

DTI Logo

ILO Logo

Seminar Monograph

The Cooperative Link: Food Security and Agrarian Transformation

Contents

1. Background

2. Problem Statement

3. Agriculture for ... food security, local economic development and local energy production

Christine Madlabane, Eco-city Project Manager

4. Co-operatives and Urban Agriculture in South Africa

Stephen Greenberg, Independent Policy Analyst and Land Reform Expert

5. Summary of Main Discussion Points

1. Background

On 10th February 2009 the International Labour Organisation and the Department of Trade and Industry hosted a seminar entitled: *The Cooperative Link - Food Security and Agrarian Transformation*. This was the first in a seminar series on cooperatives to be hosted by the ILO and DTI.

The seminar drew in cooperators, policy experts, sector stakeholders and academics into a common space to think about cooperative development as part of an approach to addressing wider development challenges facing the country.

The seminar series on cooperatives is intended to achieve the following:

- Provide a platform for in depth debate about key policy and development issues facing cooperatives in South Africa;
- Generate new ideas, innovative thinking and insights about the role of cooperatives, the cooperative sector and cooperative economy;
- Identify opportunities and challenges facing cooperative development in South Africa;
- Provide a learning and sharing space for cooperative practitioners, policy actors, support ngos, and mass organisations;
- Generate knowledge about cooperative practices and experiences at the frontline of change;
- Enhance the capacity for knowledge based leadership around cooperative development in South Africa.

2. Problem Statement

The link between development and food security has been broken in South Africa. This is reflected in high food prices, deepening food poverty, growing incidence of food vulnerability in households and the loss of agricultural capacity to feed South Africa's population from local sources. The food question is also a big part of the overall economic and social crisis, which is deepening through unemployment, retrenchments and income inequality. In this context various responses stand out: the call by unions to investigate price fixing in particular food markets; calls for food prices to come down; policy struggles to end the 'willing seller-willing buyer' land reform model; and ambitious policy proposals for rural transformation. In the past South Africa developed an industrial agro-processing model which secured food security and was largely organised through white farmer controlled cooperatives. This was a carbon based and energy inefficient farming system which concentrated land ownership. Can we build a new food production system that is sustainable, ecologically transformed and grounded in cooperative relations of production? What are the current practices on the ground, both urban and rural, that represent such an alternative? What is the role of the state? What is the role of a cooperative movement?

3. Agriculture for ... food security, local economic development and local energy production

Christine Madlabane, Eco-city Project Manager

3.1 Introduction

This input provides a general view of fossil based agriculture and its problems. It also provides a perspective on the Eco-city alternative for promoting organic urban based food production through the cooperative model. Our perspective on food production is holistic and hence we locate cooperatives within a wider framework to promote sustainable development. This contribution provides an overview of our work in urban township communities in the Gauteng Province of South Africa and highlights some of the challenges. The paper also provides a perspective on bio-mass production and its relationship to food production. Finally, the paper concludes with a set of policy recommendations to move the society away from dependence on fossil based food production.

3.2 Fossil Fuel Driven Agriculture

Agriculture is defined as the science, art, and business of cultivating soil, producing crops, and raising livestock farming. Agriculture refers to the production of agricultural goods through the growing of plants and the raising of domesticated animals. Agriculture has played a key role in developing human civilization with the domestication of plants and animals, which allowed humans to settle and give up their previous hunter-gatherer lifestyle during the Neolithic Revolution. Until the Industrial revolution, the vast majority of the human population labored in agriculture. Development of agricultural techniques has steadily increased agricultural productivity, and the widespread diffusion of these techniques is often called an agricultural revolution.

A remarkable shift in agricultural practices has occurred over the past century in response to new technologies. In particular, the method for synthesizing ammonium nitrate made the traditional practice of recycling nutrients with crop rotation and animal manure less necessary. Synthetic nitrogen, along with mined rock phosphate, pesticides and mechanization, greatly increased crop yields in the early 20th century. Increased supply of grains has led to cheaper livestock as well. Further, global yield increases were experienced later in the 20th century when high-yield varieties of common staple grains such as rice, wheat and corn were introduced as part of the green revolution. The green revolution exported technologies (including pesticides and synthetic nitrogen) of the developed world to the developing world.

Many governments have also assisted the shift to high yield, fossil fuel driven agriculture through subsidies that ensure an adequate food supply. These agriculture subsidies are often linked to the production of certain commodities such as wheat, corn, soybeans,

milk. These subsidies, especially when done by developed countries, have been noted as protectionist, inefficient, and environmentally damaging.

In 2007, an estimated 35% of the world's workers were employed in agriculture (down from 42% in 1996). Despite employing one-third of the world's workers, the relative significance of farming has dropped steadily since the beginning of industrialization. In 2003 for the first time in history the service sector overtook agriculture as the economic sector employing the most people worldwide. Moreover, agricultural production accounts for less than five percent of the gross world product (an aggregate of all gross domestic products).

