## ANALYZING ORGANIC FARMING TRAINING IN THE CURRICULUM OF THE UNIVERSITY OF KWAZULU-NATAL, PIETERMARITZBURG

## SJ, Polepole \* and SH, Worth

Agricultural Extension and Rural Resource Management Program; University of KwaZulu-Natal; School of Agricultural, Earth and Environmental Sciences; Pietermaritzburg, South Africa

## ABSTRACT

The value invested in organic farming in the midst of the current environmental degradation is of great importance; hence the focus on organic farming training is crucial. Agricultural education should have a role to play. The study was conducted at the University of KwaZulu-Natal (UKZN), Pietermaritzburg, South Africa. UKZN is one of the largest academic agricultural institutions in the province where agriculture is taught. The aim of the research was to analyse the extent to which organic farming was included in the agricultural curriculum at UKZN.

The study examined what is currently offered in terms of organic farming or sustainable agriculture. It identified the perceptions of students and lecturers about organic farming. Also it identified the challenges faced by academics and practitioners in respect to organic farming to provide insight into current and potential curricular offerings.

The study was qualitative; data were collected through interviews, site visits, and observations. Interviews were conducted with 52 postgraduate students, 20 lecturers and eight nonuniversity key informants in the organic farming sector; all selected by purposive sampling.

The study found that organic farming is present in the UKZN agricultural undergraduate curriculum to a small extent (5.5% was the highest rate of organic content concentration in the whole curriculum). There are no modules devoted exclusively to organic farming, but the subject was included in 10 modules offered in 2010 by five agriculture related disciplines (Agricultural Plant Science, Community Resource Management, Soil Science, Plant Pathology and Bioresources).

The majority (88%) of students respondent indicated that it is important for organic farming to be taught at UKZN because it is a crucial knowledge for future generations. It addresses important issues such as the use of alternative methods in food production, human health protection, sustainability, and environmental protection. Those students who did not think it was important to include organic farming in the UKZN curriculum (6%) argued that organic farming would never feed the exponentially growing population of the world, hence enough yield production is the first priority.

The academic staff interviewed related organic farming to sustainability, environmental protection, use of alternative methods for food production, human health protection and knowledge for future generations. Organic farming was regarded as a crucial approach on different levels, including food security, environment, economy and market. It was indicated by 30% of lecturers that organic farming is of little importance to the economy and markets. Their reasons were similar to those of students who did not organic farming as being important, namely that organic farming is unable to feed a large number of population and it is not commercially profitable.

The nonuniversity key informants considered as experts in organic farming felt strongly that the fact that people have committed themselves to business ventures in organic farming is a good indication of the viability of organic farming.

Collectively, the respondents cited a number of challenges and issues which they suggested as reasons for the slow progress of organic farming in South Africa and why it is perceived as a difficult (perhaps unrealistic) route to follow. These included the cost involved in production of organic food, poor yields, making organic farming not competitive, lack of interest or awareness on the part of consumers, uncertainty for career opportunities, lack of expertise by academics and farmers in the domain, chemical companies driving all the support of investors, and government not supporting organic farming.

The study recommended that of the presence of organic farming be enhanced in the UKZN agricultural curriculum. Modules dedicated to organic farming in which the theory and practice of organic farming is learned should be developed and set as compulsory modules for UKZN undergraduate agricultural qualifications. Existing production modules should be expanded to include an intelligent debate concerning organic farming. It further recommended that students should be involved in curriculum development as they can contribute with good ideas to improve their own learning, more research and open, objective debate about the merits and disadvantages of organic farming should be encouraged to eliminate uncertainty. Finally farmers' knowledge and skills in producing, marketing and initiation of partnerships among organic farmers, processors, retailers and government should be undertaken to establish a framework for taking the debate to grassroots level.

**Keywords**: organic farming, environment, agricultural education, curriculum, sustainable agriculture