Chapter 4

Urban Agriculture Projects in Khayelitsha

This section discusses seven case studies of gardening groups in Khayelithsa. The information included in each case studies refers to project establishment and membership, motivation, living and strategies, livelihood outcomes and assets, access to resources and natural capital, support service, skills, crops grown, problems experienced, marketing strategies and successes and failures.

4.1 Umanyano Lomama 'Woman's Unity': Site 6 on Figure 2

4.1.1 Establishment and membership

Mavis, the project leader told a very sad story: "One of our community members sexually abused (raped), molested a kid because she was asking for food. If the child is hungry and is asking food they sleep with them before they can give them food." The group consists of 13 women with ages ranging between 40 and 60 years. All the group members come from the Transkei and stay in Town 2 informal settlement. Before one becomes a member one has to be a volunteer for some time without paying a joining fee. The respondents mentioned that some members pull out of the project because of unrealistic expectations but another three members joined them. As one respondent commented: "Community residents join the project with the hope that they will be employed and get a salary at the end of the month."

4.1.2 Motivation

The main motive for starting the community food garden is to access food and generate money. They also started a school vegetable garden to improve the nutritional status and consequently the health of school children and to instil the habit of growing vegetables. Children at Chuma Primary School were stealing food from their classmates and money from their teachers. The project is feeding 98 children daily from the food they grow in their gardens.



Plate 1: Womens Unity and school children

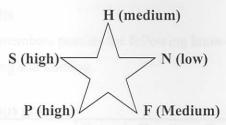
4.1.3 Living and strategies

The members are gardening to access food and cash income. They sell vegetables for R2.50 a bunch of spinach and earn R40.00 to R50.00 a day and record the sales. During the summer season total income received from selling vegetables per month ranges from R1 000 to R1 300. During the winter season the total income received from selling vegetables per month ranges from R300 to R400. Each individual member gets a R100 share a month from the income generated from selling vegetables. They also self-consume from the garden. Sales occur on the project site with buyers coming to the project. This saves the producers transport costs to the market and also saves on storage costs as the produce is harvested when the consumer needs it. Respondents are also involved in informal trading of sheep's heads and trotters and one member is selling African beer. They have crèche at the church with soup kitchen (community services). The parents of the children in pre-school pay R40 a month per child and R50 for an infant in nappies. They pay themselves with money earned from pre-school. As one respondent commented: "We are flexible here, some parents do not have money to pay us."

4.1.4 Livelihood outcomes and assets

- Food supply/Domestic food security
- · Solidarity and aid
- Cash income
- Sustainable use of natural resource

As one respondent commented: "The kids at school were suffering from sicknesses such as malnutrition and kwashiorkor, but now they are healthy and teachers say they are performing very well at school."



In this diagram, asset-base are being analysed in relation to the projects where H is human capital, S is social capital, P physical capital, F is financial capital and N is natural capital (See Figure 1).

The main factor behind the success of this project is the strong social capital (solidarity) amongst members, which is important in gaining access to other forms of capital.

4.1.5 Access to resources and natural capital

They have one hectare of school land and two hectares from the church. The soil quality is extremely poor, requiring manure and compost. The problems relating to the soil include poor fertility, rapid evaporation and wind blowing the sand away, resulting in exposed plant roots. Water is obtained from the school tap and municipal water connection at the church. They pay R100 a month for water to the church but they claim that there is some degree of flexibility because the church pays sometimes. Abalimi Bezekhaya also installs drip irrigation equipment. The use of drip irrigation instead of sprinkler reduces loss of water before it reaches the bed and moreover strong wind increase unnecessary loss of water. Watering of plots is done by hosepipe. The women do not currently recycle grey water because they perceive grey water as dirty, containing impurities and unsafe to plants.

4.1.6 Support service

The Equal Opportunity Foundation donated a tractor and implements (fork, spade, wheelbarrow, rakes, hosepipes). Food Gardens Foundation gave them paint for the preschool. Abalimi Bezekhaya are supporting them with seedlings, irrigation equipment and training but the members are dissatisfied with Abalimi's support because of jeopordized social capital. A three-day course of Abalimi Bezekhaya covers the following subjects:

garden design, trench bedding, soil preparation, compost making, seed sowing, seed transplanting, watering, vegetable care and maintenance and pest control. This project is sustainable and can operate without the support of Abalimi Bezekhaya.

4.1.7 Skills

The group members possess the following know-how: gardening, child minding, domestic work, sewing and knitting.

4.1.8 Crops grown

Summer	Spinach, Tomatoes, Green pepper, Beetroot, Carrots Spinach, Cabbage, Lettuce, Onion				
Winter					

4.1.9 Problems experienced

Social capital is jeopardized by Abalimi Bezekhaya and is considered to be the main drawback limiting the success of the project. As one respondent commented: "Abalimi Bezekhaya are using us when they need funding and they give us 10 percent of money received from donors. We want funding to come straight to us not to Abalimi." They also complained about the lack of human capital such as follow-up training from Abalimi Bezekhaya. The respondents also mentioned that natural capital such as insufficient supply of water and shortage of land as major problems. The respondents mentioned that water pressure is low at Chuma Primary School because the school is watering their flower garden and the school children also drink water from the same tap.

