



CENTRE FOR HEALTH SERVICES  
RESEARCH AND POLICY

# **An Evaluation of the Gardening for Health and Sustainability Initiative: An Initiative supported by Let's Beat Diabetes**

## **Final Report**

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# Table of Contents

Acknowledgments.....	2
List of Figures .....	5
Abbreviations.....	6
Executive Summary.....	7
1. Introduction .....	10
1.1 Literature summary .....	10
1.2 Let’s Beat Diabetes.....	11
1.3 Alignment to HEHA strategy .....	12
1.4 Aims and objectives of the evaluation.....	12
1.5 Structure of the report.....	12
2. Gardening for Health and Sustainability Initiative.....	13
2.1 Initiative background .....	13
2.2 Garden project descriptions .....	14
2.3 Initiative objectives .....	15
2.4 Initiative logic model.....	15
3. Methodology.....	16
3.1 CIPP model .....	16
3.2 Evaluation questions.....	17
3.3 Data collection .....	18
3.3.1 Document analysis .....	18
3.3.2 Key stakeholder interviews.....	18
3.4 Data analysis .....	18
4. Results.....	19
4.1 Key stakeholder interviews.....	19
4.1.1 Initiative aims.....	19
4.1.2 Appropriateness of the initiative .....	20
4.1.3 Partnership within the initiative .....	20
4.1.4 Networking and collaboration .....	22
4.1.5 Resources.....	23
4.1.6 Community involvement.....	24
4.1.7 Key achievements .....	25
4.1.8 Enablers to implementation .....	26
4.1.9 Barriers to implementation.....	27
4.1.10 Future sustainability.....	28
4.1.11 Stakeholder suggestions for the development of the initiative .....	29
4.2 Programme logic .....	30
4.2.1 Overarching Programme Logic.....	30
4.2.2 Garden Project Programme Logic .....	33
5. Discussion and conclusion .....	35
5.1 Summary of findings .....	35

5.2	Answering the evaluation questions.....	35
5.3	Issues to consider.....	39
	References .....	41
	Appendices.....	42
	Appendix A: Current garden projects .....	42
	Appendix B: Key stakeholder interview questions .....	43

## List of Figures

Figure 1: CMDHB LBD Business plan logic model .....	16
Figure 2: The CIPP Model .....	17
Figure 3: Gardening for Health and Sustainability Draft Overarching Programme Logic.....	32
Figure 4: Gardening for Health and Sustainability Draft Project level Programme Logic.....	34

## Abbreviations

CDC	Centres for Disease Control and Prevention
CIPP	Context Input Process Product
CMDHB	Counties Manukau District Health Board
ECE	Early Childhood Education
GFHS	Gardening for Health and Sustainability
HEHA	Healthy Eating Healthy Action
LBD	Let's Beat Diabetes
MCC	Manukau City Council
MCHT	Mangere Community Health Trust
MIT	Manukau Institute of Technology
PSG	Partnership Steering Group
SOPH	School of Population Health

## Executive Summary

This report presents the findings of a process evaluation of the Gardening for Health and Sustainability initiative in Counties Manukau. The evaluation was commissioned by the Counties Manukau District Health Board “Lets Beat Diabetes” programme, and undertaken by the Centre for Health Services Research and Policy from the School of Population Health at the University of Auckland. The evaluation was designed to provide a snapshot of the implementation and progress of the initiative.

Specifically, the objectives of the evaluation were:

- To collaborate with the GFHS initiative to develop and conduct a process evaluation that meets the needs of the programme providers and key stakeholders, as well as the overall LBD programme.
- To describe and evaluate the implementation of the GFHS initiative.
- To support the GFHS initiative and incorporate lessons learned.

## Methods

The GFHS initiative evaluation is based on the Centres for Disease Control and Prevention (CDC) framework for the evaluation of public health programmes. The CIPP Evaluation model (Stufflebeam, 1983) guided the present evaluation. A mixed methodology was proposed as the most appropriate means of successfully implementing the evaluation, with two key methods used to collect and analyse the data presented in this report. These methods were;

- Documentary analysis and
- Key stakeholder interviews.

