

Urban Farming Centre - Samford

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Bringing culture back into agriculture

Concept document - Version 1.1

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1. Introduction

This document describes a new concept of sustainable agriculture in urban and peri-urban environments with the potential for broad and positive health, social, environmental and economic benefits, in addition to greatly increasing the supply and access to locally grown food.

The starting point for the venture has been Samford, Brisbane. The concept evolved from a community led process from 2011-2012 called Samford Futures. One of the key outcomes of this process was the desire of Samford residents to have a more sustainable food system and have access to more locally grown food. In addition, the opportunity arose out of this process to pitch for use of a very suitable piece of public land on the edge of Samford as the base for the Urban Farming Centre. This land is proposed to integrate other community aspirations and is being called the Samford Commons.

The Centre will become a hub of agri-culture, incorporating education (short and long courses), commercially sustainable organic farming, sale of produce direct to the public, food processing, festivals, restaurant, processing of green waste to fertiliser, sale of food plants, urban agriculture research and consulting.

What makes the Centre very different to a horticultural training organisation, community garden or farm is that it will spawn and support urban farming entrepreneurs. These entrepreneurs will make use of the abundant land in the Samford Valley for food production to a level where they can make a good living on land no greater than 4000m². It's implicit in the viability of the urban farming model to be taught at the Centre that the urban farmer does not pay for the land to farm. The land will be made available on very low cost lease with a long tenure.

Many short courses will be offered at the Centre around food production and processing and it's expected that consultancy, advocacy and research services will also evolve out of the Centre around urban agriculture. It is also expected that the concept of the Centre could be duplicated to other cities in Australia and students who choose the urban farm entrepreneur course may use land in their own local area, perhaps public land now used for a park, land in a new residential property development, or even a rooftop or podium in a city development.

As at the date of this document, The Urban Farming Centre venture has reached the stage of:

1. Preparing documents describing the venture which were incorporated into the Samford Commons presentation made to the Moreton Bay Regional Council in November 2012
2. Forming a working group to prepare for a major public presentation on the 15th March to the Samford community of the Urban Farming Centre concept, as part of the Samford Futures process.
3. Forming a steering group of experienced and passionate individuals to carry this venture forward to the stage where an entity can be formed funded and the Centre gets underway.
4. Formed advisory group to assist with more technical issues around the venture
5. Forming a partnering relationship with Australian Organic (OA) to facilitate urban farming

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curriculum development and enable the centre to become a pilot project for Australia in stimulating commercially sustainable urban farming.

6. Commenced negotiations on the Samford Parklands land with the Moreton Bay Regional Council

See Appendix 5 for members and background of the steering, working and advisory groups.

2. Overview

2.1 Food system context

- The food system in Australia has many challenges due to:
 - Lack of new farmers moving into take the place of older farmers, average age of farmers in Australia is over 60 years old,
 - Farm land consumed by mining,
 - Poor financial viability of farms due to dysfunctional market system, excessive land prices, high A\$ and very low priced imports taking out traditional markets
 - Degraded land due to chemical farming,
 - High sensitivity to increases in fuel prices,
 - Poor quality food due to lengthy storage and chemical growing methods,
 - Supply of organically grown food insufficient to meet demand leaving organic food at high prices.
 - Increasing reliance on imported foods
- On the flip side of these problems is an increasing interest in urban food growing, local food systems and organic food. The disconnection to food sources experienced by people in cities is beginning to turn, where more of the public want to grow some of their own food, buy from farmers markets, know where food is coming from and buy local.
- The current challenges of viability with urban food growing in Australia are:
 - Expanding the volume of food grown so that it is a viable supply to support the medium term weakening of supply from the existing Australian food system.
 - Access to sufficient land in urban and peri-urban locations to increase food production without the financial barrier of having to buy the land.
 - Knowledge of intensive organic food growing and urban farm operating methods, so urban farmers can make a good living out of growing food in and around cities.

2.2 Venture purpose

- To create a pathway for people to have a financially sustainable urban farm
- To assist urban farmers gain access to excess private & public land in urban and peri-urban areas for food growing, without the need to buy the land.
- To connect with small scale hobby growers, providing training and support to improve skills.
- To engage the local community in a sustainable culture of food - growing, processing, consuming and celebrating locally grown food
- To provide a duplicatable system that spreads the knowledge and experience of

the Centre, thus widening the impact of the venture and its ultimate viability.

2.3 Social, economic and environmental benefits of venture

- Localises the economy and builds community resilience
- Creates local employment and entrepreneurial opportunities in the food industry
- Improves soil, reduces carbon foot print and reliance on petroleum based products
- Builds community and connects the public to their food sources
- Creates healthier and fresher food

2.4 Venture business model



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A comparison is shown in Appendix 1 of the venture to other types of organisations that have components of the Centre business model. These organisations are: Northey Street City Farm (Brisbane), Milkwood Permaculture (Sydney), Growing Power (Milwaukee, USA), Angelic Organics Learning Centre (Chicago, USA), Food Connect (Brisbane) and Sole foods (Vancouver, USA).

2.5 Proposed venture structure

Given the background of the venture, where the concept evolved partly from a broad community consultation process and the benefits of the venture are very much focused on the local community, even though the concept can be duplicated, the venture structure must be designed to facilitate:

- Ongoing community support and participation
- Gaining adequate funding for start up and ongoing operations
- Attracting high quality people to manage and work in the venture
- Reinvestment of profits in growing the venture and supporting the urban agriculture movement.
- The creation of large numbers of food entrepreneurs
- Environmental, social, cultural and economic responsibility

The actual legal structure of the venture is still subject to further research.

