic Agriculture development in Morocco

Morocco has a significant horticultural production, and the organic sector has grown rapidly since its establishment in 1986. AMABIO, the Moroccan Association of Organic Production Chain Value, is a driving force, offering technical assistance to farmers and working towards the government on development strategies for organic agriculture in Morocco.

From citrus to argan oil

Initiated in 1986, the first export of organic commodities was citrus. Later, exports extended to vegetables, medicinal and aromatic plants and other exotic products. Between 1990 and 1994, organic growers were particularly active in the development of the organic sector in Morocco, by the rapid increase in the cultivated lands they had allocated to the production of fruits and vegetables, which increased from a few hectares in 1990 to over 300 ha in 1999. In 1998, another category of organic growers appeared: Smallholders within cooperatives in the rural and mountain area. They were assisted by NGOs to launch marketing operations of organic medicinal and aromatic plants collected in forests. Argan forest was also subject to regulatory certification,
and the oil is currently marketed as endemic argan oil of Morocco. During the last decade, the areas dedicated to organic farming increased significantly, from 8 300 ha in 2003 to 870 000 ha in 2013 (including argan forest), a growth rate of 54% per year.

**Low-input, high-labor and local varieties**
Morocco has some strengths in agricultural production that promote the emergence of organic farming. The land and the climate are suitable for the production of off-season products for EU markets. Easy access to labor is another strength in the Moroccan agricultural production. The persistence of traditional agriculture has allowed the conservation of farmers' expertise on "natural" (low input) production. In all Moroccan regions, especially in the High Atlas, local varieties have been conserved in a dynamic way by farmers since centuries. Farmers have been able to select varieties resistant to diseases and pests and adapted to local environmental conditions. Self-seeds reproduction on farms has remained predominant in these areas.

**Constraints**
While organic production in recent years has developed significantly in terms of area, production and export, particularly for crops, many constraints remain and can be summarized as follows:

- The conversion period of 2 to 3 years, during which productivity declines and the product is not valued
- The increase in production costs caused by high costs of certification, currently performed by foreign regulators;
- The scarcity of authorized inputs, including bio-pesticides and composts in the domestic market as well as seeds and plants used in organic farming;
- Lack of subsidies for professional entities (farmers, cooperatives...) ensuring the take-off of the sector;
- Lack of communication and promotion of organic products by government entities in both national and foreign markets;
- The lack of a domestic market for organic products, although there is a significant potential national demand.

**Driving organization: AMABIO**
From the database provided by the inspection and certification bodies operating in Morocco, the current area of organic crops is about 870 000 hectares. This certified organic area is managed by 260 entities (farmers, companies, cooperatives...) throughout the country. The Moroccan Association of Organic Production Chain Value (AMABIO) was created in 2010. Its mission is to define and implement together with the government a strategy for the future development of organic agriculture. It also offers technical assistance to farmers and engages in the extension of good practices. Moreover, AMABIO promotes the consumption of Moroccan organic products both nationally and internationally. AMABIO brings together all the operators in the sector including producers and processors, exporters of fresh and processed organic products; inspection and certification bodies; suppliers of organic inputs; researchers and extension society; non-governmental associations and organizations (NGOs) promoting the organic sector, environmental protection and sustainable development.
The government and AMABIO signed in April 2011, a program contract up to 2020 for the development of the organic sector. A program of investment up to 100 M€ was signed, to boost the implementation of operations in order to reach the following objectives:

**OBJECTIVES 2020**

<table>
<thead>
<tr>
<th></th>
<th>Situation 2011</th>
<th>Objectives 2020</th>
<th>Increment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface (Ha)</td>
<td>4 000</td>
<td>40 000</td>
<td>36 000</td>
</tr>
<tr>
<td>Production (T)</td>
<td>40 000</td>
<td>400 000</td>
<td>360 000</td>
</tr>
<tr>
<td>Exports (T)</td>
<td>10 000</td>
<td>60 000</td>
<td>50 000</td>
</tr>
<tr>
<td>Income in foreign currency (millions €)</td>
<td>8.93</td>
<td>71.43</td>
<td>62.50</td>
</tr>
<tr>
<td>Job creation (millions of working days)</td>
<td>1</td>
<td>9</td>
<td>8</td>
</tr>
</tbody>
</table>

The program contract is based on the following axes to reach the objectives:

1. Development of the research and extension actions;
2. Improvement of the conditions of valorization, marketing and promotion for organic products in the domestic market;
3. Development and promotion of the export sector;
4. Improvement of the professional condition framework.

The Moroccan Ministry of Agriculture has developed an organic national regulation (N°39-12 published in February 2013), in coordination with AMABIO. Operators (farmers) have until now certified their products through private certification and control bodies (five are currently operating) since no national body was available, but this will now change since implementing decrees relative to the organic national regulation have been published. The national authority for approving certification bodies is the Moroccan Accreditation Service (SEMAC).

