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## Ecology and Farming

The magazine of the International Federation of Organic Agriculture Movements

# Organic Africa

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#### Organic Agriculture in Higher Education in West Africa

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#### Background

Organic agriculture has developed over the past fifty years and has become a major international phenomenon in the last 15-20 years with the development of significant international trade, regulation and certification. The participation of Sub-Saharan African nations in this sector is relatively recent, though countries such as Kenya, South Africa and Uganda, have made rapid progress in entering the international market. Many West African countries, however, lack relevant expertise and most staff in higher education has been trained exclusively in conventional agriculture. There is, thus, a pressing need to bridge the knowledge gap by providing training and exposure in organic agriculture to existing education professionals. It is also important to develop appropriate curricula and teaching materials to allow educational institutions in African nations to deliver high quality courses in organic agriculture relevant to the next generation of teachers, researchers, producers, extension officers and policy makers. The work reported in this article centers on the development of organic agriculture in higher education in Nigeria and the wider West African region through a series of externally funded projects.

The agricultural sector in Nigeria remains underdeveloped. Although Nigeria was a large exporter of agricultural products in 1960s, by 2001 the oil sector accounted for 94% of the nation's export earnings. Nevertheless, the agriculture sector still occupies a strategic place in the nation's economy and provides employment for about 40% of the population. The targets set by the Government, under the National Economic Empowerment and Development Strategy includes promotion of environmentally friendly farming practices; and protection of all prime agricultural lands for continued production. Attention has been given by federal, state and local governments, the private sector and NGOs to the potential of organic agriculture in Nigeria. However, the formal organic industry in Nigeria is relatively underdeveloped and uncoordinated and there is very little certified organic production.

#### OAPTIN and the England Africa Partnership

In order to improve the contribution of education institutions to organic agriculture in Nigeria, the Organic Agriculture Project in Tertiary Institutions in Nigeria (OAPTIN) was launched in 2005 by a consortium of Nigerian universities. OAPTIN functions as a networking and support group and holds an annual conference on organic agriculture. Within the OAPTIN framework, the University of Agriculture Abeokuta (UNAAB) and Coventry University (CU) from the UK obtained funding from the UK Department for Education and Skills under the England Africa Partnership (EAP) program. The funding was for a project entitled the "Development of Institutional Capacity in Organic Agriculture". Its main aim was to increase the level of professional expertise in all aspects of organic agriculture in Nigeria, by developing an organic agriculture curriculum and teaching materials suitable for Nigerian Tertiary Institutions, and providing exposure for UNAAB staff to organic agriculture production, certification, trade, and research methodologies in the EU.

At the commencement of the project only one course, Organic and Peri-Urban Farming, taught in the Department of Horticulture at UNAAB was relevant to organic farming. Indeed, a survey of higher education institutions in Nigeria revealed that none had organic agriculture as a degree-level specialization, and only 5 percent taught organic agriculture and/or had organic demonstration plots. To develop a draft curriculum for organic agriculture courses, a national workshop, attended by higher education institutions, the private sector and the Nigerian Universities Commission, was held. It was agreed that the most likely way forward is the provision of more electives at the Bachelors level and fully-fledged masters programs in organic agriculture.

In an innovative move, two Nigerian graduates returning to Nigeria from CU's MSc Sustainable Agriculture course in the UK were employed for six months with EAP funding to contribute to organic agriculture curriculum development and research and to establish commercial organic production and sales on the UNAAB campus. The University allocated land for the construction of an organic produce kiosk in a busy pedestrian area of campus and the availability of a range of organic products has proved popular.