The venture would be funded by a variety of income streams as explained in 4.3.1, in addition to funding via grants and social investment to get the venture underway.



3. Urban Farming

The most common models of urban food growing (vegetables, fruit, herbs and small animals including bees) include:

- Backyard and balcony/podium food growing
- Hobby food growing on peri-urban acreage
- Community gardens on public land
- School food gardens

Not so common are commercially oriented models of urban agriculture which include:

- Urban farms on unused private and public land in and around cities, typically on areas from 0.5 to 5 acres.
- Urban farms on industrial space with indoor growing methods such as large greenhouses.
- Urban farms on rooftops, more common in large cities of the USA

Given the abundance of unused public and private land in the Samford district, the excellent climate for food growing and in particular, the unique opportunity to make use of some of the CSIRO Parklands, the most appropriate model to significantly expand food production is 'Urban farms on private and public land'. This model is explained below.

It is important to recognise, that in the process of changing the culture of food in Samford, the Centre will provide support for any level of food growing whether the grower chooses to be commercial or not with their food production. Such support would involve:

- Short courses – see a list in Appendix 2,
- Physical gathering point for knowledge sharing,
- Food plants such as veggie and herb seedlings, fruit trees and native edible plants,
- A local seed exchange,
- Solid and liquid organic fertiliser from local green waste processed on site
- A location to sell excess produce, be it fresh or preserved
- A place to celebrate locally grown food

3.1 The sustainable urban farm entrepreneur model

The model will be refined over time and in particular during the pilot stage (see 4.2.3 and 4.2.4 below), however it is mostly based on a combination of intensive organic growing systems which are being used successfully in the USA within urban environments (see research sources in Appendix 3), plus some additional income opportunities listed below.

A curriculum is being developed to teach urban farm entrepreneurs how to run their own successful farming businesses. The key elements of the proposed curriculum are shown in Appendix 4. The venture is working with the BFA (Biological Farmers Australia) and their link into one of the most popular organic farming teaching colleges in Australia, Riverina TAFE, to develop the urban agriculture farm entrepreneur course content.

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Here are the key elements of the urban farmer business model:

- Food grown with organic methods only, this may include aquaponics where appropriate
- Urban farm will be generally be on a minimum of 4000m². Additional space of 1000-1500m² may be allowed for community plots, storage area, seed raising and green house, cool room, food preparation, mini-store and community seating areas
- The land size is designed so that it can produce a viable income without the need for any significant investment in farm machinery and can be run by one main farmer
- Figures from research sources in Appendix 3 indicate that farmer gross and net income for 4000m² shows a well-run market garden can gross \$80,000-\$100,000 per year from two crops per bed with net income at approximately 70% of gross. More than 2 crops per year per bed are certainly possible in many parts of Australia due to the climate, especially South East QLD, in addition to the use of a greenhouse to extend cropping time. This income estimate:
 - Assumes the farm and the farmer are at full capacity, in reality this may take a few years to reach, and
 - Does not include income from “Other opportunities” described below which could be used to buffer the farmer income as it builds during the soil improvement and farm management period over the first few years of operation.
- Food grown will mostly be vegetables, supplemented with herbs (culinary & medicinal), fruit, chicken eggs, honey, mushrooms and food processed from what is grown
- Roof top & podium style food growing is included where on-ground land is not available
- Due to close proximity to local customers, the farmer will sell most produce at the farm gate and get the virtually all of the margin and with remaining produce, rely on other sales channels such as: Urban Farming Centre Shop and box scheme, local food retailers and restaurants and city based food box scheme's like Food Connect.
- Community Supported Agriculture models where farmers are paid in advance for their crops from customers/subscribers could also be considered for farmer cash flow.
- Farmer is likely to sell produce at less than retail organic
- Other farmer entrepreneur profit opportunities:
 - Extra income from:
 - Processing local green waste via bio digester technology
 - Running workshops for local residents
 - Charging local schools for farm visits or to have a plot next to the urban farm space. Charging the public for guided farm visits.
 - Vermiculture – selling worms
 - Selling of fish via aquaponic methods
 - Selling seedlings to local residents
 - Selling excess produce of local community residents from own gardens
 - Cost reduction from:
 - Using Urban Farming Centre interns to handle some of the manual work
 - Getting school children involved in some of the farm activities
 - Getting local community supporters to participate in farm activities
 - Reducing or eliminating power costs by solar panels and/or bio digester technology to process green waste, generate fertiliser and electricity.

3.1.1 Soil fertility

The intensive growing of food in relatively small areas has a considerable impact on soil fertility. Great attention will be needed to consistently improve soil with organic methods whilst making it as productive as possible and creating optimum soil health so it gives sufficient vitality to plants to resist pest and disease impacts and to crop at consistent volumes of high quality without the need for any artificial fertilisers, pesticides or herbicides. The organic methods to be used will be:

- Crop rotation
- Cover cropping in rotation
- Companion planting with herbs and flowers
- Regular application of organic, biodynamic and biological soil conditioners
- Composting including using matter from the local community
- Vermiculture to generate liquid manure from worms as well as worm castings for compost
- Regular application of liquid manure made from plants and animal manures.
- Balancing of mineral levels in the soil

It is suggested that each urban farm has a comprehensive soil test before farming commences to help with the establishment of a soil fertility management plan for the growing space. Consideration will be made for using some level of organic certification for the centre and the urban farms created from trainees of the centre.

During the first few years of operation of the Urban Farming Centre, a resources/cropping schedule will be developed and refined for the local climate and soil type of Samford. This will provide the platform for duplicating a methodology of farm start up and management (in particular, soil management) on other land in Samford.