Operators (farmers) purchase seeds, fertilizers and other inputs from companies that import most materials from the EU. There is a real need for a professional association of companies that import and distribute organic inputs to the organic operators. Such an association should defend the farmers' rights to reduced taxes on imported organic inputs, which are currently at the same level as conventional inputs. In addition, production of Moroccan organic inputs should be encouraged by government entities to decrease the high costs of inputs especially for smallholders.
High diversity of organic crops
Moroccan organic farming is divided in seven sub-sectors of products, as shown in Table 1.
<table>
<thead>
<tr>
<th>Groups</th>
<th>Subgroups</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits</td>
<td>Nuts</td>
<td>Nuts…</td>
</tr>
<tr>
<td></td>
<td>Stone fruits</td>
<td>Apricots, Avocado, Nectarines, Peaches, Plums, Olives</td>
</tr>
<tr>
<td></td>
<td>Pome fruits</td>
<td>Quinces, Figs, Grenades, Pears, Apples, Table Grapes</td>
</tr>
<tr>
<td></td>
<td>Citrus</td>
<td>Lemons, Clementine, Oranges…</td>
</tr>
<tr>
<td></td>
<td>Starchy</td>
<td>Bananas</td>
</tr>
<tr>
<td></td>
<td>Red fruits</td>
<td>Strawberries - Other</td>
</tr>
<tr>
<td></td>
<td>Dry fruits</td>
<td>Dates, Almonds</td>
</tr>
<tr>
<td></td>
<td>Bean fruits</td>
<td>Carobs</td>
</tr>
<tr>
<td>Vegetables</td>
<td>Bulbs</td>
<td>Garlic, Onions, Leeks</td>
</tr>
<tr>
<td></td>
<td>Leafy</td>
<td>Cabbage, Spinach, Lettuce</td>
</tr>
<tr>
<td></td>
<td>Fruits</td>
<td>Eggplant, Cucumbers, Zucchini, Green Beans, Chili pepper, Pepper, Pumpkins, Tomatoes</td>
</tr>
<tr>
<td></td>
<td>Grains</td>
<td>Beans - Peas - Chick peas</td>
</tr>
<tr>
<td></td>
<td>Roots</td>
<td>Carrots, Radish</td>
</tr>
<tr>
<td></td>
<td>Tubers</td>
<td>Potatoes</td>
</tr>
<tr>
<td>Aromatic Plants</td>
<td>Shrubs</td>
<td>Capers</td>
</tr>
<tr>
<td></td>
<td>Spices, condiments &amp; aromatic and medicinal plants (AMP)</td>
<td>Dill, Anise, Basil, Chamomile, Chive, lemongrass, Coriander, Tarragon, Fennel, Laurel, Lavender, Mint, Oregano, Nettle, Sorrel, Parsley, Rosemary, Saffron, Sage, Thyme, Verbenas, Rose</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>Aloe vera</td>
</tr>
<tr>
<td>Cereals</td>
<td>Cereals</td>
<td>Oats - Durum wheat - Sweet corn - Cereals</td>
</tr>
<tr>
<td>Processed</td>
<td>Oil</td>
<td>Olive Oil, Essential oils of aromatic plants</td>
</tr>
<tr>
<td></td>
<td>Fruits</td>
<td>Apricot and Olive</td>
</tr>
<tr>
<td>Livestock products</td>
<td>Meat</td>
<td>Sheep - Cattle - Chicken</td>
</tr>
<tr>
<td></td>
<td>Bee</td>
<td>Honey</td>
</tr>
<tr>
<td>Argan</td>
<td>Oilseeds</td>
<td>Argan Nuts</td>
</tr>
<tr>
<td></td>
<td>Oil</td>
<td>Argan Oil (cosmetic and edible)</td>
</tr>
</tbody>
</table>
Table 1. Groups of organic crops produced in Morocco, with sub-groups and main products. The soil and climate diversity offer a wide range of products. Most of them are grown naturally without any treatment what give them high potentiality to be easily certified to organic products.

Large proportion of wild collection

In Morocco, organic cultivated land area comprises about 8 046 hectares, while the wild collection certified area is 861 690 hectares with 1 840 hectares in conversion by 2015. The cultivated land comprises only 0.08% of the Moroccan utilized agricultural area (UAA), whereas for the areas of wild collection, organic lands exceeds 9 % of the national area. This is well above the world average of 0.9%.