As of late 2007, several factors pushed up the price of grain used to feed poultry, dairy cows and other cattle, causing higher prices of wheat (up 58%), soybean (up 32%), and maize (up 11%) over the year. This has been accompanied by major increases in food prices. Food riots have recently taken place in many countries across the world as food insecurity and hunger have increased. An epidemic of stem rust on wheat is currently spreading across Africa and into Asia and is causing major concern. Approximately 40% of the world's agricultural land is seriously degraded. In Africa, if the current trend of soil degradation continues the continent might be able to feed just 25% of its population by 2025, according to UNU's Ghana-based Institute for Natural Resources in Africa.

Proponents of organic farming such as Sir Albert Howard argued in the early 1900s that the overuse of pesticides and synthetic fertilizers damages the long-term fertility of the soil. While this feeling lay dormant for decades, as environmental awareness has increased recently there has been a movement towards sustainable agriculture by some farmers, consumers, and policy makers. In recent years there has been a backlash against perceived external environmental effects of mainstream agriculture, particularly regarding water pollution and damage done to soil fertility.

This critique of fossil based agriculture and the need for a shift has been supported by the European Union. The EU first certified organic food in 1991 and began reform of its Common Agricultural Policy (CAP) in 2005 to phase out commodity-linked farm subsidies, also known as decoupling. However, the growth of organic farming has renewed research in alternative technologies such as integrated pest management and selective breeding. Recent mainstream technological developments include genetically modified food which has brought to the fore new risks and challenges.

3.3 The Eco-city Alternative

The EcoCity Trust: "A transformed, Integrated, Ecological, and People Centred Development Practice"

The EcoCity Trust was created to alleviate poverty, create environmental awareness and to promote the sustainable utilisation of natural resources in an equitable manner that

secures the ecology for future generations. The Trust does this through programmes that provide integrated, sustainable local economic development and environmental awareness programmes that are ecologically based and benefit the disadvantaged and previously marginalised communities within South Africa. The EcoCity Trust is the custodian of the EcoCity concept.

The EcoCity concept arose from an understanding that the current development paradigm deepens and entrenches poverty, depletes our natural resources, alienates people from a sense of community, destabilises local economies, increases peoples' feelings of insecurity and results in degradation of our health and natural environment.

At the onset, the EcoCity Concept was seeking to develop sustainable ways to undertake urban development by addressing a range of interconnected issues. These are food security, waste management and recycling, water management, renewable energy, cleaner technologies, sustainable transport, ecological housing/planning for sustainable settlements, capacity building and outreach and awareness raising through democratic institutional structures and businesses.

3.4 Food Gardens and Agriculture Co-operatives: A Sustainable Model

EcoCity promotes co-operatives as a democratic model for development, poverty alleviation, food security and sustainable local economic development. Building on experience gained in implementing a pilot co-operative programme in Ivory Park over the past 10 years, EcoCity intends to further strengthen this programme within Ivory Park and to replicate it in other areas.

EcoCity does not run such programmes on behalf of communities, but rather approaches poverty challenges through the capacitating and strengthening of communities to the level where they are able to conceptualise, design, implement and report on development programmes.

Youth Training and Food Gardens

Since 2005 EcoCity has been implementing Youth In-service Projects known as Youth EcoBuild and has trained 550 youth. Environmental awareness raising was conducted in schools around Gauteng through development of food gardens in schools. Over 1500 school children were trained in agriculture and permaculture. School children were given an opportunity to learn about agriculture and food security and ways in which they can develop food gardens at home, in their schools, and their respective communities. These learners were given an opportunity to do practical learning about the importance of permaculture. Learners were transported to Wildrock farm (in another part of Midrand, in Gauteng province), where they were given practical exercises by planting different types of vegetables. The learners were given seeds to take back to their schools and start doing their own vegetable gardens. This programme provided the learners an opportunity to understand the basic principles of permaculture and what it does for our environment: "Permaculture is about caring for the environment so that the environment cares for us."

Permaculture can also:

- Improve water supply
- Provide us with food
- Provide us with fire wood, fodder, building materials, herbs and other resources
- Provide ways of earning money
- Improve our quality of life
- Beautify our schools and homes

Permaculture is about ‘cultivated ecology’. It uses the principles of ecology to achieve cultivation of the things we want. Thus, by exposing our students to permaculture, we are teaching them first hand about ecology.

With this project schools were given seeds to start food gardens and most of the schools started feeding schemes in their schools and were able to feed over 30 to 40 kids daily from the feeding scheme. They also targeted children who came from child-headed families and children who came from unemployed households, since Ivory Park is one of the communities that suffers from high unemployment. By 2009 an additional 1500 school children received training and 8 Primary schools in Ivory Park benefited from this project. One of the schools won an award in the government school competition called *bontle ke botho programme*.

Organic Farming Cooperatives

EcoCity has also pioneered a programme on local economic development and poverty alleviation in Johannesburg, Ekurhuleni and Tshwane. The programme aims to develop social catalysts in targeted communities through the cooperative development model. In total 450 previously disadvantaged individuals drawn from 6 communities will be engaged in this initiative.