It will be important that the curriculum for the urban farming also includes more intensive methods of food growing such as aquaponics and rooftop growing systems and that these methods are working on site at the Centre using organic methods.



3.1.2 Community connections

Strong local community connections are vital for the success of the urban farms. Some of the connection opportunities are:

- Processing of green waste from the community
- Selling produce of the farm to the local community
- Providing a meeting place for community members at the farm
- Creating the opportunity for volunteer and paid work at the farm
- Provide central point to sell excess produce of community members from own gardens
- Workshops on organic food growing principles for community members
- Participation in community plots in the urban farm space
- School visits and participation in the urban farm
- Providing opportunity for people with special needs to participate in the urban farm
- Web and mobile device technology could be provided to the farmer as part of a training support package to enable easy community connection to the urban farm activities.

3.2 Context of the Samford Parklands land

This land, next to Samford Village, was used as a CSIRO agricultural research station for many years and was subdivided about 10 years ago, with 150 acres handed to the Moreton Bay Regional Council as public space. Some of the public space land has already been used for sporting facilities and within the Samford Futures process, a portion of the land is proposed to be used for walking trails, environmental planting, education and parking. It is expected that a minimum of 10 acres of land for farming would be used and this could be broken up into 5-6 plots of 4000-5500m². The exact layout of the land to be used for the Urban Farming Centre is not finalised as yet, since it will be subject to finalisation of all intended community uses.

The Samford Commons is the central point of the land where the current buildings are located. The buildings include office areas ideal for training facilities, food processing and shops, 3 large cold rooms perfect for storing food grown and 8 large green houses for plant propagation.

Water rights are available on the site and the land currently has deep pasture formerly used for cattle grazing. The land presents an ideal opportunity to commence the Urban Farming Centre. The Moreton Bay Regional Council are being asked to provide the land and buildings for the intended uses from the Samford Futures process at no cost because of the significant economic, community and environmental benefits it will bring to Samford.

Research is required on the state of buildings, cold rooms, green houses, water supply, soil and planned vehicle access on the site to assess the need for any significant capital works. It is hoped the capital works will be kept to a minimum in starting the Urban farming Centre.

It is expected that a not for profit entity may be formed to take on the head lease of the Samford Parklands land and buildings to be used by the Samford Futures initiatives. The Urban Farming Centre would then sub-lease the land and buildings to be used for the Centre initiatives from that not for profit entity. Discussions are currently underway with the Moreton Bay Regional Council on a feasibility study to assist the council in deciding on how the land can be made available for the Samford Futures initiatives.

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In the event that the Samford Parklands land does not become available for the farming activity of the Urban Farming Centre, then other land will be found that can be leased both for farming and teaching. This scenario is likely to result in more capital being required for the venture.



Gibbons road land, Samford – Council owned



View to Samford Village from buildings, paddock is proposed starting for Urban Farming Centre



Some of the many buildings in the Parklands area that could be used for the Urban Farming Centre



Working green house structures in Parklands area, some could be used by the Urban Farming Centre

4. Venture operation

4.1 Functions

4.1.1 Education - What is taught?

- Urban farmer entrepreneur internship - Training in intensive organic food growing to cover all aspects of the urban farm model described 3.1. This training also includes farm management, business, marketing, community development aspects and how to use the technology platform made available in the training support package to help with farm management. An overview of the curriculum is shown in Appendix 4.
- Short courses and workshops from half day to one week - These will cover a range of subjects around food growing, food preservation and cooking; see Appendix 3 for a list. Components of the urban farmer internship course may also be split out into split courses for those students who feel they have already developed the knowledge. Consideration should be made in using such components of the internship course on holding the value of the internship

4.1.2 Education - How is it managed and delivered?

- Accreditation - Further research is required on the structure of the training organisation and national accreditation of the Internship training course and whether such accreditation is also needed for the short courses.
- Training method - Training method includes both hands-on and intellectual content. The hands-on component would be delivered at an urban farm training location as described below and may work in the form of an internship depending on the level of training undertaken by the trainee. Some of the intern/trainee work will also occur at urban farms of graduated trainees.
- Training formats – The duration of the training depends on the training option taken on by the trainee. Further research required. Some training material will also be delivered online and this would include both written and video content.
- Trainers – Experienced trainers in the different facets of the urban farming model and short courses will be sought to deliver the training and over time, one of or more farmer/trainees will also become trainers. The trainers must have hands-on experience.
- Training content development – It is anticipated that the training content will be progressively refined as the face-to-face training is done and the urban farming model evolves based on feedback. The urban farmer technology support package (see 4.1.3) will also go through this progression of refinement based on user experience.
- Trainee career path – A core aim of the training will be for the trainees to move onto their own farms so they can use the urban farming model. This could be on land they already have or can gain access to or on land the Centre organises for them (see 4.1.2 below). Trainees may choose to form a farm jointly with another trainee or choose to use only part of the urban farm model.
- Training location – The first urban farm to be established will be the primary training location. It is proposed this be in Samford, Brisbane. In terms of staging, it is suggested that a number of urban farms be established in the Samford/Dayboro area from graduated interns/trainees, as this area provides a huge amount of good land for food

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growing that is not productively used and is only 30 minutes from Brisbane CBD. Once the model works well and training materials are fully developed, an urban farm training location could be established in another city as primary training location for that city. As the number of trainee/interns grows, they could be placed on the urban farms of the trainees in that city and come back to the primary training location for specific training sessions. Thus, the training model becomes duplicable and supports the growth of the graduated trainees who have taken on their own urban farms using the models designed by the venture.