The distribution of organic crops within the cultivated and wild collected areas are shown in Table 2.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Certified organic area (ha)</th>
<th>Certified wild collection (ha)</th>
<th>Conversion (ha)</th>
<th>Total Area (ha)</th>
<th>Total area in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apricots</td>
<td>88</td>
<td></td>
<td>88</td>
<td>88</td>
<td>0,01</td>
</tr>
<tr>
<td>Citrus</td>
<td>760</td>
<td></td>
<td>70</td>
<td>830</td>
<td>0,10</td>
</tr>
<tr>
<td>Arbutus</td>
<td>150</td>
<td></td>
<td>150</td>
<td>150</td>
<td>0,02</td>
</tr>
<tr>
<td>Argan</td>
<td>507</td>
<td>630000</td>
<td>630507</td>
<td>72,34</td>
<td></td>
</tr>
<tr>
<td>Avocado</td>
<td>100</td>
<td></td>
<td>100</td>
<td>100</td>
<td>0,01</td>
</tr>
<tr>
<td>Prickly pear</td>
<td>44000</td>
<td></td>
<td>44000</td>
<td>5,05</td>
<td></td>
</tr>
<tr>
<td>Capers</td>
<td>770</td>
<td></td>
<td>82</td>
<td>852</td>
<td>0,10</td>
</tr>
<tr>
<td>Carob</td>
<td>1322</td>
<td></td>
<td>1322</td>
<td>1322</td>
<td>0,15</td>
</tr>
<tr>
<td>Cereals</td>
<td>132</td>
<td></td>
<td>100</td>
<td>232</td>
<td>0,03</td>
</tr>
<tr>
<td>Vegetable crops</td>
<td>942</td>
<td>28</td>
<td>970</td>
<td>0,11</td>
<td></td>
</tr>
<tr>
<td>Grenades</td>
<td>60</td>
<td></td>
<td>60</td>
<td>0,01</td>
<td></td>
</tr>
</tbody>
</table>
Table 2. Distribution of cultivated and wild collected crops in certified organic areas of Morocco.
Wild collection is predominant in land area what prove that inhabitants of rural area respect their environment.

The main national organic products are the argan tree (72%) and AMP (22%), with 94% of the organic UAA. The cultivated area is shared between AMP (21%), carob (16%), olive (13%) and vegetable crops with (12%).

Table 3 presents the various crops produced during 2012/2013.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Certified organic area (ha)</th>
<th>Production (T)</th>
<th>Production %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apricots</td>
<td>88</td>
<td>1330</td>
<td>1,77</td>
</tr>
<tr>
<td>Citrus</td>
<td>760</td>
<td>15200</td>
<td>20,27</td>
</tr>
<tr>
<td>Avocado</td>
<td>100</td>
<td>1300</td>
<td>1,73</td>
</tr>
<tr>
<td>Carob</td>
<td>1322</td>
<td>9260</td>
<td>12,35</td>
</tr>
<tr>
<td>Cereals, legumes and forages</td>
<td>488</td>
<td>7808</td>
<td>10,41</td>
</tr>
<tr>
<td>Vegetable crops</td>
<td>942</td>
<td>21680</td>
<td>28,91</td>
</tr>
<tr>
<td>Grenades</td>
<td>60</td>
<td>240</td>
<td>0,32</td>
</tr>
<tr>
<td>Mint / verbena</td>
<td>157</td>
<td>940</td>
<td>1,25</td>
</tr>
<tr>
<td>Crop Type</td>
<td>2012/13 Area (ha)</td>
<td>2013 Area (ha)</td>
<td>Percentage</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------</td>
<td>----------------</td>
<td>------------</td>
</tr>
<tr>
<td>Olivier</td>
<td>1070</td>
<td>3210</td>
<td>4.28</td>
</tr>
<tr>
<td>Aromatic and medicinal plants</td>
<td>1686</td>
<td>10116</td>
<td>13.49</td>
</tr>
<tr>
<td>Plums</td>
<td>12</td>
<td>160</td>
<td>0.21</td>
</tr>
<tr>
<td>Pink</td>
<td>480</td>
<td>576</td>
<td>0.77</td>
</tr>
<tr>
<td>Saffron</td>
<td>48</td>
<td>0.3</td>
<td>0.00</td>
</tr>
<tr>
<td>Vine</td>
<td>55</td>
<td>880</td>
<td>1.17</td>
</tr>
<tr>
<td>Other</td>
<td>274</td>
<td>2300</td>
<td>3.07</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7539</td>
<td>75000.3</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3. Distribution of cultivated organic certified crops in Morocco 2012/13 within crop species.

Even vegetables and citrus represent only 0.21% of the organic UAA, they represent quite 50% of the total production.

High market demand, highly skilled farmer of off-season opportunities are sufficient ingredient for this success.