4.1.10 Successes and failures

This is the most remarkable group of gardeners in Khayelitsha because of their independency, initiatives and hardworking. The project is well established and is capable of achieving greater yields, positive outcomes such as food security and income. Group members have made gains in fighting malnutrition, hunger and starvation amongst school children. Their main strength is the strong social capital (solidarity) amongst themselves, their dedication and the fact that they serve as an inspiration to other urban agricultural projects around Khayelitsha.

4.2 Esam Esakho isitiya 'Yours and My Garden': Site 3 on Figure 2

4.2.1 Establishment and membership

The project began in September 2000. It consists of nine women and two men. There is no joining fee but one has to be an integral part of the community in order to become a member. Members come from the Eastern Cape, particularly from the Transkei, with only one member from the Ciskei. They are residing at Macassar informal settlement and they didn't know each other before they formed a group. Macassar Development Forum (MDF) motivated people or volunteers to come together and start vegetable gardening at Impendulo Primary School.

4.2.2 Motivation

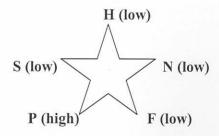
The main objective is to generate cash income and food for unemployed adults. As one respondent commented: "There are no jobs and we are suffering due to money shortages. We want to garden and sell vegetables to the local people and get money." They also voluntarily give vegetables to the people infected with HIV/AIDS and TB at the clinic.

4.2.3 Living and strategies

- Welfare grants dependent on pension money for their living
- Off farm income Informal trading of second-hand clothes, selling traditional beer, baking and sewing are livelihood strategies of the project members
- Farming income selling of vegetables

4.2.4 Livelihood outcomes and assets

- Food and money
- Increased well being



Low levels of social capital are confirmed at this project because the project members are highly dependent on Abalimi Bezekhaya for support resulting in an unsustainable project that can collapse in future especially if Abalimi Bezekhaya were to withdraw support.

4.2.5 Access to resources and natural capital

The project is situated on the grounds of Impendulo Primary School. The soil quality at the school is poor, requiring introduction of compost and manure. Water is obtained from the school tap. Currently they do not pay for water, the school is probably responsible for the payment of water. Watering of plots is done by hosepipe. Abalimi Bezekhaya also installs drip irrigation equipment. The use of drip irrigation instead of sprinkler reduces loss of water before it reaches the bed and moreover strong wind increase unnecessary loss of water. The group does not recycle greywater in the garden because they perceive soap water to be bad for plants.

4.2.6 Support services

Abalimi Bezekhgaya provide seedlings, irrigation equipment, and training courses. A three day course of Abalimi Bezekhaya covers the following subjects: garden design, trench bedding, soil preparation, compost making, seed sowing, seed transplanting, watering, vegetable care and maintenance and pest control. If Abalimi Bezekhaya were to collapses or withdraw support the project will also collapse because the members are highly dependent on Abalimi Bezekhaya (low social capital) and moreover gardening projects cannot be sustainable on their own without the introduction of income generating activities such as chicken farming, sewing, beadwork.

4.2.7 Skills

The group possesses the following know-how: gardening, baking, sewing, knitting and beadwork.

4.2.8 Crops grown

Summer	Spinach, Tomato, Green pepper, Beetroot, Carrots, Turnip, Parsley, Chinese			
	Spinach, Egg-plant, Maize, Lettuce, Cabbage			
Winter	Spinach, Chinese Spinach, Beetroot, Cabbage, Lettuce, Onion, Carrots			

4.2.9 Marketing strategies

They sell spinach to local people for R2.00 a bunch of 20 leaves. Sales occur on the project site with buyers coming to the project. This saves the producer transport costs to the market and also saves on storage costs as the produce is harvested when the consumer needs it.

Abalimi Bezekhaya assist with marketing to the Oude Moulen organic market in Observatory. Abalimi Bezekhaya puts it: "Each member is getting about R100 per 100 m^2 after cost, in his or her pockets or on their tables. This is a lot of value for penniless people."

The project members also sell Chinese spinach to Chinese restaurants in towns. As one respondent commented: "The people who work in offices and towns are working for us because they come and buy vegetables from our project." The income generated from vegetables is collectively saved into the project's bank account.

4.2.10 Problems experienced

Social capital is the major problem in the project. The members are highly dependent on Abalimi Bazekhaya for technical advice and inputs. They are unable to plan for themselves without the help from Abalimi Bezekhaya. Although they are skilled in terms of gardening, they achieve lower yields because of greater dependency (low social capital) on Abalimi Bezekhaya. Natural capital, such as limited supply of water, is critical according to the respondents. There is also low water pressure at the school because of usage of water by school children.

4.2.11 Successes and failures

They voluntarily support people affected with HIV/AIDS and TB. The main drawback is their dependency on Abalimi Bezekhaya. They are unable to plan for themselves without the help from Abalimi Bezekhaya.

4.3 Quaker Peace Garden: Site 9 on Figure 2

4.3.1 Establishment and membership

In 1991 the Quaker Peace Center NGO approached the United Dutch Reformed Church to request a portion of land on the church premises for vegetable gardening. An agreement was reached and over time the garden has grown to include much of the available land on the property, including most of the area surrounding the minister's mission.