The following cooperatives exist in Gauteng through these initiatives and partnerships were developed by engaging CSO'S, CBO'S, private sector and government institutions.

Business Type	Name	Number of members	Year of Registration
Organic food cooperatives	Mvelaphanda Agriculture Co-operative	8	2004
Organic food cooperatives	Phoma mo Mama Agriculture Co-operative	11	2004
Organic food cooperatives	Mathomo Mayo Organic agriculture co-operative	6	2008
Organic food cooperatives	Etswang re shome agriculture cooperative	14	2006
Organic food cooperatives	Temo thou agriculture co operative	12	2006
Organic food cooperatives	Ever green organic co operative	8	2008
Organic food cooperatives	Amalemba agric cooperative	16	2008
Organic food cooperatives	Thabatha Ijokolakho organic agriculture cooperative	10	2008
Organic food cooperatives	Itsuseng Agriculture Co-operative	5	2008
Organic food cooperatives	Greater Midrand Agriculture co-operative	13	2008
Poultry and Agriculture	SML Poultry and agriculture co-operative	9	2007

Since the implementation of this project over 47 Co-operatives have been established of which 12 are agriculture co-operatives. Some of the important issues faced by projects on food security and agriculture are:

- The location of co-ops;
- The lack of support from the government for scaling up;
- Their focus, activities and structures;
- Their strengths and constraints of getting into markets with the private sector;
- Their capacity in relation to their key activities and expectations of them as service providers and frontline community agents;
- Their needs in terms of organisational development and governance;
- Land availability and sustainability;
- Level of education;

- Lack of start-up capital.

The primary focus of this capacity building programme is on poverty alleviation, based on the belief that sustainable development can improve the quality of life and the standard of living of the beneficiaries and their families. The key principles are self-reliance, capacity building, green transformation, equity and participation. The long-term goal is to create self-sufficient and ecologically friendly communities.

With equity being one of the principles, the local economic activities that will be structured and supported will require a business structure that embodies it. Cooperatives are therefore the preferred structure as communities and workers jointly own the enterprise. This economic model has to be integrated with the township economy, food security and poverty alleviation programmes to be successful.

3.5 Bio-mass and Energy Crops?

An important consideration with biomass energy systems is that biomass contains less energy per pound than fossil fuels. This means that raw biomass typically can't be cost-effectively shipped more than about 50 miles before it is converted into fuel or energy. It also means that biomass energy systems are likely to be smaller than their fossil fuel counterparts, because it is hard to gather and process more than this quantity of fuel in one place. This has the advantage that local, rural communities (and perhaps even individual farms) will be able to design energy systems that are self-sufficient, sustainable, and perfectly adapted to their own needs.

There is an ongoing debate around the competition between farming land for food growing and farming land for energy crops. For instance, Cornell University estimates that it takes 1.7 gallons of fossil fuels to make 1 gallon of petrol. Until fossil fuel prices rise even further, it is not economically wise to make fuel this way. It should also be recognised that, in order to produce huge amounts of energy crops like corn and sugar cane, we need to use industrialised farming methods which are not energy efficient if you take into account the entire energy life cycle of the process. Besides that, these crops are not good for soil conservation or water management, major considerations for policy makers in South Africa. It is estimated that if everyone in the US used ethanol to power his or her cars, the entire land area of the US would have to be given over to producing maize.

It is estimated that the US would require 4 times the existing capacity of its national grid to power all the cars on its roads with fuel cells, hydrogen or plain electricity

As much as biomass production can be improved and enhanced for use as a sustainable energy form, we must also recognise that it is unlikely that we can replace liquid and solid fossil fuels solely with biomass products. It will form part of an overall strategy to utilise many technologies, each having its own benefits and its own weakness. But clearly, biomass and energy crops will have a powerful and considerable impact on rural communities

when introduced properly and sustainably.

Many of the protagonists for biomass production are the same people and companies that sell chemical products for the agri business today. They push for subsidies on bio fuels and successfully stop subsidies for solar and wind energy. Of course there are some strong arguments in favour of biofuels including increasing energy self-sufficiency within the nation and an improved balance of payments due to a decrease in oil imports. But biomass will only ever provide a small amount of the existing capacity in a sustainable way. However, it is worth following up on for the rural and farming communities and as a job creation process and as part of a holistic energy programme.

A country like the United States gets 60 billion kilowatt-hours of electricity from biomass, about 2 percent of its total. It also gets over 1 billion gallons of ethanol, about 1 percent of the liquid fuel used in cars and trucks. South Africa has a small biomass contribution.

3.6 Conclusion

As human beings we need to reconsider very carefully our relationship to land and food. Land is one of our most precious natural resources, along with water, air, and energy. We so far have an appalling record over the past two centuries in the way we have treated our land. This will have to change if we are to ensure the ongoing fertility of the land for food production. We need to redefine food security in terms of availability of locally produced, nutritious and healthy food. It is clear that having lots of food in the shops for purchase will not, and has not, helped the starving millions.