Exports: Citrus dominated

The export-oriented activities generate substantially all revenues of the national organic sector. In 2013, the export volume reached 10671 tons. Citrus dominates the exports, mainly "Maroc Late" variety (49%), and zucchini dominates within the vegetables (37%). For processed products, orange juice dominates (38%). Main changes in export trends are shown in Figure 1.
Figure 1. Distribution of products within organic exports from Morocco 2009-2014. There is a need to develop processing plants in order to absorb the excess of fresh vegetables. Catering and school canteen could be an excellent opportunity to outflow processed organic foods in domestic market.

Domestic exports experienced a remarkable growth from 2009 to 2011, with 13,512 tons. Since 2012, the volume has decreased, especially for fresh vegetables. The EU is the main destination market. France, Germany and Switzerland were the first European importers of organic produce from Morocco. France imports almost 90% of citrus and 79% of processed products. Germany is the leading importer of early vegetables with 61% of the volume of this category (Figure 2).
Figure 2. Distribution of exports of organic produce form Morocco between countries.

National regulations in place

At national level, a legal framework was established to regulate the organic sector through the adoption in February 2013 of the law N°39-12 of organic production of agricultural and aquatic products (see Figure 3). The law defines the following key points: The scope and definitions; rules of production, preparation and marketing of organic products; the National Commission for Organic Production (CNPBio); the accreditation of certification bodies of organic products; and the labeling requirements.
A joint commission, CNPBio has been created to write, study and give its opinion on the implementing decrees specific to organic plant and animal products. The CNPBio is an advisory entity, composed of members representing government authorities, research sector such as INRA, INRH, ONSSA, EACCE, ADA, ANDZOA, etc., and relevant professional organizations such as AMABIO. CNPBio will give its opinion on the specifications for organic production, the granting or withdrawal of approvals of regulatory bodies and certification, complaints related to the suspension or revocation of certification and all questions of scientific, technical or legal aspects under the application of the rules on organic production.

**Compliance with EU regulations**
The European regulation is strict. To export an organic product to Europe, it must be produced and controlled equivalently to EU regulations. If the exporting country is among the countries whose production rules and control are deemed equivalent to EC Regulation 1235/2008 on
imports from third parties (Argentina, Australia, Costa Rica, India, Japan, New Zealand, Switzerland and Tunisia); the product is automatically approved. For the other exporting countries (USA, Canada, China, Morocco...etc), organic products are subject to import authorizations within each Member State. Nevertheless, in all cases, the products must be certified and inspected at each stage of production to be exported abroad. Moroccan farmers exporting to EU have until now used the services of a European certification body.

**National subsidies for the organic sector**

To promote organic farming, the Moroccan government has developed a strategy that aims both to encourage producers to move towards organic production, and then to convert to organic, and to raise awareness among producers and the population in general on the importance of organic farming. The main measure is the grant of the certification costs. However, no subsidy will be paid for certification costs until the implementing decree has been approved by relevant national authorities. Subsidies for certification will be 70% with a threshold of 1000 MAD/ ha for crops, possibly 700 MAD/ ton for animal products, and 1000 MAD/ ton for exported processed products. The grant will be given only during the conversion period. The Ministry of Agriculture and Fisheries subsidise agriculture in general by other financial supports for agricultural equipment (drip irrigation) and agricultural inputs, which are freed of tax when imported to Morocco.

**Organic research in Morocco**

The program contract signed has scheduled funds for R&D estimated up to 6.25 M € until 2020. AMABIO has launched a call for three research and training institutions (INRA-ENAM and IAV) in Morocco to suggest R&D projects. The first three institutional projects are now in their second year, and the impact is already seen in the field. Members of AMABIO are called to express their needs and shape them in subjects to be treated by researchers in order to adjust their research operation to the professional requirements in a dynamic approach.

INRA which is the only government institution dedicated to agronomy research in Morocco is aware about the research in organic sector. Beside its cooperation with AMABIO, a national research program is under consideration in order to develop links between different agroecosystems needs and the experimental sites (24 experimental farms of INRA over Morocco). Soil fertility, composting, organic horticulture, plant protection, plant and animal breeding, socioeconomics... are main topics undergone by INRA’s researchers to answer professional calls. International cooperation with EU research institutions in the framework of CORE Organic and TIPI Organics will be an excellent opportunity to link northern with southern Mediterranean countries to sustain organic research in a globalized world.
International Society of Organic Agriculture Research

Author:

Khalid Azim
Researcher, INRA Morocco
azim.khalid@yahoo.fr

Ramli Hafsa
Engineer, Horticulture Morocco

Relevant links:

http://www.inra.org.ma

http://asapmaroc.com/partenaires/amabio/
Breeding of plant material adapted for organic agriculture is important in order for plants to cope with stresses such as climate change, weeds and seed borne diseases. Conventional varieties may not meet the specific needs of organic agriculture. The use of plant material adapted to conditions of organic agriculture will have a positive effect on the productivity and sustainability of organic crop production.