Nokwanda started the project in 1991 with 113 members. Currently there are 73 members. Sylvia is in charge of the project. The membership fee is R10.00 and is collectively deposited in their bank account. Membership related income return is quite reasonable because of profitable farming activities. The group had a list of people who want to join the project and if one of their members retires because of old age or sickness they take number one on the list. Members didn't know each other before they joined the group. Most of the gardeners are coming from the Eastern Cape, particularly from the Transkei. The respondents speak isiXhosa and have some degree of farming experience. Some of the respondents have backyard gardens at their homes. Currently they are residing in Khayelitsha at sections A and E.

4.3.2 Motivation

- Food and cash
- Social interaction
- Pleasure

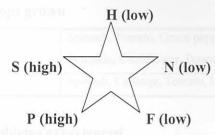
4.3.3 Living and strategies

Most of respondents are old and dependent on welfare grants. They each receive R570.00 per month as a pension grant. They also sell their produce to local people at the cheaper price of R2.50 than the market price of R3.00 to R4.00. The people who buy vegetables from Epping or Phillippi market every Tuesday, those having stands or spaza shops sell vegetables and fruit at higher price of R3.00 to R4.00 than vegetables produced by community food gardeners. The crop, most commonly sold by community food gardeners is spinach for R2.50 a bunch. As one respondent commented: "We get money from our hands." Sales occur on the project site with buyers coming to the project. This saves the producer transport costs to the

market and also saves on storage costs as the produce are harvested when the consumer is in need of them.

4.3.4 Livelihood outcomes and assets

- Increased well-being
- Reduced vulnerability
- Community binding
 - Sustainable use of natural resources



The main strength behind the success of this project is the strong social capital (social interaction and enjoyment of gardening activities) amongst the members. Good social capital in the form of co-operation and trust result in gaining of other forms of capital required as a means of living.

4.3.5 Access to resources and natural capital

Quaker Peace Centre approached Dutch Reformed Church to use a portion of land for vegetable growing, including some of the area surrounding minister's mission. An agreement was reached and the community residents were given land for vegetable cultivation. The soil is very sandy. Respondents are using underground water for watering their vegetables. Water is obtained from a borehole, constructed by Quaker Peace Center at the cost of R17 500. An electric pump is used to pump water from the borehole. The Quaker Peace Centre pays for the electricity. All the members pay R5.50 each per month to cover the cost of water. There is also a municipal water connection which supplies water to the minister's house and is sometimes used by gardeners.

4.3.6 Support services

Seedlings are obtained from the Quaker Peace Center on a seasonal basis, depending on the size of the garden. The respondents pay R2.50 for 10 seedlings. At the local shops the price is R1.50 for 30g of seeds and at Shoprite or Pick'n Pay the price of seeds is R10 a packet. They

also pay R5.50 for a plastic bag of manure at the Quaker Peace Centre, which also supplies them with a bakkie of manure, approximately R170 a load. There is also a small nursery where gardeners can obtain seeds and seedlings as well as manure. The nursery charges very little or sometimes nothing when gardeners have no money.

4.3.7 Skills

The group members are old and possess gardening skills.

4.3.8 Crops grown

Summer	Spinach, Tomato, Green pepper, Egg-plant, Beetroot, Maize, Beans, Carrots,			
	Pumpkin, Cauliflower, Potatoes			
Winter	Spinach, Cabbage, Tomato, Lettuce, Onion			

4.3.9 Problems experienced

This project, unlike the other case studies profiled in this report, is not encountering major problems because of social cohesion amongst the members.

4.3.10 Successes and failures

The project is going very well because of strong social capital (solidarity, social interaction and enjoyment of gardening). They achieve greater yields and positive outcomes such as food security and income because of their commitment. These pensioners supplement their pension money with gardening.

4.4 SCAGA (Siyazama Community Allotment Garden): Site 8 on Figure 2

4.4.1 Establishment and membership

Siyazama Community Allotment Garden started in 1997 by Star Black and Cristina Kaba. The project is located on powerline servitude land at Macassar, Section 39, Village 4, (Erf no. 39236). Madlami puts it: "There was a fight between the community and Lingulethu West Transitional Council but finally they agreed to give us the land but on condition that we won't cultivate close to electric poles and we feel secure on land because there is no other alternative use of it."

SCAGA consisted of 30 group members first by the time it was started of whom two were men. However, conflict erupted (low social capital) between group members and resulted in change in membership composition. The main cause of conflict was corruption between the members with regard to misappropriation of funds, as the result they ended up taking garden tools and sewing machines to their houses. As one respondent commented: "One man was coming on the project site during Saturdays to sell vegetables and take the money for himself to buy beers." The other reason for a change in membership composition is that people join the project with the hope that they will be employed and get a salary. Individual gardeners in SCAGA are involved in community food gardening for a while and then move to something else. The possible reasons for individuals leaving are high expectations from the gardeners, hard work from trench digging, low yields and finding a job. As one respondent said: "Jealous amongst us results into people leaving the project".

During surveys nine (second group) members were interviewed but at the beginning of 2002 another 30 (third group) members joined the project. All the members are not residing in the area surrounding the project site. They are residing in Harare and Town 2. Those who are staying near the project do not want to join because they claim that they started it and they experienced a lot of problems. Everybody is welcome to join the project and the membership fee is R50 collectively deposited into their savings account. Membership related income return is not reasonable because of lower yields.