The following are some policy guidelines that EcoCity supports, which could shift the balance towards our goal of locally grown, organic food available to all.

- Existing subsidies should shift to assist farmers to carry out local organic and ecological farming.
- Pesticides and chemical fertilisers should be taxed.
- Farmers who pollute streams and rivers with chemicals should be prosecuted.
- Land should be given a value at the point of sale and if a farmer reduced the fertility of the land through his/her poor practice, there should be a penalty.
- Taxes for aviation fuels should exist for the export of products that are needed locally, like vegetables, fruits and most foodstuffs.
- Major reform should be considered for international trade agreements to provide protection for local farmers and their products as well as other agricultural related products like materials.
- Energy crops should be supported through energy programmes but not for intensive industrial agriculture but for organic low input farming at a local level.
- Energy crops must be additional to food growing and not supplant it, food must always come first.
- The share of land under organic farming should increase by 10% over the next ten years.

Agriculture could provide the basis for rural transformation, particularly if we include the growing of crops like Hemp and energy crops. If we take the route of less industrialised agriculture the numbers of jobs will increase and the resultant pollution will decrease. Finally, there is increasing evidence that organic agriculture produces superior foodstuffs that are rich in cancer preventing agents. Higher protein and vitamins levels could mean more nutrition and this could very considerably impact on the health of the most vulnerable, the elderly, the young and HIV/Aids sufferers.

4. Co-operatives and Urban Agriculture in South Africa

Stephen Greenberg, Independent Policy Analyst and Land Reform Expert

4.1 Introduction: A crisis in the global agrifood system

The recent global food crisis that saw a sharp rise in food prices and a decline in the quantity of available food is merely a symptom of an increasingly unstable and insecure food system. Since the middle of the twentieth century, food systems have become increasingly entangled. This is not so much a case of symbiotic interdependence between producers and consumers globally, as it is a case of the gradual imposition of an unequal division of labour in the agrifood chain. The internationalisation of the US model of food production has carried in its wake the destruction of national and regional farming systems in other parts of the world that had been built up and refined over many centuries of human endeavour.

The contemporary capitalist food system is fundamentally premised on a fossil fuel economy: it would not survive very long without the constant use and redevelopment of pesticides, chemical fertilisers, long distance transport and capital-intensive technology. Monoculture, increasingly with genetically modified seed, dominates the production of essential grains and crops. Seed diversity has shrunk alarmingly over the past 60 years, to the extent that basic crops such as wheat are at high risk globally¹. The current energy crisis is a precursor for a similar crisis in agriculture not too long from now. Water and land have been degraded, high levels of fossil fuels are wasted to transport food around the world, plants are bred to travel well and retain cosmetic characteristics for longer at the cost of nutritional quality. All these have serious negative ecological and health impacts².

Northern governments subsidise producers in a way that allows producers to export crops for less than their cost of production. Coupled with the historical shift in the division of labour in the mid- to late twentieth century, and the devastating effects of forced structural adjustment programmes on agricultural systems in Africa, this has reduced the capacity of farmers to produce food. An export orientation to meet niche markets in the North and to secure foreign exchange with which to repay odious debt has obliterated agricultural production in Africa and other countries of the South.

The dominance of the market as a mechanism for distribution excludes those without financial resources. Since expenditure on food constitutes a larger portion of the poor's income³ compared to wealthier groups, the poor feel a sharp rise in food prices

¹ For more on the loss of genetic diversity in food crops see Fowler, C. & Mooney, P. 1996 *Shattering: Food, Politics and the Loss of Genetic Diversity*. University of Arizona Press, Tucson

² See Pfeiffer, D.A. 2006 *Eating Fossil Fuels: Oil, Food and the Coming Crisis in Agriculture*. New Society Publishers, Gabriola Island, BC

³ In South Africa, poor households spend an estimated 50-60% of their total budget on food. BuaNews Online "High food prices has left rural communities vulnerable", 8 Aug 2008
<http://www.buanews.gov.za/rss/08/08080811151006>

inordinately heavily. The welfare that is provided (whether in the form of food or cash) for ever-larger and more intractable emergency situations is not a long-term solution. One estimate has it that, in order to ensure food security, especially in the face of potential emergencies, a community should be able to provide 30% of the food required by its residents⁴. The South African commercial farming and food production system is a microcosm of the global system, with the same inherent problems imbedded in its structure: concentrated ownership of natural resources and a narrow and undiversified production base, a dependence on fossil fuels for agricultural production and distribution, concentrated ownership in the value chain that produces cartels and anticompetitive practice, declining nutritional quality of food, and the use of the market as the primary mechanism for distributing food. The contemporary food production system, globally and locally, is socially, ecologically and economically unsustainable.