- Payment for training – The training fees will be designed to be affordable and provided a number of options with short and long courses and course fees may be reduced by providing internship labour in exchange for some of the course fees. Subscription services will also be made available for online services to trainees who cannot physically attend training and to those who use the urban farmer support package, see 4.1.3.

4.1.3 Education - Urban farmer entrepreneur land set up

- Land source – The land could be owned by: government, business or individuals
- Land tenure – The aim would be for land to never be purchased specifically for the farming activity, as it will be at high residential or commercial land costs. The land would be set up under a very long term lease at a negligible rate. Where Centre organises the land, consideration should be made for it entering into a head lease on the land and then sub-leasing the land to the urban farmer.
- Land options – Trainees may have their own land or can get access to land through their own connections. An alternative and key advantage of aligning with the Centre will be its ability to negotiate and establish land for urban farms at no capital cost for land and land rent a negligible levels.
- Land characteristics – Land should be level, not shady, have good access to water, have either a reasonable soil base or provision to work up the soil quality (with for example a roof top or podium style urban farm) and have good public access.
- Farm infrastructure – This will depend on the land characteristics. Funding and sharing of equipment support could be provided by Centre for farm set up to urban farmers who have graduated from training and are using the support package. The basic set up costs for the urban farm are expected to be in the range of \$20,000 - \$50 000. This cost excludes: land purchase costs (unlikely to ever need to purchase land), costs of bringing in soil (for example with podium or rooftop urban farm), bio digester technology, aquaponics infrastructure and costs of creating road access.
- Legal templates – These will be refined over time to secure land tenure, but should be an important task during the first stage of the venture where the primary training farm is established. As these templates are developed they can be made available on the venture support web site.
- Land for primary training location – The first primary training location is proposed to be in the Samford region 30 minutes from the Brisbane CBD at the Samford Parklands

4.1.4 Support services

- Technology platforms – knowledge and farm management support – Online technology platforms would be available to trainees to share experiences, to communicate with customers and local communities around their urban farm, to plan and manage their farm and to deal with any direct trading of their produce. These platforms would be made available on a paid subscription basis to the trained urban farmer and could also be

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accessible on paid subscription to other people who have not gone through the training. These technology platforms could be licensed to the Centre by Cityfood Growers as an experienced technology and content provider in organic food growing,

- Farm infrastructure set up – Sharing of farm set up resources such as land preparation equipment could be made available to each new urban farm. Where funding is needed, consideration of partial funding support by the Centre with pay back of funds over time.
- Trainee labour – New trainees that take on internships could make some of their labour time available to help develop the new urban farms of people who have completed the Urban Farmer Entrepreneur training with mentoring by experienced trainers.
- Promotion – Ongoing promotion of urban farmers to draw public attention to the venture and the farmers developing from the venture
- Mentoring/cooperation – The Centre will provide ongoing mentoring services to urban farmers both face-to-face and via its web site. Cooperation rather than competition between the urban farmers will be a critical ethic in the venture so they can all build a community of growers helping each other and the community.
- Organising land for interns – With regard to land at the Centre, it's likely that the Centre would sub-lease the land to each urban farm entrepreneur making the commitment to that farm. For land elsewhere, where the urban farmer needs assistance to get hold of land, a consulting service would be provided.

4.1.5 Margins on food sales

- Food grown at the Centre – The individual urban farms at the Centre will be the business of each urban farmer working on their patch. The food they grow that is sold through the Centre Farm shop will attract a margin. Further research required on margins so that prices to farmer and customer are great value.
- Food processed at the Centre – This could, for example, be a sourdough bakery, a cheesery or fermented and bottled foods processing. Each of these would be businesses of food entrepreneurs at the centre and where produce was sold at the farm shop, and then a margin would be received.
- Food grown at urban farms of trainees not at the Centre – Margins can be on two levels:
 1. Where produce sold via the Centre shop and box scheme, then a margin will be given to the Farm shop.
 2. Where urban farmer uses Centre farmer support business software platform which will have a billing system in it, then a small margin on the value of all that is transacted through the platform will go to the Centre. This income source can provide great leverage with income for the Centre, so long as the web based platform is highly functional
- Food sold at farm shop from local growers – Where local growers choose to supply their excess produce, either in raw or processed state to the Farm shop, and then a margin will be received by the farm shop.
- Food sold at a restaurant on site – The Centre may take on the restaurant as a business or find an entrepreneur to run the restaurant. In either case, if food is supplied to the restaurant from the Farm shop, then a margin will be received.
- Orchard run by the Centre – Given the potential land to be used at the Samford Parklands, where an orchard is developed on from 1-5 acres of land (triangular piece of land bordered by the road and the land on the north side of the buildings area), the orchard could be managed jointly with the urban farmers at the Centre and the income from sale of the produce from the orchard shared between the farmers and the Centre.