4.4.2 Motivation

- Supplement income and to access food
- Selling vegetables

Different motivations exists between the members, with some members joining SCAGA as a means of access to employment and to get salaries, while others are actively participating to access food and others are just followers, expecting that anything might happen.

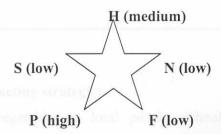
At SCAGA there is diversity among the members of the group in both their level of education and their expectations from the project. The educated tend to be dominant and have a final say in decision making regarding saving of money and managerial tasks such as division of labour. The educated members responsibilities are record keeping, taking minutes of the meetings and banking and are less interested in practical activities of gardening such as weeding, irrigating, planting, etc.

4.4.3 Living and strategies

- Welfare grants dependent on pension money for their living
- Off farm income Informal trading of secondhand clothes, remittances, selling traditional beer, baking and sewing
- Farming income selling of vegetables

4.4.4 Livelihood outcomes and assets

- Food security and income
- Sustainable use of natural resources



At Siyazama Community Allotment Garden there is low level of social capital because of conflicts and unrealistic expectations from the project and this can lead to the collapse of the project.

4.4.5 Access to resources and natural capital

The Siyazama Community Allotment Garden is located on power-line servitude land at Macassar informal settlement. Lingulethu West Transitional Council reached an agreement with the community residents to use land for gardening but there was no formal lease agreement between the parties involved. The soil at SGAGA is very sandy requiring soil improvers. Watering of plots is done by sprinklers and hosepipes. Abalimi Bezekhaya also installs drip irrigation equipment. The use of drip irrigation instead of sprinklers reduces loss of water before it reaches the bed and moreover strong wind increases the loss of water. Abalimi installed a well point to supplement municipal water. The well point at SCAGA is driven by an electric pump.

4.4.6 Support services

Abalimi Bezekhaya supplies gardeners with seedlings, manure and bone meal. The gardeners receive training from Abalimi Bezekhaya. A three day course of Abalimi Bezekhaya covers the following subjects: garden design, trench bedding, soil preparation, compost making, seed sowing, seed transplanting, watering, vegetable care and maintenance and pest control. SCAGA could collapse without the support of Abalimi Bezekhaya because of low social capital and absence of income generating activities.

4.4.7 Crops grown

Summer	Spinach, Cabbage, Lettuce, Tomato, Egg-plant, Green pepper, Beans, Onion, Potatoes,				
	Beetroot, Carrots, Turnip, Pumpkin, Maize				
Winter	Spinach, Tomato, Turnip, Cabbage, Lettuce, Potatoes, Onion				

4.4.8 Marketing strategies

They sell vegetables to local people, schoolteachers and Rastafarians. In contrast to Kleynhans and Myburgh (1992) who said that marketing of agricultural produce poses no problem, they said marketing opportunities in Khayelitsha and Driftsands are unlimited. Abalimi Bezekhaya (2001) also put it: "there is no lack of market for high quality vegetables." Evidence from the surveys shows that marketing is a problem for the gardeners. The respondents mentioned that they give their produce to the community members free of

charge especially if the communites and vegetarians are not buying from them. As one respondent commented: "Last season we had a surplus of tomatoes and we ended up giving to the community for free because there was no place to sell and it was rotten." Due to fact that marketing is a problem Abalimi Bezekhaya assist them with transport and take vegetables to Constantia for marketing day. They also assist with the marketing of vegetables to the Oude Moulen organic market in Observatory. The most common crops sold are spinach and green peppers. Sales also occur on the project site with buyers coming to the project. This saves the producer transport costs to the market and also saves on storage costs as the produce are harvested when the consumer is in need of them.

4.4.9 Problems experienced

As already highlighted, group conflict is the major problem. These problems might be caused by unnecessary expectations of the members, corruption and division of labour.

4.4.10 Successes and failures

The main strong potential of the project is that it managed to secure funds from donors. Abalimi Bezekhaya had invested a lot of funds in SCAGA in order to be sustainable, but today the project is still unsustainable, draining or mining funds from Abalimi Bezekhaya.

The project is not capable of achieving greater yields because people join the project as a means of access to employment and to get salaries and as a result they come and leave the project because of high expectations. Jealousy amongst the members and working in groups weakened the success of the project because some people are lazy. Fieldwork confirmed that there is a strong preference for gardening on an individual basis.

Eden Garden: Site 2 on Figure 2

4.5.1 Establishment and membership

4.5

The group was initiated in 1998 by France Mxokozeli (center) in plate 2. The project was formed by 20 men who had individual plots in the bush outside Khayelitsha and they decided to form a group.



Plate 2: Eden Garden

All the members are men living at Site B in sections R and L informal settlements. Although they are staying at Site B, the place of origin is Eastern Cape particularly from the Transkei and Ciskei. The members are mostly young to middle aged. They intend including women but the project is located in the bush. Mbhele commented: "The women have a fear of rape in the bush". The membership fee is R25 and is deposited into their savings account. Membership related income return is not reasonable because of unprofitable farming activities.

4.5.2 Motivation

- Income generation
- Access food
- Job creation

France put it: "I came from Eastern Cape in 1975 to search for a job in Cape Town. I sat and waited for a job but there was nothing coming and I began growing vegetables in the bush. I inspired other males to come and join and they came."