4.2 What role for urban agriculture?

“A fixed money wage may offer no security at all in a situation of sharply varying food prices (even when employment is guaranteed). In contrast, a share of the food output does have some security advantage in terms of exchange entitlement” - Amartya Sen, Nobel Prize-winning economist⁵

The primary purpose of producing food is to ensure people have enough to eat. As Sen indicates, in conditions where prices are high or unstable, a share of actual production can be more valuable even than a wage in ensuring access to sufficient food. But this is only one of the benefits of engaging in food production. It can be useful to adopt a livelihoods framework as the prism through which to look at urban agriculture. If we consider that sustainable livelihoods can be realised through building and sustaining the five classes of assets available to all people (natural, financial, human, physical and social), urban agriculture can contribute to building each of these assets.

Natural assets can be built through improving the ecology by greening otherwise barren landscapes, and by giving people secure ‘use rights’ (if not ownership rights) to land, water and genetic resources. It goes beyond this, because by using natural resources for food production, stewardship is placed in the hands of the local population rather than some external agent, whether state or corporation or (wealthy) private individual. Financial assets can be built through urban agriculture because there is the potential for surplus production and hence some income generation. This is not likely to be the immediate outcome for many producers. But the potential definitely exists, especially if production continues for a number of years. On a more basic level, producing food frees up financial resources that might have been used to buy food. It reduces the expenditure on food, or alternatively allows a greater amount of food to be consumed in the household.

⁴ Pfeiffer *op cit.*, p.68

⁵ Sen, A. 1981 *Poverty and Famines: An Essay on Entitlement and Deprivation*. Clarendon Press, Oxford, p.5

Human assets will definitely be enhanced through urban agriculture. There is a positive correlation between better nutrition and educational performance, health, and the ability to manage the effects of HIV/AIDS. Urban agriculture is not necessarily a significant contributor to physical assets if we think about roads, bulk water supply or housing. However, this does depend on scale and there is likely to be some asset building, such as tools and equipment, as well as equipment in processing and storage.

Finally, and most importantly for the purpose of this seminar, social assets can be strengthened through urban agricultural production. Building other asset classes often presupposes a strong social asset base because people have to organise themselves to realise sustained gains. Urban agriculture is an arbitrary place to start from this point of view, but as good as any other place. Urban agriculture offers the opportunity to form networks, support systems, sharing and learning mechanisms, and organisation for advocacy. Indeed, each of these can enhance the ability of households to produce food for themselves. Co-operative forms of organisation contribute most to building these assets. There is a symbiotic relationship between building social assets and strengthening urban food production systems, since each one builds the other.

4.3 Urban agriculture globally

Urban food production is a growing phenomenon globally. Formal food systems – based as they are on market mechanisms – have been unable to keep up with the growth of urban populations, especially in the global South. Contemporary capitalism is not able to produce employment, and jobs that do exist are increasingly insecure and poorly paid. This has forced the urban poor, whose demand for food is not registered in the market, to find alternative ways of acquiring food. One way has been to produce food for themselves. An estimated 800 million people globally engage in urban food production. Of these, 200 million produce for the market and 150 million are full-time food producers⁶. In parts of the world, urban agriculture is an important component of the domestic food economy. In Asia, for example, corporate outsourcing has been practiced for some time in urban agriculture⁷. Twenty-five percent of vegetables consumed in Singapore are produced in urban farms⁸.

In some countries, the state has actively supported urban food production. This is not always a neo-liberal project. Cuba is a successful example, where the collapse of the Soviet Union in 1990 led to a food crisis that was resolved through urban agriculture actively supported by the state. In the 1980s Cuba imported over 50% of its food, a policy it could afford because of its favourable terms of trade within the socialist bloc. The state

⁶ Sawio, C. & Spies, L. 1999 “Towards the Establishment of a Development and Research/Training Network on Urban Agriculture for East and Southern Africa”, paper presented at the ISBRAM-FAO Workshop on Urban and Peri-Urban Agriculture, Accra, Ghana, August 2-6, p.3

⁷ Mougeot, L. 2000 “Urban Agriculture: Definition, Presence, Potentials and Risks”, in Bakker, N., Dubbeling, M., Gundel, S., Sabel-Koschella, U. & de Zeeuw, H. (eds) *Growing Cities, Growing Food: Urban Agriculture on the Policy Agenda*. German Foundation for International Development (DSE), Feldafing, p.8

⁸ Pfeiffer *op cit.*, p.71

distributed subsidised food to the population. With the disintegration of the Soviet Union, food availability declined by as much as 60% between 1991 and 1995. One response by the state was to encourage urban food production, with Fidel Castro urging that no piece of land should be left uncultivated⁹. The popular movement in urban agriculture rapidly developed with state support, creating 160,000 jobs. From almost zero in 1994, urban agriculture (organoponics and intensive vegetable gardens) yielded more than 800,000 tons of vegetables in 1999¹⁰. Havana has become one of the largest producers of vegetables in the country, with some neighbourhoods producing up to 30% of their food supply. Urban farmers, on average, also sold their produce 20% cheaper than mainstream market traders¹¹. In this case, state support for urban agriculture can hardly be reduced to attempts to prevent the population from rebelling. Indeed, urban agriculture can conceivably become part of a process of stimulating independent grassroots self-activity.