The COBRA (Coordinating Organic plant Breeding Activities for Diversity) project has been linking up efforts in organic breeding activities in both cereals and grain legumes. COBRA has been focusing on four major arable crops: wheat, barley, pea and faba bean.

The project has dealt with
- seed health
- response of crops to multiple stresses
- improvements in breeding efficiency for organic systems
- structural issues such as funding for breeding and the regulatory framework
- networking and coordination

The COBRA final conference took place on 24th and 25th November as part of the Danish Organic Congress. The Danish Organic Congress was attended by more than 800 participants, and a great deal of knowledge exchange took place.

Many interesting results were presented, a few of them is mentioned here. Resistance to seed borne diseases has been investigated in several studies and Johannes Ravn Jørgensen showed that spectral imaging is a promising tool for evaluation of fusarium resistance. Simulation of extreme climate conditions has shown a general decrease in grain and protein yield under future conditions, but accessions of spring barley with valuable traits for a future climate has been identified in studies presented by Rikke Bagger Jørgensen. Odette Weedon gave insight into the cycling populations experiments. Composite cross populations showed high resistance to a new yellow rust race and outperformed references during drought stress. Paolo Annicchiarico illustrated that bulk breeding in peas is better to produce higher yielding lines and is less expensive than single seed decent breeding. Regine Andersen emphasized that breeding for diversity and breeding for conformity represents different breeding aims, and that there is a need
to ensure legal space for both and that farmer’s rights are important in order to enable farmers to contribute to the protection of genetic diversity. Isabelle Goldringer stated that the involvement of multiple stakeholders in plant breeding can increase system resilience. Bruce Pearce gave insight to the temporary marketing experiment in cereal populations.
International Society of Organic Agriculture Research

University, Belgium; Silva Grobelenk Mlakar, University of Maribor, Slovenia; Almuth Elise Müllner, BOKU Vienna, Austria; Luciano Pecetti, Council for Agricultural Research and Economics Italy, CREA-FLC, Italy; Evelyne Stoll Institute for Organic Agriculture Luxembourg; Franc Bavec, University of Maribor, Slovenia; Maria Finck, University of Kassel, Germany; Martina Robačer University of Maribor, Slovenia; Isabelle Goldringer, INRA, France; Nils-Ove Bertholdsson, The Swedish University of Agricultural Sciences, Sweden; Ilmar Tamm, Estonian Crop Research Institute, Estonia; Manfred Jakop, University of Maribor, Slovenia; Odette Weedon, University of Kassel, Germany; Peter Baresel, TUM, Germany; Anders Borgen, Agrologica, Denmark.

Participating, but not in the picture: Regine Andersen, Oikos - Organic Norway; Anne-Kristin Løes, Norwegian Institute for Bioeconomy Research, NIBIO, Norway; Veronique Chable, INRA, France; Karel Dewaele and Lieven Delanote, Inagro vzw, Belgium; Lene Krusell, Sejet Plant Breeding, Denmark; Frederic Rey, ITAB, France; Riccardo Bocci, AIAB, Italy; Kaija Hakala; Natural Resources Institute Finland (Luke), Finland; Majbritt Bergholdt, Nordic Seed, Denmark.

More info:

The COBRA project has a website, where abstracts, presentations and videos from the final conference will be made available: www.cobra-div.eu

Author

Tove Mariegaard Pedersen

SEGES Organic Farming

tmp@seges.dk
A satisfied Ethiopian beekeeper, who increased the honey production significantly when introducing beehives during a cooperation with the German development projects “One World No Hunger”.

With 97 million people by 2015, a rapidly growing population and vulnerability towards stricter weather conditions, Ethiopia faces challenges linked to agriculture. International cooperation contributes to solutions, also within the organic farming sector as shown by this report from the German initiative “One World No Hunger”. ISOFAR President Gerold Rahmann is the program manager of “Green Innovation Center – Ethiopia”, which is part of the One World No Hunger program.

Geography and main productions
Ethiopia is a large and diverse country. It is land-locked and located in the Horn of Africa, with an area of 1.1 million km$^2$. The bio-physical environment includes a variety of ecosystems, with significant differences in climate, soil properties, vegetation types, agricultural potential, biodiversity and water resources. Hence, also the farming systems are very diverse, with products ranging from rainforest crops (e.g., coffee, tea, tropical fruits) via humid-cold crops (e.g., grain crops like maize, rice, wheat, pulses and oil seeds) to desert crops (wild collection from bushes and herbs). This bundle of food crops includes also unique food crops like Tef (millet) and Enzett (false banana). Livestock plays an important role in these diverse agro-ecological conditions. Cattle, sheep, goats, camels, poultry and bees are the predominant animals all over the country. For food safety reasons, only leather so far has a potential for export of premium livestock products.