4.1.6 Cultural/community engagement

- Running festivals – Organisation of seasonal festivals, these may be fund raisers or more likely to be community engagement activities to celebrate local food.
- Farm tours – The Centre would organise trained people to conduct farm and Centre tours which may be to: school groups, community groups, individuals and corporate groups. These tours would become an income source for the Centre. Some of the income from the farm tours may be shared with the urban farmers at the Centre.
- Community plots - Where community plots are made available to the public which are adjacent to the urban farms, the food gardeners or schools using these plots would pay a yearly rental for the plot. The plot size may be up to 100m²
- Care Farm - Make space available at the primary training location and in the model for each urban farm for people with special needs to come and have space to have a small patch or to help with an activity on the farm. The Centre/farmer may get paid for providing this service.
- Green waste processing – Where biodigester technology is established on site, green waste from the local community and from the rest of the Parklands site will be processed in the biodigester, generating liquid and solid fertiliser which could be used by the farms at the Centre and sold at low cost to the local community. In addition, the biodigester generates electricity which could be used by the Centre and tradeable carbon credits. Further research required on implementing biodigester technology.
- Venue for support groups and presentations – Rooms provided at very low cost for any local groups focused on urban food growing
- Seedling sales and seed exchange –
 - The Centre may take on the business of growing seedlings to sell to the urban farms and the general public. Alternatively, this business may be contracted to an entrepreneur with a margin going to the Farm shop where seedlings sold at the Farm shop.
 - A seed exchange could be provided by the Centre which would store locally propagated seeds (in the cold rooms) and reveal these seeds via an online catalogue. It is suggested this activity be run by a local seed savers community group with a small fee paid to the Centre

4.1.7 Consultancy

- Urban agriculture advocacy – This would involve lobbying local and state governments on land use regulations which facilitate the urban farming model on public and private land. This service may also become part of the social responsibility of the Centre to change the current paradigm on land use and extend to authoring and speaking at conferences (which may attract speaking fees).
- Urban agriculture consultancy – Providing consultancy services to commercial, community and government organisations on integrating urban agriculture into the fabric of their communities
- Research and development – Providing research services on the operations of the Centre and the agricultural activities of the students and from the local area. This research could focus on: soil management, carbon reduction, community development, urban agriculture business models and farm management models. It would be ideal that the agriculture research heritage of the Samford Parklands site (50 years with the CSIRO) be extended by working strongly with research around urban agriculture.

4.2 Staging strategy

4.2.1 Stage 1 – Initiation

- Creation of venture concept - underway
- Creation of the working, steering and advisory groups – Already created, see Appendix 5 for the names of the people involved and a brief background.
- Refining of this business planning document, clarifying further research questions, allocating priorities and establishing a timeline – using Steering group feedback
- Present the concept of the Urban farm Centre to the Samford community on the 15th March 2013 to get feedback, further ideas and support.
- Research on suitable land for the first primary training location. This research has identified the Samford Parklands – Approximately 10 acres proposed to be used for up to 6 urban farms, details as described in section 3.2. Building structures are also located next to the land and some of these will need to be used including some green houses, sheds and cold rooms. Further research required on the land in conjunction with the Samford Futures Group and Council.
- Research on appropriate legal structure for venture – bona fide legal advice if possible
- Identification of initial team for stage 2. Team would include venture manager and organic farmer and a volunteer team.
- Duration of this stage depends on:
 - Resolving the land issue at Samford Parklands
 - Finalising the business plan and budget
 - Deciding on the most appropriate entity to run the venture

4.2.2 Stage 2 - Forming and funding

- Forming of legal structure for the venture
- Raising of funds to get underway
- Continue negotiations on first primary training location and refining the model for land tenure of urban farms.
- Get venture manager position funded.
- Source and fund trained organic farmer to be the first farmer on the primary training location and have 2 urban farm plots running (provide funding to get them underway)
- Duration of this stage depends on how quickly the funding is established and resolving the land

4.2.3 Stage 3 -Training development and primary training location

- Develop first stage of training material for the venture
- Start 2 more urban farm plots
- Begin the orchard
- Begin the seedling raising venture – most likely outsourced
- Identify specialist trainers in the various aspects of the urban farm model
- Complete feasibility on biodigester technology and source funding (Carbon initiative funding)
- Create first stage of venture web site
- Farm shop underway

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- Consider running some of the short courses at the Centre to begin income generation
- Develop urban agriculture research focus areas and apply for research funding
- Allow 8 months for this stage

4.2.4 Stage 4 - Commence internship training courses

- Primary training location farms well underway
- Training materials at a stage where they can be used to bring in urban farm entrepreneur trainees
- Source food processing entrepreneurs to become part of the Urban Farm Centre – such as Cheese/Yogurt making business with local biodynamic milk, sourdough bread making, preserves and fermented foods production
- Start 2 more urban farm plots
- Training courses commenced with specialist trainers as well as the organic farmers that are running the urban farms.
- Start other venture functions to generate income such as: farm tours, seedling sales, community plots and green waste processing.
- First graduates of the training courses and moving onto urban farm locations in Samford region identified by the venture.
- Deepening of venture web site functionality and accessing of online services to provide the support package to graduates and other subscribers
- Develop research services
- Allow 12 months for this stage

4.2.5 Stage 5 – Bed down training methods, increase number of farm plots

- Review of success of training methods with trainees on first urban farms set up by the venture
- Refinement of training methods and materials where needed
- Farm restaurant commenced – most likely outsourced
- Release urban agriculture consultancy services.
- More trainees into the system with interns available for urban farms underway
- Deepening of online functionality to support urban farmers
- Continue to source additional urban farm locations in Samford regions to expand production and entrepreneurial opportunity for farmer students

4.3 Funding

4.3.1 Business model

Income

- Training fees – face to face courses provided at different levels, in addition to subscriptions for some courses provided online in video format
- Margins of food sold
- Subscription to the education and support online platform
- Farm tours
- Green waste processing

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- Seedling sales
- Consultancy services and research

Expenditure

- Venture management and administrative team
- Technology development
- Promotion
- Training material development
- Set up of first primary training location – land and buildings not purchased but leased at very low cost
- Interim funding where required for trainee farm set up costs – returned in fees charged to farmer over time

4.3.2 Capital requirements

Stage 2 and 3

- Legal costs for forming the venture and for developing legal templates for land leases
- Manager – Work would include all management activities including development of training material and planning technology needs
- Administration costs
- Farmer – to manage one or more of the urban farm plots of the primary training location. This farmer would generate income from produce of the farm but would need some income to get underway as it would be expected that this farmer would also become part of the education team
- Development of farm at primary training location – Cost depends on location, the aim would be to find the best possible land with the least required up front capital costs. Office costs will need to be provided for in this development
- Technology cost for first stage web site as well as materials development, movies, etc.