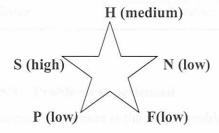
As one respondent commented: "There is no food in our houses so we want to feed our children." As another respondent commented: "Pick n' Pay is selling plastics not food so we want to produce fresh vegetables and not buy from expensive Pick n' Pay. Our dream is to become farmers not gardeners so that we can market our produce and also create jobs for ourselves."

4.5.3 Living and strategies

They are dependent on part- time jobs ranging from construction work, painting, brick making, fishing and metal work and earning R300 to R400 a month. Some of the respondents are dependent on disability grant of R570 per month.

4.5.4 Livelihood outcomes and assets

- Improved food security
- More income
- Increased well-being



In this project social capital is high, but the problem is low physical and natural capital. Insecure tenure and scarcity of water are the major drawbacks limiting the success of the project.

4.5.5 Access to resources and natural capital

As already mentioned the project is located outside Khayelitsha in the bush on unauthorized land. Water is obtained from the dam constructed by the members. Watering of plots is done by hand using buckets.

4.5.6 Support services

Abalimi Bezekhaya normally supports women growers but as from 1999 they have provided the Eden group with inputs, training and market support. The training covers the following subjects: garden design, trench bedding, soil preparation, compost making, seed sowing, seed transplanting, watering, and vegetable care. If Abalimi Bezekhaya could collapses or withdraws from providing support the project will fall down because gardening project cannot be sustainable on its own without the introduction of income generating activities such as chicken farming and woodwork.

4.5.7 Skills

The group members posses the following know-how: fishing, brick making, painting, candle making, washing basin and steel buckets making.

4.5.8 Crops grown

Summer	Spinach, Cabbage, Lettuce, Egg-plant, Green pepper, Tomato,		
	Pumpkin, Potatoes, Maize		
Winter	Spinach, Potatoes		

4.5.9 Problems experienced

Insecurity of tenure is the major problem for these gardeners. The land belongs to the Council of Tygerberg. They need more land for farming livestock and gardening. Insufficient supply of water is also a major problem mentioned by the respondents.

4.5.10 Marketing strategies

They sell vegetables to the local people. If they sell at the project site a bunch of spinach is R1.50; outside the project site the price is R2. Abalimi Bezekhaya are also helping with marketing to the Oude Moulen organic market in Observatory. The most common crop sold is spinach.

4.5.11 Successes and failures

The main drawback towards the success of the project is the insecurity of tenure. The members lack motivation as they have a fear of being evicted. The land belongs to the

Council and there is no formal agreement between the two parties.

4.6 Nomsa Maphongwane: Site 4 on Figure 2

4.6.1 Establishmemt and membership

The project began in May 2001 at the initiation of Cristina Kaba. The project is situated on the grounds of Nomsa Maphongwane Primary School in Khayelitsha and is maintained by five men and two women. Only interested and motivated people are allowed to be members. To become a member each individual pays a R100 joining fee, and after three years they pay another R100. Membership fee in relation to income return is quite reasonable because of profitable farming activities. Before forming a group they didn't know one another. All the members originated from the Eastern Cape, particularly from the Transkei and Ciskei. Currently, they are residing at Makhaya and Macassar informal settlement.

4.6.2 Motivation

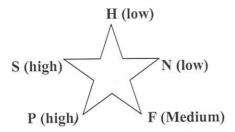
- To generate food and cash
- They also voluntarily support people affected with HIV/AIDS with vegetables

4.6.3 Living and strategies

The members are engaged in informal activities such as gardening, knitting, informal trading of meat, domestic work and they receive remittances.

4.6.4 Livelihood outcomes and assets

- More income and food
- Sustaining natural resources



Social capital is high and the project is successful beccause of high returns from the project.

4.6.5 Access to resources and natural capital

The project is situated on the grounds of Nomsa Maphongwane Primary School. The soil is very sandy. Water is obtained from the school tap and watering of plots is done by hosepipe.

4.6.6 Support services

Abalimi Bezekhaya is the main source of training, expertise and inputs for the garden ranging from manure and seedlings to marketing strategies. The project is sustainable and can survive without the support from Abalimi Bezekhaya.

4.6.7 Crops grown

Summer	Spinach, Cabbage, Lettuce, Egg-plant, Green pepper, Tomato, Pumpkin, Potatoes,		
	Maize		
Winter	Spinach, Potatoes		

4.6.8 Marketing strategies

They sell vegetables to local people and teachers at school and they voluntarily support HIV/AIDS patients with vegetable donations. Sales occur on the project site with buyers coming to the project. This saves the producer transport costs to the market and also saves on storage costs as the produce are harvested when the consumer is in need of them.

4.6.9 Problems experienced

Insecure tenure combined with limited supply of water are the major problems facing gardeners at Nomsa Maphongwana. As one respondent commented: "Our project is allocated at school and we cannot water our garden after school hours because school gates are locked. The principal complain when we use too much water as a result we use very little water when watering plants."

4.6.10 Successes and failures

The group got the permission from the school principal to expand on unused portion of land because of the members determination. This is the most successful project and is capable of achieving greater yields. It was used by Social Development Minister, Zola Skweyiya in a campaign launched to address malnutrition (*Vukani News, 2002a: 3*). The other contributing factor towards the success of the project is that one field worker of Abalimi Bezekhaya favours the group and they get preference when inputs are supplied to the community food gardens or urban agriculture projects around Khayelitsha.

