

## “Global Development of Organic Agriculture: Challenges and Prospects”

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The book titled ‘**Global Development of Organic Agriculture: Challenges and Prospects**’ is published by CABI Publishing in the year 2006. N. Halberg, H. F. Alroe, M. T. Knudsen and E. S. Kristensen are the editors of this book. This book is mainly the outcome of an international workshop: ‘Organic farming in a global perspective – globalization, sustainable development and ecological justice’ which was held in Copenhagen in 2004. On the basis of presentation by experts from USA, Sweden, Austria, The Netherlands and Denmark; and the discussions and group work which followed; Danish experts along with other international experts synthesized the knowledge on organic agriculture from a global perspective in this book.

As the title of the book implies, the purpose of reading it was to understand the global scenario of organic agriculture: how the practices are similar or differs given the socio-economic, political and ecological variation; what are the opportunities and challenges brought by globalization; who are the beneficiaries and payer of such market development; and finally what are the constraints in the overall scenario of organic agriculture development.

The book, in my opinion, has been able to satisfy the expectation readers will have given its splendid title. It includes vast aspects of organic agriculture system and emphasizes on how it is experiencing technological and structural changes in the face of globalization. Surely organic agriculture has been expanding in both developed and developing countries, owing much to the environmental and health concerns or simply to take benefit from the high-priced niche market. Even so it faces tremendous challenges which vary from high-income countries with modern farming techniques and growing preferences, to low-income countries characterized by smallholder farmers and resource-poor consumers. This book tries to highlight the issues surrounding organic agriculture in the modern world from the perspective of ‘sustainability, food security and fair trade’.

The book starts off with the global trend in agriculture and food system. In order to clarify its stance on the damage brought upon by industrialized food production system, it presents cases of soybean-soil depletion effect in Argentina and beef production-deforestation relation in Brazil. The fact that the compensation rate for Argentina for the depleted soil nutrients as a result of increase in soybean production and fertilizer use with mineral fertilizers will be ‘around 1.1 million t of phosphorous fertilizers and an amount of 330 million American dollars to buy it in the international market’ (p.23) is quiet alarming. It is particularly interesting when it is simultaneously claimed that it exports around 3.5 million t of nutrients without actually reflecting the ecological cost in the market prices.

Numerous other examples from across the globe has been provided to shed light on the kind of problems countries have been facing given their specific characteristics. A case in Uganda shows how two Ugandan companies benefited by consolidating in a fair trade arrangement with Danish/European market to process and export organic fruit. It also provides an insight on the

complications which are pointed out as lack of adequate financing, management skills, consistency in workforce, logistics, difficulty in partnership and cooperation, and cultural differences. It can be of specific interest as it reflects on what kind of difficulties smallholder farmers in developing countries is likely to face when integrated into global market.

In case of recycling nutrients from urban wastes, the book provides couple of examples from various countries such as China, India, Botswana, South Africa, Malaysia, Australia, Sweden and Norway where applied cost effective technologies along with the barriers are also explained. This will benefit other developing countries to replicate the technology or modify it according to their specific context and get the glimpse of the associated problems beforehand, which probably will help them to prepare better.

The book also argues about political ecology, ecological justice, ecological economics and free trade and relates with how organic agriculture can contribute to each of these aspects. Ecological justice is a concept wherein social and ecological justices are given high priority than market liberalism and economic growth. The idea of shared responsibility for livelihoods and environments or commons-based government, as termed in this book, has been proposed to resist the pressure of globalization and associated structural and technological developments. Commodification of commons, externalization of environmental and social costs, and the growing distance of trade and ownership has been identified as three key challenges in the light of ecological justice. Ecological justice can be put into practice through organic agriculture by way of fair trade, following nearness principle, identifying organic production zone and produce to create awareness and bolster community, creating sustainability and justice through ecological footprint approaches and measures of socio-ecological performance that are built on principles of equity and sustainability through the creation of series of social institutions, and prioritizing non-certified organic agriculture as well to avoid imposing the burden of Western-style certification. Another concept of ecological economics (EE) has also been conceptualized in this book which is basically the interrelationship between the ecological, economic and social systems. These should be the basis for future policy tools but the authors claim to have done very little globally in harmonizing and sustaining these interrelations.

It also reflects on importance of certification to get access to price premium in an international market but also criticizes that such global uniform standards might not be designed to blend with different cultural and natural conditions in different regions, thus concluding that 'organic standards and control systems themselves can be a barrier that hinders the potential growth and spread of organic farming' (p.77). With this it moves on to emphasize on non-certified organic production for local consumption. At present long distance trade and large corporate retails' control dominates the global food market. 'Low price, demand for larger quantity, standardization, specialization and high production efficiency and productivity' has been the essence of globalization. But such system has a repercussion through pollution of surface and groundwater with nitrates and pesticides, increased emission, loss of biodiversity, soil degradation and declining animal well-being. Certainly it has benefited food security of industrialized countries and few developing countries like China; but has also increased agricultural system and population gap, especially when compared to developing countries like Africa. The local farming system of developing countries are unable to compete with subsidy backed, lower priced surplus food production from market such as Europe. Thus, organic farming (OF) offers a more sustainable practice in this regard. OF is in a growing trend where about 100 countries are already practicing it. Trade in organic food throughout the world has been increasing, especially from South to North where developing countries like Brazil, Egypt and Uganda are now exporting to Europe and North America. Even though this provides a good prospect for developing countries, OF is in a greater risk than ever before of being pushed towards a conventional farming model backed by specialization, capital intensification, export orientation rather than local, increased processing, packaging and long-distance transporting. This has jeopardized the very fundamental elements of OF. Besides if not for export-orientation, OF can also improve production of marginalized smallholders as an uncertified production for local consumption. Prioritizing this aspect of organic system will, to some extent, lessen the environmental burden through less transportation, thus keeping up with the core feature of organic farming. Thus, the book prioritizes both certified and non-certified organic farming which holds its own priority in different section of the market.