Africa has a range of different experiences with regard to urban agriculture. In some cities – for example Dar es Salaam in Tanzania – urban farming is accepted at a policy level but government support is limited¹². In other cities – such as Accra in Ghana and Cairo in Egypt - there is no explicit policy and although urban agriculture is practiced it is not significant¹³. In yet other cities – such as Nairobi in Kenya – regulations forbid urban cultivation but, because it is extensive in practice, the policy is to ignore it¹⁴. In other places, urban food producers have to fight for and defend urban food production practices against the state. In Zimbabwe, urban agriculture initially received a boost in the 1980s through the government’s promotion of co-operative formation. However, support was not forthcoming and the government increasingly viewed urban agriculture with suspicion, partly because it was seen as detracting from the issue of rural land redistribution¹⁵.

Many different organisational forms have accompanied urban agricultural production across the world, including farmers’ markets, co-operatives and community-supported agriculture (CSA). A basic typology of orientations of urban producer organisations is¹⁶:

- Socially oriented - mainly urban poor, doing survivalist or subsistence production;

⁹ Novo, M.G. & Murphy, C. 2000 “Urban Agriculture in the City of Havana: A Popular Response to Crisis”, in N. Bakker *et al* (eds), p.330

¹⁰ Companioni, N., Hernandez, Y.O., Paez, E. & Murphy, C. 2002 “The Growth of Urban Agriculture”, in F. Funes, L. Garcia, M. Bourque, N. Perez & P. Rosset (eds) *Sustainable Agriculture and Resistance: Transforming Food Production in Cuba*. Food First, Oakland, California, pp.221 & 228

¹¹ Novo & Murphy *op cit.* 344

¹² Jacobi, P., Amend, J. & Kiango, S. 2000 “Urban agriculture in Dar es Salaam: providing for an indispensable part of the diet”, in N. Bakker *et al.* (eds)

¹³ Armar-Klemesu, M. & Maxwell, D. 2000 “Accra: urban agriculture as an asset strategy, supplementing income and diets”; Gertel, J. & Samir, S. 2000 “Cairo: urban agriculture and visions for a ‘modern’ city”; Mbaye, A. & Moustier, P. 2000 “Market-oriented urban agricultural production in Dakar”, all in N. Bakker *et al.* (eds)

¹⁴ Foeken, D. & Mwangi, A. 2000 “Increasing food security through urban farming in Nairobi”, in N. Bakker *et al.* (eds)

¹⁵ Mbiba, B. 2000 “Urban Agriculture in Harare: Between suspicion and Repression”, in N. Bakker *et al.* (eds), p.295

¹⁶ Wilbers, J., van Veenhuizen, R. & Castro, C. 2007 “Strengthening Urban Producers’ Organisations”, *Urban Agriculture*, 17, pp.1-4, 7

- Economically oriented - commercial structures to support input supply and marketing of a well-established base of producers;
- Politically oriented - set up mainly for policy influence and access to resources.

These types can also be mixed together and the ideal situation would be to have the social, economic and political elements represented in any organisational form. But the specific context, the class base of the producers and the immediate and medium term challenges will all determine what form organisation will take. The co-operative form functions well in many countries, but it is important to understand the particular histories and cultures of struggle and organisational forms as a background to the places where it has been successful. It is not a question of just saying, 'we want a co-operative form' without seeing how the vision inherent in that connects with the lived experience of the producers and their communities. I will return to this question in the South African context.

4.4 Urban agriculture in South Africa

"Each family should have a vegetable garden. Let us help one another to grow our own food. In areas where the land lies fallow, let us mobilize communities to produce food for themselves" - Lulu Xingwana, Minister of Agriculture and Land Affairs¹⁷

Under apartheid, urban agriculture was not supported and urban food production consequently made a very limited contribution to domestic food supply, certainly in terms of the formal market. In the post-apartheid era, there is explicit endorsement from high levels of government that direct production of food, including urban agriculture, can mitigate food insecurity. The major metropolitan municipalities all have urban agriculture support programmes, even though these are small and not necessarily appropriately focused (more below). This positive climate enhances efforts to support urban food production and food gardens. However, practical support remains limited. Part of the problem is the neo-liberal spatial planning frameworks at a macro-level that makes access to land and water very difficult for the urban poor. So, while government expresses its support for local food production, access to resources, space and support to carry this out in practice are not forthcoming. This is partly caused by a disjuncture between the political and operational levels of government. It is also partly a lack of co-ordination at the level of vision and policy that allows some to fervently push a particular line, but without combining with those who have to make that a reality.