Stages 4 and 5

- Expand administrative team and admin costs including management, some of these costs will be funded by income
- Further technology costs for second stage web site with deepening of functionality for the urban farmer support package

Up front funding sources depend very much on the structure chosen for the venture. Further research required on the most appropriate structure. This funding may be a combination of grants (government and philanthropy), loans, equity, social investment and crowd source funding (for example Kickstarter.com).

Further work is required on the 3 year business plan to finalise the upfront budget so that an estimate of funding needs can be completed. It is aimed that the venture will reach a self-funding stage from income as quickly as possible, but how long this takes is challenging to estimate at present. The following strategies in the business model aim to minimise external funding needs:

- Land or buildings for the Centre are aimed to be on Council land at very low rent levels, thus eliminating a major infrastructure cost
- The Samford Parklands land is very suitable for farming and has potential to reach good

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food volumes and income levels relatively quickly

- The business model includes different levels of income which diversify risk and increase potential for sustained growth with income.
- Technology platform may be externally funded and licensed to the Centre
- Staging of the venture

Subject to further analysis, the upfront budget is expected to be in the range of \$250,000-\$500,000.

4.4 Management and location

4.4.1 Working Group

This group has evolved out of the Samford Futures process which commenced in 2010. Peter Kearney has led this group. The current members of the working group are shown in Appendix 5. The major tasks of the group at the time of this document are to prepare for the March 15 presentation to the Samford community.

4.4.2 Advisory Group

The advisory group includes people with specific skills in the areas who have already been involved in conversations about the venture and have expressed interest in assisting with its development. Some gaps in this advisory group indicate where additional help is needed. Members are shown in Appendix 5.

4.4.3 Steering group

This is a group of people with enthusiasm for sustainable living and food security, with a range of relevant skills and connections who are prepared to provide voluntary services to help with the planning stage of the venture. A list of group members is shown in Appendix 5. Some of this group may assist in attracting funds to the venture and may choose to participate in the venture once the entity is formed.

4.4.4 Management team

Suitably skilled manager will be chosen for the venture once it moves from initiation stage into operations. As the venture grows, the team would be expanded with an appropriately skilled farming, administration and management people. Since the venture idea commenced, Peter Kearney has led the process and is taking on the role of manager during the initiation phase.

The steering group formed in the initiation phase would need to evolve into an advisory board with members who have a range of skills suitable to help with the growth of the venture such as: legal, marketing, business management, agriculture and community development

4.2.4 Location

The preferred location is a building at the Samford Parklands.

5. Appendix

1. Comparison to other organisations
2. Short courses and workshops at the Centre
3. Research sources
4. Urban farmer entrepreneur curriculum outline
5. Steering Group, Working Group and Advisory Group members

Appendix 1 – Comparisons to other organisations

Northey street city farm

This is a Permaculture training location with a weekly market that is very successful. The 5 acre site of the Northey street farm is mostly run on voluntary labour as a community garden. It is very successful at bringing people together as a community but does not produce much food for the amount of land it has. A relatively small proportion of the market produce sold is locally grown. Key differences to Northey Street and the Urban Farming Centre venture are:

- Venture will concentrate a significant part of its training on teaching people to grow food intensively with organic levels so they can make a living from it. Northey street does not train this type of content, but it is very successful at running food gardening and Permaculture short and long courses and this part of business model of running courses and workshops is similar to the Centre
- The venture will create a duplicatable system of commercially viable urban farming on approximately 1 acre and assist with land access for urban farmers if they need it. Northey Street does not provide this.
- The venture will combine community connection with commercially viable urban food production so that food volumes produced for the space will be much higher than the pure community garden basis of Northey Street.
- The venture will provide modern technological support to urban farmers to assist with managing their farms, customer base and marketing systems. Northey Street does not provide this.
- The venture training location will produce significant volumes of food and as it trains other urban farmers that take up land in the area, a growing network of local urban farmers will be built up so that consumers have a viable supply of true locally grown food. Sale of food at Northey Street does not focus on locally grown goals.
- All food sold at the Northey Street market is certified organic. It's possible that much of the food from the urban farms connected to the Centre will eventually have some level of certification, but initially the certification is more likely to be an internal one.
- The venture primary training location will have a farm gate shop opened daily and may have a market day each weekend and will sell what is grown on the farm and grown in the local area by residents of the local area that choose to supply their surplus. Northey Street sells produce at a weekend market only.

Milkwood – near Sydney

This is a very successful Permaculture training location based on a farm on the edge of Sydney. It provides short courses of 1-3 days as well as Permaculture design courses.

- Milkwood trainees may live in at the location as accommodation is provided. This is unlikely for the venture though home stays could be organised for interns in the local area
- Not sure how much volume of food is produced at Milkwood, but it seems to be mostly oriented to teaching.
- Short 2 or 3 day courses are run on market gardening. The venture will have much more comprehensive urban farmer courses with an internship period
- The location is within 2 hours of Sydney CBD whereas the Samford Centre is 30 minutes from the Brisbane CBD and is likely to attract a lot of weekend visitors.