Ethiopia is a country of many nations, nationalities and peoples, with an estimated total population of 97 million. Only 17% lives in urban centers, the great majority of them in Addis Ababa. At a current annual growth rate of 2.6 percent, Ethiopia’s population is estimated to reach 130 million by 2025, and is projected by the United Nations to be among the world’s ten largest countries by 2050. The urbanisation will increase by 20-30 million people, because people move from rural areas into the towns. They will search for jobs and better living conditions. The middle class is increasing by numbers of people and percentage. There is an increasing demand for non-contaminated (pesticide free) food, particularly in expatriate and more wealthy urban areas.

Small income, but agricultural growth

Ethiopia is vulnerable to trade shocks from international food and fuel prices, and to large domestic weather-related shocks as demonstrated by the 2011/12 East Africa droughts. Lack of foreign currency for required imports is one of the most important difficulties to develop the economy and livelihood. Ethiopia is one of the world’s poorest countries. The country’s per capita income of US$570 is substantially lower than the regional average of US$1,257 and among the ten lowest worldwide. Ethiopia is ranked 173 out of 187 countries in the Human Development Index (HDI) of the United Nations Development Program (UNDP).

The agricultural sector remains a dominant sector in the Ethiopian economy and an important source of economic growth. Although there is an on-going structural transformation in the Ethiopian economy, predominantly from agriculture to services and manufacturing, agriculture still comprises 45% of total output, and continues to dominate employment (78%) as well as export incomes (80%). Despite its declining share in the economy, the agriculture sector is growing rapidly. Over the past 15 years, the annual growth rate has been ca. 7% thanks to an increased area under cultivation, and increased productivity driven by large public investment including extension service, rural roads, and advances in public policy such as improvements in land tenure security.
Ambitious public targets for agricultural production have been set, and the production of cereals, pulses and oil seeds increased from 180 million quintals in 2009/10 to 274 million quintals in 2013/14, which is slightly above the target set for 2014/15, 268 million quintals (1 quintal = 100 kg).

**Exports: Coffee, oil seeds, pulses and roses**

Coffee export comprises 65% of the foreign exchange for the country. Further export crops are oil seeds and pulses such as niger seeds, sesame, linseeds, sunflower seeds, groundnuts, rape seeds, castor oil seeds, pumpkin seeds, haricot beans, pea-beans, horse beans, chick peas and lentils. Floriculture has also significant share in the export market. The export of honey is currently low, but there is a large potential. According to the data provided by the Ministry of Agriculture, Germany is the prime export partner of Ethiopia, accounting for 11-13% of the export volume. Other major partners are Saudi Arabia, Netherlands, US, Switzerland and Italy.

**Shock fall in coffee prize called for organic farming initiative**

Ethiopia has a significant organic production and a high number of organic farmers. About 170,000 smallholders, with farms comprising on average 1 ha, produce organic coffee, sesame, honey and some other products. 167,000 ha (0.5%) of the Ethiopian farmland is managed organically. According to the Ethiopian Organic Association (EOA) there are about 60 certified projects, involving about 140,000 smallholders. The organic sector has a rapid growth, with about 12% each year. Lack of knowledge and infrastructure hamper an increased export. EOA keeps track of organic sales, and 15,000 tons of organically certified products were sold during 2014.

Ethiopia has a high potential for production of organic quality crops for the local and regional retail markets. Although the country's traditional production system is in line with current organic requirements, the modern concept of organic agriculture was only introduced around 13 years ago.

Following the shock price fall in the coffee market in the early 2000s, the Government of Ethiopia invited consultants from Europe to designate a strategy, which could help Ethiopian coffee to become competent in the world market. It was during this time that the concepts of organic agriculture and certification were introduced. In 2003, the government announced it would support the development of organic agriculture, and a task force was established to outline an Ethiopian Organic Agriculture Regulation, which could later be implemented into the juridical system as a Regulation for Organic Agricultural Products. It was designed to describe a general definition of organic production and to define the regulatory framework for growing and processing. In March 2006, the Government issued Federal Negarit Gazeta: Proclamation No. 488/2006 to establish “The Ethiopian Organic Agriculture System”.
Despite a growing sector of organic agriculture, there is little activity in the field of processing of organic foods. The only recorded product is the production of Tahina from sesame seeds. The average annual production of Tahin is 3 tons.

So far, organic certified production is targeted towards the export market, without very low domestic sales. The reason for low domestic consumption is a combination of an absence of national standards, low awareness amongst consumers, and limited consideration from the government side. On the other side, external factors such as a reliable market situation, clear trading schemes and a secure premium on certified products encourage farmers to produce for export, hampering the development of a national market. Coffee and sesame are either exported directly by the producers or enter the Ethiopian commodities Exchange (ECX). All commodities entering ECX are directed towards the export market, unless the product is below required quality standard. For cereals, the input of agrochemicals is more difficult to avoid, and organic certification is not considered so far.