4.7 Nondyebo Community Educare: Site 7 on Figure 2

4.7.1 Establishment and membership

This garden project began in 2000 by the Department of Health at Luhlaza Primary School. All the members of Nondyebo are middle to old aged women and they are pensioners. The group began with three members and later more women joined the project bringing to the total of ten members. The joining fee is R50 deposited into their bank account. Membership related income return is not reasonable because of unprofitable farming activities. The members are coming from the Transkei and Ciskei. Currently, they are residing in Khayelitsha at sections A, B and C and they didn't know each other beforehand but were organized by Department of Health.

4.7.2 Motivation

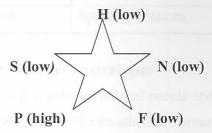
- To access food and generate income
- To help other community members who are unable to meet basic needs because of their being chronically disabled or sick

4.7.3 Living and strategies

Most of the group members are pensioners and are getting a grant of R570 a month, others are dependent on remittances, one member is a domestic worker, one member is getting grant for a child and one is dependent on informal trading of sweets and chips.

4.7.4 Livelihood outcomes and assets

- Increased well-being
- Reduced vulnerability



They are also dependent on NGOs for their support and if the NGOs withdraw, the project will collapse.

4.7.5 Access to resources and natural capital

The project is located on the grounds of Luhlaza Primary School. They obtained the land from the school principal for vegetable growing. Water is also obtained from the school tap and the school is responsible for the payment of the water account.

4.7.6 Support services

Abalimi Bezekhaya provides seedlings, irrigation equipment, and a training course. A three day course of Abalimi Bezekhaya covers the following subjects: garden design, trench bedding, soil preparation, compost making, seed sowing, seed transplanting, watering, vegetable care and maintenance and pest control. The project can collapse if Abalimi Bezekhay should withdraw support because they achieve lower yields and there are no income generating activities such as sewing, beadwork.

4.7.7 Skills

The group has the following skills, gardening, sewing, knitting, beadwork and domestic work.

4.7.8 Crops grown

Summer	Spinach, Beetroot, Cabbage, Potatoes, Pumpkins, Maize, Beans, Carrots				
Winter	Spinach, Potatoes				

4.7.9 Marketing strategies

They sell vegetables to local people and teachers at school. The dominant crop sold is spinach at a price of R2.50 a bunch. Sales occur at the project site to the local people.

4.7.10 Problems experienced

The respondents mentioned insufficient land as a major problem. They also complained about the poor soil quality. The respondents also mentioned that livestock tramples into the garden and destroys their crops because of the broken fence at school.

4.7.11 Successes and failures

They produce sufficient amounts of vegetables for household consumption and for selling. They are capable of achieving greater yields because of their determination and enjoyment of gardening.

Table 3: Comparison of seven case studies in line with sustainable livelihood framework

Aspects	Women's Uunity	Esam Esakho Isitiya	Quaker Peace Garden	SCAGA	Eden	Nomsa Maphongwane	Nondyebo Educare.
Location	Church & School	School	Dutch Reformed Church	Eskom power line (servitude land)	State idle land	School	School
Expected livelihood outcomes	Improved food security Income generation Reduced vulnerability	Improved food security Income generation Increased well-being	Secure food Increased well-being	Subsistence Generate income	Secure food Generate income Reduced vulnerability	Access food Income generation	Access food Increased well-being
Main constraints	Natural capital. Social capital Human capital	Natural capital	Natural capital Garden pest	Institutional constraints Social capital	Natural capital	Natural capital	Natural capital Physical capital
Strength	Solidarity Dedication Hardworking Independency	Dedicated	Enjoy gardening Sufficient time for gardening. Teamwork	Secure funds from donors Serve as an inspiration for people to start improving their own lives Show house	Dedicated	Hardworking Favored by Abalimi field worker Committed and dedicated	Enjoy
Vulnerabil ty context	Casual employment / Insecure jobs	Unprofitable farming activities	sto petween	Casual employment replaces agricultural work Resource sink	Earn very little from casual employment	Casual employment	Members are very old pensioners, hard work from trench digging

4.8 Assessment of case studies

Different motives exist for each case study, for example Women's Unity's main motive of starting a vegetable garden is to generate food and money. This project is sustainable and is capable of achieving greater yields because of strong social capital (solidarity) and introduction of other income generating activities such as community services (crèche) and feeding scheme. They are capable of securing funding from donors. At SCAGA is a low level of social capital because of conflicts and unrealistic expectations from the project and this can lead to the collapse of the project. Good social capital is crucial in gaining access to other forms of capital such as financial, human, natural and physical capital. Women's Unity garden project is sustainable because of good social capital. Low levels of social capital are also confirmed at Esam Esakho Isitiya, where the project members are highly dependent on Abalimi Bezekhaya, therefore being unsustainable and can lead to collapse of the project.

From the case studies it can be deducted that projects with high levels of social capital are most likely to be successful. Financial capital is low for the members because of high levels of hire purchase and indebtedness and most of them are pensioners and pensions provide the economic underpinning of many households.

