Practitioners' Track, IFOAM Organic World Congress 2014, 'Building Organic Bridges', 13-15 Oct., Istanbul, Turkey

# Organic farming in Khartoum

Batoul Yousif Alkhalifa<sup>1</sup>, Azza Elkhatim<sup>2</sup>, Elhag Awouda<sup>3</sup> and Suad Tawfig<sup>4</sup>.

Key words: Organic farming, Khartoum State, Legislation, Ministry of Agriculture, organic production and chemical fertilizers.

# **Author's Background**

- <sup>1</sup>Agricultural Inspector Assistants at Organic farming Unit in the Ministry of Agriculture, Animal Wealth and Irrigation. <sup>2</sup> A member of National Committee of Organic Agriculture.
- <sup>3</sup>Director of the general directorate of Agricultural services in Ministry of Agriculture, Animal Wealth and Irrigation.

#### Summary

Interest in organic agriculture and its products has widely grown in the world, mainly because of the increasing environmental and health hazards associated with the intensive use of chemicals in agriculture. Sudan, in spite of its high potential of organic agricultural production along the shores of the Nile, rivers, and the seasonal streams, has not been able to widely invest in organic production. Over the last years, the paradigm of organic agriculture as a sustainable mode of production has strongly grown among the Sudanese community. Furthermore, the importance of this type of production is progressively increasing amongst researchers, as well as policy makers as a good sign for a healthy thinking lead to take serious steps toward organic production in all the states of Sudan especially Khartoum state as a horticultural state and where the Capital of Sudan located. This paper reviews the potentials and current situation of organic agriculture in Khartoum state and the running organic farming projects in different States are highlighted. The main directives in the Sudanese Standard of Organic Agriculture are pointed out. The complete lack or gabs in legislation for organic production in Sudan, besides the absence of national or international offices of inspection and certification bodies are focused.

### **Background**

Sudan is an agricultural country with respected potentials which can highly contribute in organic production. The Khartoum state is located in the Semi-desert region between latitude 16.08 - 16.45 and longitude 31.36 - 34.25 east with a total area of about 20971 square kilometers about 5 million acres, population density of 5.5 million with a growth rate of 3.7% the arable land about 1.8 million acres and the invested area about 700 thousand acres on three Seasons summer, followed by autumn and winter suitable for cultivation of various crops including fruits, vegetables and fodder..etc. by application of irrigation from the Nile or underground water reservoir and rain water. Much of the Sudanese agriculture is carried out under default organic management which simply means the farmers has no access to chemical fertilizers, pesticides or other organically prohibited amendments for financial and other reasons. These farms are rely exclusively on natural methods of building soil fertility and combating pests and diseases, but are not inspected and verified by any organic certification agency 3.

As we know Organic agriculture is an integrated system to maintain a sustainable environment by preventing the use of chemical fertilizers and pesticides 1. Organic agriculture combines tradition, innovation and science to benefit the shared environment and to sustain and optimize the health and productivity of interdependent communities of organic agriculture, in the modern sense of the term; it is a highly regulated form of ecological agriculture. Thus Organic production is present obligation with future responsibility and it can be feasible in Khartoum.

## **Main Chapter**

#### Potentialities of Organic Agriculture in Khartoum state:

Khartoum state enjoys many potentials presence in vast and immaculate land, researches centers, adequate farmers and labors, financing banks, Sudanese Standards and Meteorology Organization (SSMO), exporting companies and great potentials for production, commercialization and application of biofertilizers and biopesticides. In spite of all these potentials and initiatives, the country still lacks national policies and regulatory frameworks for organic agriculture.

### Organizations currently working in organic agriculture:

<sup>,</sup> The ministry of Agriculture, Animal Wealth and Irrigation - Khartoum state - Sudan - batoulyousif@ymail.com.

<sup>&</sup>lt;sup>2</sup> The ministry of Agriculture, Animal Wealth and Irrigation – Khartoum state – Sudan – azzaelkhatim@gmail.com.

<sup>&</sup>lt;sup>3</sup> The National Committee of Organic Agriculture – Sudan – orgagric2009@gmail.com.

<sup>&</sup>lt;sup>4</sup>The ministry of Agriculture, Animal Wealth and Irrigation – Khartoum state – Sudan – orgagric2009@gmail.com.