Ethiopia has a high potential for organic production, but the country is at a very low stage compared with other countries, even in Africa. The potential needs a further developmental support to establish production, processing and trading infrastructure, as well as to increase the human capacities for organic production along the whole value chain.

Ethiopian honey is processed, labelled and sold as organic honey in local shops. The potential for export is also significant.
The Italian Ministry for Agriculture (MiPAAF) is about to release a new strategic action plan for the organic food and farming sector. The plan, discussed with Italian stakeholders, will be presented to the Italian Regions in December and then officially launched.

MiPAAF has recently set up a strategic action plan for the organic food and farming sector. The document has been deeply discussed in the course of the last 6 months at national level, sharing the contents with the Italian stakeholders.

The plan, structured in ten main actions, aims to further promote the growth of the Italian organic sector in terms of both cultivated land and market value.

Action 10 is devoted to sustain innovation and research. This action is articulated in 9 main research and innovation areas, aiming to further increase competiveness and reliability of the Italian organic food and farming system. The research areas are even more ambitious as they aim to contribute to answer to the global challenges our societies face, namely food security, food waste reduction, adaption to and mitigation of climate changes, and social justice.
Co-research and co-innovation have been identified as the key enabling conditions to project design and implementation. Similarly, agro-ecology has been acknowledged as the fundamental discipline and practice for a diverse, efficient and durable organic production.

Italian pavilion and the tree of life at EXPO (Milano)   Central Italy countryside

Author:

Stefano Canali, CREA
stefano.canali@entecra.it
Call to join the Action Network ‘Organic can feed the Planet’

The International Action Network "Organic can feed the planet" (Action Network) intends to position organic agriculture within the global debate on food security by providing evidence that the organic alternative is not just another way to produce commodities. 

Expo Milano 2015 "Feeding the planet, Energy for life" is the Universal Exhibition that the city of Milan, Italy, hosts from 1st May to 31st October 2015. Over this six-month period, more than 140 participating countries will showcase the best of their technology providing a concrete answer to a vital need: the ability to guarantee healthy, safe and sufficient food for everyone, while respecting the planet and its equilibrium.

The International Action Network "Organic can feed the planet" (Action Network) intends to position organic agriculture within the global debate on food security by providing evidence that the organic alternative is not just another way to produce commodities; it is an innovative food and agricultural system that can feed the planet while safeguarding its biodiversity and resources.

The Action Network - initiated by FederBio (Italian Federation for Organic farming) and supported by IFOAM – Organics International, IFOAM EU, IFOAM AgriBioMediterraneo, ISOFAR, Navdanya International and the Italian organic and biodynamic movements – aims to involve organic and like-minded associations and individuals in an extensive discussion on the role of organic agriculture in "Feeding the planet" debate.

In order to give high scientific backing to the discussions, the Action Network will involve organizations and individuals working in science, research and extension circles.

The objective:

The Action Network will outline the capacity of organic farming to feed a world of over nine billion people in 2050 and to meet the nutritional and economic requirements of its inhabitants, while conserving natural resources and mitigating the impact of agricultural activities on climate change.

The network consider organic agriculture as one of the most important food and agricultural innovations of the 20th century: "We want to involve and commit citizens in the promotion of organic farming as the model for future food production, based on the principles of Health, Ecology, Fairness and Care.”
Timeframe:


In June, the objectives of the Action Network will be presented during a press conference.

From June to September 2015, the consultation activities – online and face-to-face events – will be organized according to the availability of our host (Bologna Fiere and the Biodiversity Park) and of the Action Network members and invitees.

In September 2015, the finalized position document "Organic can feed the planet" will be presented publicly during an event organized in cooperation with the Italian Ministry of Agricultural, Food and Forestry Policies.

How to join the Action Network

To join the Action Network you need to send an email to the following address:
organic.action.network@gmail.com

Please indicate the organization name and contact details of a reference person. The forum’s secretariat will send you all necessary information for you to be able to take part in the Action Network’s initiatives.
Goesan declaration - ISOFAR Organic 3.0 Scientific Symposium

The ISOFAR 2015 Goesan International Organic Expo + Industry Fair is the largest organic event of 2015, which aims to promote sustainable agriculture and ecological life where People live in harmony with Nature. Goesan International Organic Expo + Industry Fair is held in Goesan County, Chungbuk Province, Republic of Korea.
Below you find the Goesan Declaration:

**ISOFA R Organic 3.0 Scientific Symposium**

‘Organic 3.0: Innovation with Research’

We, the participants of the ISOFAR Organic 3.0 Scientific Symposium 'Organic 3.0: Innovation with Research' were hosted in the Republic of Korea by the Chungbuk Province and Goesan county from 20-22 September 2015.