#### Education Partnerships in African Program (EPA)

The EPA project above established the principle of encouraging and supporting graduates to develop commercial organic agriculture enterprises. This theme has been taken up in a new project, "The Work, Earn and Learn Programme for Developing Entrepreneurship in Organic Agriculture among Graduates in Nigeria" (WELP), funded by the UK Department of Innovation Universities and Skills, under the Education Partnerships in Africa (EPA) program. The overall aim of the project is to develop entrepreneurship skills in organic agriculture among graduates in Nigeria, leading to the establishment of sustainable, profitable organic agriculture enterprises

Graduates are provided with specialized courses in organic agriculture and assisted in starting productive enterprises in rural and peri-urban areas where unemployment and under-employment are common. This project brings together graduates, academics in organic agricultural and business, and private sector and government organizations to develop new enterprises. The project commenced with an intensive organic agriculture training course at UNAAB. Following national advertising 23 graduates were selected from 70 applicants to participate in a four-week intensive residential course covering all aspects of organic agriculture. This course was followed by three weeks work experience on private farms and enterprises. Trainees were evaluated so that skills gaps could be identified and addressed in followup action plans. Strong partnerships are already developing between WELP and a few farmers who have already indicated interest in learning more about organic agriculture.

Based on their field experience, trainees have drawn up feasibility studies for an organic enterprise. The popular enterprises are the production of snails, cane rats and vegetables. The trainees will be allotted a budget and assisted to open a bank account, with the project leader as co-signatory to ensure that withdrawals are based on the approved plan. A regular quota of savings from sales is deposited to pay back the advance. The project will assist with acquisition of land for farming at UNAAB and with transport of produce in the first six months of the project. The five most promising graduates will be given the opportunity to experience organic agricultural production in Benin and the UK.

Mentoring by the project staff will help trainees cope with the challenges of developing and sustaining the market for organic produce. This project will bridge the gap between skills acquired in the university and those required by the market place to succeed. In the wider context, the project will not only serve to develop the specific enterprises supported, but will also stimulate, at the strategic level, greater business activity in organic agriculture and develop a model, which, if successful, will be replicable elsewhere in Nigeria and in the wider region.

#### EDULINK - West Africa

Finally, the lessons learned in Nigeria from the EAP and EPA projects are being applied more widely in West Africa through a recently commenced EU EDULINK ACP-EU Co-operation Program Project, "Institutional Capacity Building for Organic Agriculture in West Africa". The region is socially and culturally diverse but its nations share a high degree of food insecurity due to demographic changes, climate change and the effects of intensive agriculture. Organic agriculture offers a sustainable solution to many environmen-

tal and food security problems and has the potential to improve livelihoods in the region. The project partners are UNAAB, Nigeria; Université d'Abomey-Calavi, Benin; University of Cape Coast, Ghana; Kwame Nkrumah University of Science and Technology, Ghana; and Njala University, Sierra Leone, and it is supported by Coventry University, UK.

The partners will establish a West African Network for Organic Research and Training to train graduates, farmers, extension officers and civil society organizations in organic agriculture. The project partners will also undertake research that will underpin organic production, embed organic agriculture into the curriculum in West African universities and help develop locally appropriate organic standards, regulations and technologies. The network will carry out a skills gap analysis in each of the West African states, and will fund a program of staff and research student mobility visits between partners within the region. To expose staff from the West African partners to organic agriculture production, certification, import/export trade, marketing and research methodologies in the EU, staff from each West African partner country will visit the UK for a three-week orientation course

During the three-year program, a three-week "Concepts of Organic Agriculture" workshop will be held in Ghana that will acquaint lecturers with the basic principles of organic agriculture. In addition, a two-week workshop and training session on curriculum development will be held in Nigeria and a one-week workshop in Benin will be convened to consider the issues of marketing and certification in West Africa. Partners will convene in Sierra Leone to share research results and to gain skills in research methodology appropriate for organic agricultural research.

The overall aim of the above projects is to increase the level of expertise and synergies in all aspects of organic agriculture in West Africa. The immediate beneficiaries will be the higher education institutes where the projects will embed organic agriculture into their curriculum and research culture. The intermediate beneficiaries will be graduates who will then be able to participate in the international organic sector and make a contribution towards the development of locally appropriate standards, regulations and technologies, and also to the production and marketing of West African organic products. The ultimate beneficiaries will be the farmers/producers whose livelihoods will improve. In the long term there will also be wider environmental benefits from the adoption of sustainable organic practices.

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