Serious steps towards the adoption of organic agriculture began in 2001 with the inception of the Organic Agriculture Program (OAP), funded by the Arab Authority for Agriculture Investment and Development (AAAID) and implemented by the Ministry of Agriculture and Forestry (MOAF). The Common Fund for Commodities (CFC) supports a project to promote the exports of organic bananas from Sudan and Ethiopia to the Middle East and Europe. The Sudanese Standards and Meteorology Organization (SSMO) have also been instrumental in pursuing some organic agriculture-related activities2.

#### **Legislations of Organic Agricultural Production in Sudan:**

National committee has approved guideline for introduction and promotion the organic agriculture in Sudan and proposal was submitted to FAO CODEX Alimentarius in Rome and IFOAM in Bonn and it was agreed and approved. Legislations promote and regulate organic agricultural production, it is worth noting observations made by IFOAM to the Sudanese Standards and Meteorology Organization (SSMO) took into consideration and has been made necessary, now the standards is under license.

## The experiment of The Ministry of Agriculture, Animal Wealth and Irrigation in organic farming:

The organic unit established since 2007 within the directorate of Agricultural service to guide and supervise organic agriculture in Khartoum state. The unit started by certifying 2 farms: 1- Alshaab scheme. 2- West Omdurman scheme which are organically certified by ECOCERT Company. The unit continues it is ambitious work towards publishing organic farming culture among farmers and in 2013 the ministry became proudly a member in the IFOAM.

## The units Future plans:

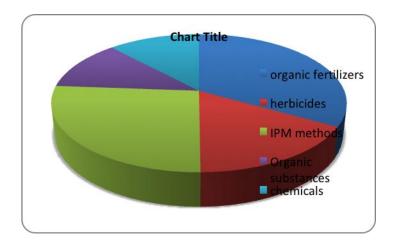
Constructing an authorized body to register and certify organic projects as well as adopting the farmers and organize them within professional societies for production and marketing. Train and provide consultations in all organic farming sectors. In addition to its main mission which is inspection and rectification.

#### Organic production obstacles:

The lack of a strategic plan to develop organic agriculture in Sudan, has been the major problem which impede the progress of organic farming in Sudan coming along with the absence of an authorized body to register and certify the Sudanese organic products, albeit that most of the Sudanese products are produced traditionally and naturally using no or low synthetic inputs. In addition to Inadequate research, manpower especially on organic production and marketing information and input supply have hindered promotion. Organic product legislation, standardization and infrastructure.

# Recommendation:

- Appropriate research and extension services should be developed to avail all the relevant information on organic farming, in general, and its specific technical details to farmers.
- Certification and labeling capacities should be developed within the country so as to overcome the prohibitive costs
  involved in getting certification done by external agency.
- Biofertilizers, bioagents, biopesticides and other organic inputs should be made available to the landlords at sufficient quantities and reasonable prices.
- Marketing linkages, both domestic and international, should be ensured for organic products.
- Subsidies and other financial support schemes should be undertaken to help farmers bear the initial expenses for converting to certified organic farms.



Practitioners' Track, IFOAM Organic World Congress 2014, 'Building Organic Bridges', 13-15 Oct., Istanbul, Turkey

Figure 1. Chemical and organic substance employed by the production institutions in Sudan

Figure 2: Watermelon produced organically by default (not certified) at Wadi-Almogadam valley 135 km west Khartoum





# Core messages and conclusion:

The Sudanese community aware of the chemical fertilizers and pesticides' hazards, which opens the flaw widely for the organic agriculture. The main problem which faces the Sudanese forever is the certification which assures that their products are clean and free of any chemicals. Therefore, we are strongly urging the IFOAM to initiate an inspection and certification body in Khartoum to simplify the certification process.

### References

- Hassan. I. Ali1; H. H. Elrayah1; M. M. Osman2 and M. I. Abdelkareem3. Organic Certification of Local Products: Gum Arabic Company's Experience in Certificating and Documenting Crop of Gum Arabic. International Conference on Organic Farming (ICOF) Friendship Hall, Khartoum, Sudan6 7 April 2010..
- Kamal E-Siddig & Abdelmagid Elmubarak, Towards a National Organic Agriculture Program in the Sudan, InternationalConference on Organic Farming (ICOF) Friendship Hall, Khartoum, Sudan6 – 7 April 2010.
- Mohamed Ahamed Bushara, Challenges for Transitioning Conventional Farming in the Sudan to Organic, Peace University. Faculty of Natural Resources and Environmental Studies, Journal of Science and Technology 12 (03) December 2011, www.sustech.edu.

.