Several papers on urban agriculture have referred to insecurity of tenure (natural capital) as a major drawback for the development of sustainable urban agriculture for the benefit of the urban poor. Evidence from the fieldwork shows that natural capital, such as insufficient land and insecure tenure combined with limited supply of water, is the main problem common to all project schemes in and around Khayelitsha.

Marketing poses problems for community food gardens in Khayelitsha possibly because of racial preferences. Abalimi Bezekhaya assists community food gardens with marketing of organic vegetables to the Oude Moulen Organic Market in Observatory and Constantia. Women's Unity is the only community project that is being not assisted by Abalimi Bezekhaya regarding marketing.

Although different motives exists between the case studies, it can be concluded that the primary motive for the people of Khayelitsha to be engaged in vegetable production is the

desire to access food, to get money from selling vegetables. Access to food and therefore food security for participants is clearly the major issue.

4.9 Analysis of assets status

The livelihoods approach focuses on what people have rather than what they lack and helps to identify opportunities for policy intervention and facilitation of sustainable development. People have access to different kinds of assets such as natural, physical, social, financial and human capital. The extent to which people have access to these assets and the ways in which these are combined for living will be explored next.

4.9.1 Physical capital

This is the basic infrastructure needed to support the household for livelihood. It includes housing, transport, water, electricity and sanitation which are often placed highest on urban dwellers list of priorities. The quality of housing in the informal settlement of Macassar is poor being made with galvanized iron and which are flooded in winter. These units are typically in a bad state of repair. Most of the households have access to electricity by using a coupon system. The cost varies depending on the usage. Macassar resident's housing units are not in good condition at all. It is typical of an informal settlement. Litha Park and Khayelitsha houses are in good condition and in good state.

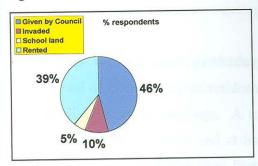
Other dimensions of physical capital are also important in urban areas, for example transport and roads, market for supply of inputs and tools and for informal trade. Roads are in a good condition in the formal and informal settlements.

4.9.2 Natural capital

Urban areas vary in the degree to which has access to natural capital in the form of agricultural production.

4.9.2.1 Access to land

Figure 5.



The majority of the households in Macassar informal settlement obtained land from the government free of charge. The plots are generally small and can be up to 100 m² to 250 m². A total of 46 % got the land from the local council for free after Basonto has removed them from Greenpoint to Maccassar informal

settlement. Secure access to land is rarely available, land users are often evicted by government officials from their plots when the land is developed, thereby giving up agricultural practices (May, Atwood, Dominik, Kaye, Newton, Rogerson & Witt 1993).

A total of 39% of the sampled residences are renting the land to the council and those residing at Litha Park are paying their rent to the NBS bank. A total of 10% invaded the land and 5% got the permission from a school to grow vegetables.

Ownership of land is problematic, since the title deed is the exception rather than the rule for most urban cultivators (Van der Waal and Korentajer 1994) cited by (De Necker, Uys & Van der Merwe 1996: p6).

4.9.2.2 Access to water

All gardeners had access to water from the tap in their housing compounds. In addition, most of them (86%) had a hosepipe as a means of watering. A total of 10% used buckets as a means of watering, 2% had sprinklers located on their properties and 2% make use of watering-cans. Mamushe commented: "I like watering-can because it waters gentle."

A total of 78% do not make use of waste-water in their gardens, while 22% were making use of grey-water from their kitchens and bathrooms. The main reason given by the gardeners for not using grey-water is that they perceive waste water as dirty, unhealthy, impure and dangerous to plants.

A total of 78% indicated that they do not pay for water used for domestic purposes as well as for watering their gardens. A total of 22% said they are paying for water used for domestic and irrigation purposes. The respondents paid a flat rate ranging from R20 to R150 a month.

They are paying this flat rate so as to avoid stoppage of their water supply by the council. Only 6% of the respondents measure the amount of water used, the rest (94%) do not measure water used during watering. Those measures add 25 l of water per day.

4.9.2.3 Access to seeds, gardening tools and soil improvers

A total of 28% of sampled residents obtained seedlings and seeds from Abalimi Bezekhaya at R2.50 a bunch of seedlings. A total of 24% obtained seeds from local shops at a cost of R1.50 for 30g of seeds and at Shoprite or Pick'n Pay for R10 a packet. A total of 18% obtained their seedlings from friends and relatives free of charge, another 18% from their previous harvest, 10% from rural areas and 2% from neighbours.

Most gardeners have their own tools or gardening equipments which they bought from shops or borrowed from neighbours and friends. The tools are affordable and they know how to use them. The most prominent source of soil improvers is Abalimi bezekhaya. Other gardeners got their soil improvers from friends and relatives who have livestock.

4.9.4 Social capital

It is traditionally viewed as patterns of horizontal social networks and solidarity relationships, i.e. between household, group or community members. Here, however, the interpretation is broadened to include "vertical links between people and groups unequally endowed with power and resources" (Shankland, 1999: p.14). It refers to the social relationships in which individuals and communities are involved, including networks, membership of groups and levels of trust and reciprocity. These are important ways to gain access to other forms of capital and provide means of controlling and defending it. Social structures in urban areas rely on forms of common interest among neighbours rather than structured through kinship. The level of social service provision is rather low. State-provided services are lacking and there has been limited growth of local civil society organisations, leading to the conclusion that there are low levels of social capital within the community.