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- The venture may also run short courses on similar topics as Milkwood but not be overly focused on Permaculture
- Milkwood is owned by individuals as a business. The venture may be owned in a structure which more oriented towards its broader social purpose.
- Milkwood is on privately owned land which would have a high capital cost. The venture will always be on leased land at rents which will aim to be at peppercorn level

Growingpower.org

This is a hugely successful venture in Milwaukee in the USA. Its focus is on intensive urban farming in a number of locations which are all managed by the same organisation. It produces large volumes of food in small areas and significant revenue from short courses as well as 3 month internships for urban farmers. This is a not for profit and does rely on grants as well as its own revenue which it has managed to diversify very successfully

Its model of teaching is quite similar to the venture. It manages each of its farms. This is not the same as the venture, as the venture will manage its primary training location and the urban farms of the trainees can be supported by the venture if they choose to use such support. Thus the ventures capital cost would be much lower than Growing Power. The Growing Power philosophy incorporates larger farms whereas the venture concept is duplicatable small farms of around 4000m².

Angelic Organics Learning Centre <http://www.learnrowconnect.org/>

This organisation has a large working farm and has been running short and long training courses over many years for organic and biodynamic farmers and gardeners. It runs a 12 month farmers course called [Stateline Farm Beginnings](#) which has been very popular. The farm has home stays and the farm produces a large volume of food. The Centre, which is located close Chicago in the USA, is very engaged in community development activities around urban agriculture in Chicago and is active around the USA as a strong advocate of local food systems.

There are many aspects of this Learning Centre which would be beneficial in the operation of the venture Centre. One of the key differences is that the Angelic centre is based around a large working farm whilst the venture centre will be based around duplicatable urban farms of approximately 4000m² each. The concept of having a number of urban farms of this size in one location will be an interesting challenge and one could say it may be much more efficient to have just one farm at the Samford Urban Farming Centre, but it's important that the Samford Centre practices what it teaches.

Food Connect <http://www.foodconnect.com.au/>

Food Connect provides a very direct link between commercial scale farmers who are generally within a 200km range of a major city. Produce is collected from farms, delivered to Food Connect, boxed and then set out to the suburbs of the city it operates within. Customers of the boxes are subscribers. In a sense it is a CSA model except that Food Connect has managed to aggregate large numbers of farmers into the one system. With the venture, a significant proportion of farm produce will be sold at the farm gate, some will be supplied to the Farm shop and there may also be a local box scheme if there is sufficient surplus, though the need for a local box scheme may be limited because of there being a Farm shop.

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Food Connect does not run food growing education as compared to the venture and is not directly involved in food production as the venture would be via the primary training location. Food Connect certainly supports its farmers well and this will be similar to the venture, but with Food Connect, they are generally already established farmers on their own land. The venture aims to bring new farmers into food system where they do not need to buy land but are keen to make a living from growing food.

Food Connect has evolved into running food systems consultancy services and it's likely that some of these services would be similar to the proposed urban agriculture consultancy services of the venture. The Food Connect online ordering system and regular communication to subscribers may provide models of operation that could be useful for the Centre. Food Connect could also become a customer of the urban farmers in the system to move excess produce that cannot be sold directly in Samford area.

SOLEfood - <http://solefoodfarms.com/about-solefood/>

This venture in Vancouver is managed by Michael Ableman and trains people in the city of Vancouver to install and manage small production farms on leased urban lots. This business model is quite similar to the Centre in many respects and has become very successful in Vancouver. Vacant unused land in and around the city is used, the urban farmers are trained intensively and supported and a marketing system has been developed to aggregate produce. The training also has a focus on helping disadvantaged people in society and is thus having a very positive social impact.

Appendix 2 – Short courses/workshops

The list provided below is not exhaustive and is an indication only of the possible courses/workshops. These courses/workshops will be varying durations (generally half day to 3 days) and formats based on the content and most will be run at the Centre. The workshops and courses will be run by experts in the particular subject matter. Over time, it may be that some of the workshop/course presenters may become employees of the Centre, but initially the presenters will be contracted per event with a healthy share of the event income to the presenter

Food Growing

- Organic gardening
- Biodynamic gardening
- Composting
- Seed saving
- Sub tropical orchard development
- Vegetable garden design
- Aquaculture
- Worm farming
- Making fertilisers from plants
- Dealing with local pests and diseases
- Edible weeds
- Soil fertility
- Native bush foods
- Permaculture aspects of food growing
- Market gardening introduction
- Managing chickens
- Hobby farm animal management
- Growing mushrooms
- Managing bees
- Half day workshops on growing certain plant groups – such as root crops, curcubits, brassicas, etc
- Roof top organic gardening

Food processing

- Making jams and preserves
- Sourdough bread making
- Cheese and yogurt making
- Fermenting food

Other

- Local food systems development
- Healing aspects of food gardening
- Organic gardening in schools
- Organic gardening in early childhood centres
- Food gardens for workplaces