Our objectives include revitalizing agriculture, developing modern sustainable food systems, and achieving environmentally benign community development. We share the belief that the organic approach is an appropriate strategy to achieve these goals and to renew agriculture worldwide.

We agree to the following:

To increase our own research efforts and invite all potential stakeholders to acknowledge and embrace organic agriculture as an optimal model of sustainable agricultural development. Organic methods provide solutions that include small scale and low-income farmers and communities and enterprises interested in contributing to environmentally sound and ethical farming and food systems.

To use the scientific expertise of ISOFAR colleagues along with ISOFAR support, facilitation, and sharing to strengthen organic agriculture in Asia and worldwide in order to establish and sustain closer collaborations among countries that are developing organic agriculture. We understand that the organic agriculture models implemented in such countries must be developed in accordance with their specific agricultural conditions.

To fulfil these aims we have developed strategies under four main challenge topics:

- Feeding the world
- Human-induced global changes (ecology)
- Ethical conflicts in agriculture (ethics)
- Quality and health of food (quality)

We will publish the detailed outcomes of the 'Organic 3.0 is Innovation with Research' symposium as a paper in the ISOFAR International Journal 'Organic Agriculture' published by Springer in mid-2016. It will be the basis for the 2017 ISOFAR scientific track of the 18th IFOAM Organic World Congress.

22 September 2015, Geosan/Pulmuon Academy, RP Korea
Dear ISOFAR members and friends.

Since July 2015, I have taken a sabbatical until the end of 2017 to get experience in the hunger prevention in the German program “One World No Hunger”. I have become program manager for the “Green Innovation Center – Ethiopia”. In this position I try my best to support organic farming, not only in Ethiopia, but also in the other countries with “Green Innovation Centers”: Tunesia, Mali, Burkina Faso, Togo, Benin, Nigeria, Cameroon, Kenia, Zambia, Malawi, and last but not least, India. About this I will let you know in later newsletters. In this issue I present a note on the organic farming sector in Ethiopia, which hopefully will expand more general information from documents like “World of Organic Farming - Statistics and emerging trends”. I hope you like to read about Ethiopia.

Sincerely

Prof. Gerold Rahmann

Addis Ababa, November 2015

gerold.rahmann@gmx.de
Organic farming in Africa

ISOFA supports the development of organic agriculture in Africa by networking with relevant initiatives and organisations, such as “Organic Alternative for Africa”, initiated by IFOAM.

High potential for organic production

Africa is the world’s second largest continent (after Asia), with the world’s second largest population - about 1.1 billion people (15%). There are slightly more than 1.2 million hectares of certified organic agricultural land in Africa, which constitutes about 3% percent of the world’s organic agricultural land but only 0.1% of Africa’s farmland. There are more than 574’000 organic producers. Uganda has the largest organic area (231’000 hectares) and most organic producers.

The island state Sao Tome and Principe has the highest share of organic agricultural area; 7.2%. The majority of certified organic produce in Africa is destined for export. Key crops are coffee, olives, nuts, cocoa, oilseeds, and cotton. There is a growing recognition among policy makers that organic agriculture has a significant role to play in addressing food insecurity, land degradation, poverty, and climate change in Africa.

IFOAM initiative

IFOAM is currently working with the African organic sector, African Union, and other agencies in the framework of the “Organic Alternative for Africa” initiative, to facilitate the integration of organic agriculture into the core of African policies and the agricultural development agenda, including the Comprehensive African Agriculture Development Programme (CAADP).

The Organic Alternative for Africa will identify, promote and nurture the uptake of organic agriculture practices, systems, markets, and policies in the context of sustainable development and poverty eradication. IFOAM works with many stakeholders, both within
the organic movement and outside it, to create opportunities and facilitate the growth of organic agriculture-based development throughout the continent.

**African Organic Network**

A significant breakthrough was achieved in 2013 in the institutionalization of the African Organic Network (AfrONet). Its activities include strengthening and supporting regional networks, the Ecological Organic Agriculture Initiative for Africa, and organic conferences in Eastern, Western, Central and Southern Africa. Key achievements comprise a close collaboration with the African Union Commission (AUC; based in Addis Ababa, Ethiopia), training on organic standards and certification for stakeholders in the member countries of the Southern African Development Community (SADC), the Common Market for Eastern and Southern Africa (COMESA), the Economic Community of West African States (ECOWAS), and the East African Community (EAC).

Furthermore, the Kasisi training centre in Zambia has been identified by AUC as one of the satellite centres for organic training on the continent. The continent-wide Organic Product Standard for Africa has been approved by the African Union Commission (AUC).

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**Author:**

Prof. Dr. Gerold Rahmann

Green Innovation Center – Ethiopia

[gerold.rahmann@gmx.de](mailto:gerold.rahmann@gmx.de)