As an example, SCAGA garden consisted of 30 (first group) members at the time it was started of whom two were men. However, conflict erupted between group members and resulted in a change in membership composition. The main cause of conflict was corruption between the members with regard to misappropriation of funds, as the result they ended up taking garden tools and sewing machines to their houses. As one respondent said: "Jealous

amongst us result into people leaving the project." Levels of social capital are relatively low, as confirmed by field-work that showed that there is strong a preference among gardeners for individual plots rather than shared activities because of lack of mutual trust and co-operation.

4.9.4 Financial capital

It is critical in urban areas where cash transactions are used to access food, housing, water, energy, transport and education. Most of the surveyed respondents are old pensioners, obtaining a grant of R570 a month. Income is spent on food, clothing, shelter, education, transport and some on liquor. Health care is free for children and older people.

4.9.4.1 Sources of income

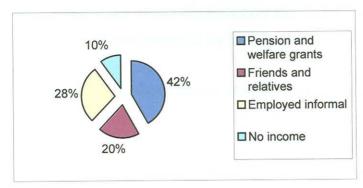


Figure 6.

Most of the respondents are dependent on welfare grants, pensions or disability grants of R570 on a monthly basis. A total of 42% of the respondents mentioned their main source of income as pension and welfare grants. A total of 28 % find most of their employment opportunities in the informal sector involving construction work, painting, wood-work, grinding, restaurants, hotels, domestic work, sewing and beadwork. Most of these informal jobs offer very little income and are insecure (vulnerability context). Some respondents are involved in informal trading of sweets, chips, sheep's head and trotters and liquor. A total of 20% of the sampled residents are dependent on remittances and 10 % of the respondents do not have any means of income.

If the household's level of income is lower than the minimum required income then the household is food insecure. It has been established that an urban South African household of five members requires a minimum of R850 per month to meet the household requirements (Human Science Research Council, 1993). The poverty limit for a rural household was found

to be R750 per month (Agrifutura, 1997/98). Of the gardeners interviewed, it was found that the majority of gardeners live below the poverty line (income less than R 800 per month), while the minority are on poverty line (R800 to R1 200 per month). It was difficult to get the exact amount of income earned by the respondents because income is the sensitive issue and moreover most of the respondents were employed informally, others self-employed who received fluctuating amounts of income per month, while others were pensioners obtaining R570 per month.

4.9.5 Human capital (skill-based)

Refers to added value due to upgrading of skills acquired through training and education. It refers to human capacity in terms of education, skills and health status to undertake activities. A total of 26% of the respondents educational level is between standards 1 and 5, 30% fall between standard 6 and 10 and 4% pre-school and another 4% had never been to school. In Khayelitsha, women predominate in the less educated groups.

One of the most significant factors affecting success in gaining urban employment is education and skill levels. Those who have qualifications and skills to work, combined with good health are at an advantage. The majority of respondents do not have much schooling and as a result are employed in informal sector which offers very little and insecure. Health care is free for children and older people and clinics are not possing problems as they are already available in Khayelitsha.

4.10 Transforming structures and processes

Institutions, organizations, policies and legislations shape the livelihoods of urban poor. Some examples of policy areas which affect people's access to assets and opportunities are:

- Environmental policies and land tenure security (natural capital)
- Policies on provision of urban infrastructure housing, electricity and sanitation (physical capital)
 - Employment generation, credit provision, savings and training (financial and human capital)

 Social security, education and health provision and support for the extreme poor (social and human capital)

The extent to which community food gardeners and households can influence the policy process is very limited at present in Khayelitsha. Community gardeners and the surveyed households focus on meeting the immediate needs, such as basic services, rather than lobbying for policy transformation. The major issue is the need for improved integration of different stakeholders into the planning processes and to promote intersectoral planning which recognizes links between land access, cultivation and nutrition, water and sanitation, and health. (Policies on urban and peri-urban agriculture will be discussed in detail in Chapter 6)

City Council does not allocate suitable land for agricultural purposes instead the land is utilised for industrial, commercial and housing purposes. Rather than allocating land to permanent use of cultivation activities, city councils tend to favour urban agriculture as a temporary use of vacant public and private land until the land is earmarked and developed for a different, usually a higher status, purpose.

There are a number of organizations in and around Cape Town that are involved in supporting urban agriculture initiatives such as Food Gardens Foundations, Tsoga (wake up) Environmental Resource Centre, Quaker Peace Centre and Abalimi Bezekhaya. These NGOs play a vital role in supporting urban food growers through the provision of training, inputs and access to resources. They are probably in the best position to facilitate the growth and promotion of urban agriculture in this city, but to do so they require financial support and staff. The other groups that contribute to the development and facilitation of urban agriculture in Cape Town include Agricultual Research Council, Centre for Integrated Rural Development and Programme for Land and Agrarian Studies.

The South African Council of Churches (SACC) has promised to set up gardening projects in Khayelitsha. The SACC has identified that many people in Khayelitsha are not working, are hungry and desperate to do anything to help themselves. The SACC is dedicated to move forward with plans to start gardening projects (*Vukani News 2002b: p.15*).