Appendix 3 – Research sources

1. SOLEfood - <http://1sole.wordpress.com/about-solefood/> This venture in Vancouver is managed by Michael Ableman and trains people in the city of Vancouver to install and manage small production farms on leased urban lots.
2. Creating a livelihood on a fresh vegetable farm – Vern Gruber. A study of a large number of organic vegetable farms in the USA from ½ acre up to 20 acres. Detailed analysis of costs, operational issues and successful marketing strategies - <http://www.cias.wisc.edu/wp-content/uploads/2008/07/grwr2grwr.pdf>
3. Drip irrigation systems – Comprehensive analysis of drip irrigation with approximate costs, benefits and disadvantages <http://edis.ifas.ufl.edu/hs388>
4. Hugh Lovell – Quantum agriculture <http://www.quantumagriculture.com/> Advice on soil testing, farm structure and soil improvement
5. Biological Farmers of Australia – Peak body for organic agriculture in Australia. Advice on organic certification, farming strategy and introduction to organic farmers <http://www.bfa.com.au/>
6. Spin Farming – Systems of profitable vegetable farming on sub acre blocks. Widely used in the USA <http://www.spinfarming.com/>
7. Growing Healthy food – Research and education on small lot organic farming, based in South East QLD <http://www.growinghealthyorganicfood.com>
8. Emily Brooks - Edible Advocates Alliance in USA - <http://www.ediblesadvocatealliance.org/> Training courses on agricultural entrepreneurialism and community development around local food systems
9. Growing Power – Milwaukee USA - <http://www.growingpower.org/> Inspirational urban farm with very successful training program for urban farmers
10. Franco Cencig – Organic farmer of 40 years in Birkdale, Brisbane on a 12 acre vegetable farm using organic and biodynamic methods. Advice on farming operations
11. Agricultural tenancies Act – DPI NSW http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0017/104093/leasing-land-calculating-a-rental.pdf
12. Organic farmer research
 - Franco Cencig
 - Geoff and Bev Buckley – [Growing Healthy Food](#)
 - [Sandy Creek Organics](#) Beerwah
 - [BFA](#)
 - [Munch Crunch Organics](#), Northern Rivers, NSW
 - [Supernatural Organics](#) - Sunshine Coast, Qld
 - Hugh Lovell, [Quantum Agriculture](#)
 - [Vern Bruber study](#) of 30 organic farms in the USA from 0.5-12 acres

Appendix 4 – Urban farmer curriculum outline

The urban farmer entrepreneur course will become an accredited diploma and include theory and practical on-farm activities. The duration of the course is still under consideration. The curriculum is subject to further refinement and will be developed after the initiation phase. Sources to support this development will be: examining content from organisations in Australia and internationally with a similar content focus and joint development of urban farm curriculum/content using existing organic farming course from Riverina TAFE.

Proposed content focus to be:

1. **Soil management** - Based on organic principles: including use of biological and biodynamic methods, with strong focus on consistent improvement in soil life.
2. **Growing space design** - This can incorporate relevant Permaculture principles. Space design and layout should also have templates of layouts of up to 1-2 acres with a model that is scalable from smaller areas.
3. **Equipment needs** - Based on scale
4. **Crop management** - to fit with land, climate and local conditions - include herbs, veg and fruit, possibly some native food crops as well. High value crop selection.
5. **Economic/business management models** - Such as cropping to maximise income, start up costs based on farm size, control and reduction of operating costs, effective marketing
6. **Marketing models** - Particular focus on farm gate, box scheme's and CSA structures
7. **Capturing other income streams unique to urban farms** - Food processing, local green waste processing, aggregating produce from smaller scale local growers, site visit fees, workshop hosting, beekeeping etc
8. **Engagement of local communities to support farm**
9. **Using technology** - To support the farm operation, marketing and financial management
10. **Integrated management approach to pests and diseases**- Organic only
11. **Resource sharing and cooperation** -
12. **Sourcing start up fund**
13. **Other growing systems** - Such as aquaponics, mushroom growing, roof top and podium growing systems, beekeeping
14. **Land establishment models** - Leasing, tenure, elimination of land capital cost, working cooperatively with land owners, be they private, commercial or public

Appendix 5 – Groups

Working Group members

Peter Kearney – Samford resident, founder of Cityfood Growers, organic and biodynamic gardener, educator, technologist and former commercial accountant

Susan Volz – Samford resident – Business owner, event organiser & passionate hobby farmer

Jenni Guise - Samford resident – Education professional, small business owner and passionate organic gardener

Charlotte Ferreira - Samford resident – Small business owner and passionate hobby farmer

Steering Group members

Rob Pekin – Former organic farmer and founder of Food Connect

Jeremy Williams – Samford resident - Head of sustainability at Griffith University, lengthy involvement in developing social enterprises

Jerry Marston - Samford resident – Brisbane director of Net Balance, leading sustainability consultancy company in Australia. Organisation has a strong focus on sustainable food systems with urban agriculture being an important aspect and Jerry has lengthy background in developing sustainable community organisations.

Greg Paynter – Former organic and biodynamic farmer, BFA certification inspector, chairman of the education group at the BFA and organic agriculture consultant

Peter Kearney – Samford resident, founder of Cityfood Growers, organic and biodynamic gardener, educator and technologist and former commercial accountant.

Christine King – Agricultural researcher and permaculture educator with a lengthy history in working with communities in Australia and internationally on developing agriculture systems.

Advisory Group members

Dick Copeland – Permaculture teacher and founder of Northey Street City Farm

Luke Zambelli – Soil scientist based in Brisbane

Anthony Foo – Organic and biodynamic farmer, organic certification, product development for organic and consultancy for urban and commercial agriculture via New World Concepts

Howard Nielsen – Sustainability consultant, community development and Moreton Bay Regional Council relations expert

Michael Ableman – Organic farmer and founder of Sole Foods in Vancouver. Leading urban farming advocate, educator and practitioner in the USA

Rob Fenton – Educator at Riverina TAFE organic farming course

Volke Jenke – Educator in the Ferny Grove High School Agriculture department

Cameron Neil – Senior Associate Net Balance – Passionate advocate of sustainable food systems.