It has also shed light on dynamic growth of organic sector both formal and informal, by specifically emphasizing on the unknown extent of the latter to realize that organic share is far more greater than presently realized. Thus the authors call for prioritizing on knowledge synthesis over identifying new research programs with active involvement from the South. This will help to generate information from those who already have prior knowledge of local networks, practices and priorities to address the most pressing issues for organic research in developing countries and disseminate the information who need it the most, i.e. resource-poor farmers.

Another aspect of organic farming, as mentioned in the book, is its potential to contribute to sustainable development by recycling domestic and household waste through the integration of urban settlements with rural communities. Although there are

some limitations to ecological sanitation system, it also demonstrates already proven technologies that can be adopted or improved in a new management system along with associated risks. It also discusses the pragmatic solution to revive the soil fertility in sub-Saharan Africa (SSA) through OF along with other approaches like high external input agriculture (HEIA), low external input sustainable agriculture (LEISA), or integrated soil fertility management (ISFM). Applying one solution to all will not bring same results throughout the diverse circumstances of SSA and so it has been suggested to adopt HEIA and certified organic system in areas that have favorable agro-climatic conditions and market access and follow LEISA or ISFM approaches in areas having lower potential or poor access. Moreover the best solution would be the one through which farmers can make profit, accept risk, feasible to specific context, and economically, environmentally and socially sustainable.

The book also discusses about organic approach to livestock production systems with particular focus on veterinary treatment and disease control. Animals should be allowed to perform in their natural behavior and it has argued on the use of indigenous breeds, role of vaccination, traditional medicine and alternatives to biomedical treatment and other methods to manage disease. Conversely it also mentions that the development of OF must not threaten local and regional disease control programmes especially when diseases are zoonotic in nature, highly infectious and have huge economic significance. The major challenges in terms of disease control are endemic diseases, large flocks/herds and how they use land under the given conditions and other economic, political, cultural, historical, climatic and vegetation factors. This is backed by the cases in Uganda and Bhutan where organic system (mainly default or traditional system) of livestock production are implemented but are also challenged with outbreak/transmission of disease because of the natural setting or free movement of animals.

One of the most pressing issues of the potential of OF to contribute to food security has been discussed as well. It argued that the relative yield of OF will depend on socio-economic and agro-ecological factors, and the characteristics of farming system before conversion. As indicated by the food policy model IMPACT, approximately 50% conversion of Europe/North America (E/NA) agricultural land will result in 35% lower yields after conversion, 50% higher yield growth rate compared to conventional crop yield and will have 6-10% impact on world prices of non-meat agricultural commodities. But in case of SSA the result seems quite positive where the same percent of land conversion will have increased self-sufficiency and decreased net food import to the region if non-certified OF is supported by capacity building and research programs. With this point the book concludes by emphasizing on importance of research for organic food and farming, especially in the South which is severely under-researched compared to the North where organic farming policies, practices and institutions are comprehensively studied. It calls for studying the social conditions under which organic farming is evolving in the South and how national or regional policies and regulations are contributing to it. It also highlights how the course of movement in the South is highly driven by Northern institutions which might not actually reflect the Southern realities and thus needs to be seriously reformed. It is worth noting at this point that out of 33 contributing authors, about half are from Denmark and most of the others from continental Europe, with none from Asia, Oceania or Pacific (Paull, 2007). This implies that the book itself lacks representative authors from various parts of the world, thus limiting their opinions to some extent as well. However, it also provides brief information on international organizations working for promotion of this sector which will probably help readers to refer to for deepening their knowledge.

Organic farming though has different set of principles from the mainstream farming, is not completely free from the chaos of globalization. This book gives us insight on various aspects of organic agriculture throughout the world. It provides a fine picture of the ground-reality of OF from developed as well as developing countries. It has tried to provide pragmatic answers to the given problem by assessing the situation therein and called for a more extensive study in other areas. Moreover it makes the reader realize that there is no one-solution-fits-all to the vast areas which are characterized by their unique natural, social, environmental and political setting. In this regard research has been given a high priority which should be context-specific for making the approach sustainable in every way possible.

Paul (2007) has also provided the links through which five of the twelve chapters can be accessed and brief summaries of further two chapters which are respectively listed below:

- [www.ecowiki.org/GlobalPerspective](http://www.ecowiki.org/GlobalPerspective)
- [www.orgprints.org](http://www.orgprints.org)

### Work Cited

Paull, J. (2007). Book Review-Global Development of Organic Agriculture: Challenges and Prospects. *Journal of Organic Systems*, 2(2), 57-58.