There has been no systematic quantification of the extent of urban agriculture in South African cities. Government programmes are quantifiable, but they are small, and constitute only a small part of the food production that does happen in cities. Studies in the early 1990s in KwaZulu-Natal and around Durban found that 25-30% of households on the urban fringe were engaged in some cultivation¹⁸. Anecdotally, one can travel through informal settlements and townships around Gauteng and see significant evidence

¹⁷ Speech at Gauteng Food Summit, July 2008

¹⁸ Rogerson, C. 1996 "Urban Reconstruction and Urban Cultivation in South Africa", (draft copy), p.9

of food gardens. I would suggest that much of this for home consumption, with a very small amount for sale.

There are three main approaches to food production in South African cities: homestead gardens with limited support; school and clinic gardens; and sponsored commercial production. Homestead gardens are fairly widespread but very informal. Some support organisations, like Food Gardens Foundation in Gauteng and Abalimi Bezekhaya in Cape Town, do provide basic training, and in some instances government departments do provide once-off training and a starter pack (seeds, tools, fencing). But generally speaking, these gardens are disconnected from one another, individualised and lack sufficient inputs (land, water, seed, tools, training). One notable aspect of these gardens is that they generally start through the initiative of the producers themselves. That is a very solid base to work from. But interventions must be participatory in their planning and execution, and must really add value for the participants, otherwise they will fail.

School and clinic gardens are also fairly widespread. They have the advantage of greater access to land and water, and of a greater potential for collective production (which can also be a serious weakness in a context of a lack of systematic organisational development support and training - finances, leadership, facilitation skills etc). These gardens also play an important role in educating others in communities about the possibilities of local food production. A lack of clarity of objectives can make these gardens unsustainable, especially when government departments are sponsoring their work. Participants are expected to provide produce for free to the sick or to school children in exchange for the access they have to the land and water. On the other hand, however, many of the gardens are expected to become economically self-sufficient within a few years - while they are giving away their produce for free. It is one of the fundamental weaknesses of the project approach which mixes welfare and income-generating objectives, and which only provides temporary support to producers.

Intermediate between these gardens located on the property of state institutions are those with a similar character but that are on unused land. These are often collective projects that aim to produce for own use and sale. They are sometimes supported by the private sector or government departments or the municipality. Lack of access to water, theft and security issues, lack of access to markets and organisational challenges are some of the obstacles to success here. Secure tenure is also an issue.

The type of urban (or more accurately, peri-urban) food production favoured by government and the private sector is commercially-oriented niche production with fairly high start-up and input costs. While people should not be denied the opportunity to participate in these kinds of projects, they tend to be unsustainable for a number of reasons. Selection of members is rarely the result of people having worked together for long periods in the past. This creates huge challenges from the point of view of internal cohesion. In many of the projects, service providers do all the work of finding markets, but do not necessarily transfer this expertise to members. Above all, these projects only benefit a small group of people. They are often located outside the settlement from where people come and there is limited interaction with other citizens. It is hard not to see these

projects as privatisations of public resources. Many of them do not survive beyond the initial injection of cash and support. As in other parts of the world, financial management, organisational development and leadership skills are key challenges.

Various levels of government support all these types of projects, but most resources go to supporting the bigger commercial ones. Homestead and school/clinic gardens receive limited support. The people tasked with providing support often do not have the appropriate skills - many are social workers who are thrust into providing support to food producers without any knowledge of food production. Chronic staff shortages exacerbate this. Support to urban agriculture is seen as support to 'projects' with a short-term period of support. But ongoing extension, sharing and learning support is required over time for urban agriculture to be really successful. There is no systematic extension system for urban agriculture at present. Individual gardens find support wherever they can, or do without.

Civil society support organisations are few and far between. The best of them, like Abalimi Bezekhaya¹⁹, provide integrated services to support projects, provide resources and training, support organisation building, do research, and support the formation of networks of producers. However, their reach is limited and their efforts are concentrated in a number of townships around Cape Town. Others focus their efforts on training or networking/sharing, advice etc. But mostly support organisations only have relatively local reach. What remains at the level of vision is a national umbrella of urban food producers.

Food producers themselves are heavily reliant on external service provider-type organisations to make links with other producers. Here and there, there may be small networks of producers, but this is very limited in scope. We need a better understanding of what the factors are that limit the expansion of urban producers' organisations in South Africa. Probably of fundamental importance is the lack of belief that producing vegetables at home can improve livelihoods to the extent that it is worth the effort. Lack of land and water, concentration in the agro-food chain, and a perception of agriculture as an inferior activity all contribute to stifling production and hence organisation.

4.5 Co-operatives and Urban Agriculture in South Africa

Internal democracy is probably the critical factor in building organisation, while working towards a long term vision of collective action based on solidarity, with organisation driven by producers.

The role of co-ops is not predetermined, and must be contextualised. As already mentioned, the development of co-operative forms of organisation must link in to the history of organisation that people have lived. Sequencing the process of organisation building is also important. It is likely that co-operative forms may be appropriate in some aspects of urban agriculture now, and some might only be appropriate when urban agriculture has matured further.

¹⁹ www.abalimi.org.za

We can consider three main segments to the value chain: i) input supply (land, water, seed and genetic material, tools, labour, knowledge of production); ii) production (growing, harvesting, processing); iii) distribution (marketing) and consumption. The first question we should ask is, what value will organisation add to the existing efforts of producers? Following that, we would want to ask what the most appropriate organisational forms are to enhance the efforts of producers.

In the long term, organisation across the three main nodes of the value chain could add value to producers' efforts. In input supply, it can reduce the cost of inputs, enhance learning and sharing between producers and encourage the formation of upstream enterprises that support urban agricultural production. A co-operative form is appropriate since it locates decision making, control and lines of accountability within the body of producers. Credit unions or some type of financial co-operative is probably essential in the long run, though this will take time to establish. One of the key lessons from other parts of the world is that self-reliance and mobilisation of members' resources is an essential condition for group development and needs to be pursued from the beginning²⁰. When financial resources are directly controlled by those who contributed to them and will be using them, the system has a greater chance of being sustainable.

A very important aspect of input supply that also relies on some form of organisation is extension support. Given the inability of government to provide this service consistently or even at all, producers will need to organise their own system of technical support. A community-based worker (CBW) system is one possible model, where a member of a producers' collective or network is selected by members to get training on how to provide technical support. This CBW then provides support for her network. This model is replicated across producer groups. CBWs attend a forum at a higher geographical level to share and learn from one another, and to identify common issues for joint action. Government has an important role to provide technical backstopping for the CBWs. But instead of one extension worker trying to provide support to 200 individual gardens, that worker can meet with a group of 10 CBWs and provide concentrated support. It simultaneously reduces the cost to government (though CBWs should probably receive stipends and/or some form of payment from network members, and government would also have to ensure appropriately skilled extension officers are available to provide support to the CBWs), while not allowing government to absolve itself of its responsibility to provide support, and also roots the process in the community of producers.

Co-operative organisation in distribution can also reduce costs and make access to markets easier. A group of producers can pool their products and find larger markets that are more stable and pay better. They can also pool resources such as trucks, processing and storage facilities that are not cost effective for individual producers, especially if producing at a small scale.

²⁰ Ruggieri, C. 2007 "Towards a Better Understanding of Low-Income Producers' Organisations", *Urban Agriculture*, 17, p.18

Production co-ops may work in specific cases but at present this shouldn't be the emphasis. If most producers who initiated their gardens themselves are doing homestead/backyard gardens, it would be best to start from this base: individual production units, but building networks between them for learning and sharing, providing extension, sourcing inputs, processing and distributing their products. Production remains individualised, but support functions are all collective. This would be a step towards a vision of collective production, which can only be successful after people have worked together over a long time. Enforced collectivisation of production has seldom succeeded, including in South Africa.

A strong link between the co-operative movement and urban agricultural producers would be highly beneficial. Producers need assistance with organisation. But organisation itself is only a means to an end. As the organisation is being developed, there must be tangible benefits for the additional effort required by producers. This means linking co-operative support organisations and urban agriculture support organisations. Government has a very important contribution to make, both in spreading the message of the importance of food production, and in working with the co-op movement and urban agriculture support organisations to develop effective systems and mechanisms to ensure that urban food production spreads rapidly and in a sustained way. This will require some resources and some restructuring of modes of delivery, but mostly it will require commitment and political will.

5. Summary of Main Discussion Points

The deliberations at this seminar raised the following important points:

- It was important to recognise the existence of different approaches to food security. Some stressed cultural factors, others emphasised asset building and others sustainable development. At the same time a cooperative approach to agriculture and food production harmonises and intersects with these different perspectives;
- ‘Food security’ is a euphemism for hunger and in the context of the ecological crisis and the crisis of market led development, food security had to be understood as an imperative and approached as such as part of national policy;
- The extent and scale of urban agriculture was still not fully understood. There was a need for further research on food gardens (household and community) to assist policy formulation and the development of sustainable urban agriculture. The Ecocity experiences assist in demonstrating the potential of a cooperative based model that could increase food production at a city wide level;
- Given the empirical realities it was also felt that cooperative models should not be imposed but should link with and strengthen existing food production initiatives where they exist. This approach emphasises an important role for cooperative development based on contextual conditions. If community food gardens have taken off, this might necessitate a cooperative intervention for input supply and for marketing, for instance. The cooperative option must be guided by the realities on the ground and should aim to compliment existing efforts. On the other hand, if household food production seems to be the pattern then a cooperative option suitable to support such a pattern needs to be devised.
- The cooperative approach can certainly assist subsistence urban agriculture, but this does not mean that these practices will generate the necessary resources to overcome poverty. Rather, cooperative based food production in this context should be understood as supplementing other sources of relief for households. In the current context the use of cooperatives even in these contexts should be understood as important.
- Commercial urban agricultural production also provides opportunities for cooperative models and approaches. In such contexts cooperatives can assist either with supply of inputs, production and/or with marketing.

- The seminar did not tackle the relationship between food production and rural development sufficiently and it was generally agreed that a follow up seminar should be hosted to look at the food production link with rural development.