## Results

### Programme logic

The evidence collected throughout the evaluation informed the development of two interdependent programme logics, which explain the intended inputs, activities, and outcomes expected from the initiative as a whole, and the community gardens themselves;

- Gardening for Health and Sustainability Draft Overarching Programme Logic (page 32)
- Gardening for Health and Sustainability Draft Project level Programme Logic (page 34)

### Key stakeholder interviews

- Each garden is unique in several ways, from the level of gardening knowledge of those leading the garden, and their perception of their role as a partner or stakeholder in the initiative, to the support required in accessing resources.
- The overall initiative aim was aspired to by all stakeholders, and all stakeholders firmly believed that the initiative was appropriate to the community and their needs, especially as they were able to tailor their project to their specific community as they saw fit. However, there was significant confusion due to a lack of clarity regarding the purpose and nature of the initiative partnership, who was or should be leading it, and how.

- All stakeholders agreed that in order to achieve the aims, collaboration has an important role to play, although there were quite varied perspectives and expectations as to what collaboration should look like in this initiative.
- Stakeholders expressed a desire for more communication, especially of the experiences and processes undergone by other stakeholders so that they could learn from each other.
- Lack of knowledge and resources were identified by stakeholders as key barriers to implementing garden projects.
- The resources of networks, horticultural knowledge and funding, when available, were described as enablers by a number of stakeholders. With these resources, gardening projects were able to successfully plan, prepare, and launch.
- There were varied perspectives on what constituted achievement at this stage. For some, it was establishing discussion and knowledge sharing amongst stakeholders, for others it was the launching of community gardens, and for others it was the enthusiasm and engagement of community members in the gardening projects.

## Issues to Consider

Based on the analyses conducted for this evaluation, there are a number of issues to consider:

- **Clarify the nature and function of the initiative with all stakeholders**  
There is a lack of clarity around the nature and function of the initiative among stakeholders. It is important to clarify this, in order for relationships to function at maximum capacity and for networks to be established and sustainable.
- **Increase communication to facilitate information sharing among stakeholders**  
A need for knowledge sharing amongst stakeholders was expressed. Increased communication around activity within the initiative would be beneficial for all stakeholders especially those that are in the planning and development stages of their garden project. This could be in-part facilitated by the initiative.
- **Develop garden support methods**  
A toolkit with guidelines for establishing a community garden could be very useful for people or organisations wishing to participate in this initiative through creating a community garden. Such a resource could be developed through a collaborative effort of the stakeholders.
- **Continue building networks between stakeholders**  
An important resource for stakeholders is a supportive network, encompassing strong links, and meaningful collaboration. While this will be initially facilitated by the initiative, all stakeholders should take responsibility for building meaningful relationships with other garden projects.
- **Review the role and structure of meetings**  
Meetings play an important role in collaboration through effective and clear communication. Currently there are mixed views about the role and structure of the meetings. In addition to a high level steering group or something similar, an informal meeting whereby stakeholders

can come together and share experiences may be more relevant for the current needs of the stakeholders.

- **Review the role of School/ECE gardens within the initiative**

In the original business plan, school gardens linked to the community were seen as training hubs. Based on the evidence collected for this evaluation, there is limited evidence to suggest further work is occurring in this area. Given this, the role of school gardens within the initiative needs to be reviewed in collaboration with key stakeholders including potential schools and ECE services.

- **Further monitoring of the initiative**

If monitoring of outcomes is to occur, particularly monitoring the establishment of home gardens, a number of factors need to be considered. This includes clarifying the definition of a home garden, the timing of data collection, and logistics of participant follow-up. Monitoring is an important part of evaluating any project, however if stakeholders agree that there is a need to systematically evaluate a range of projects within the initiative a coordinated and systematic approach needs to be taken to collect this type of information across the varying garden projects.

# 1. Introduction

As part of the evaluation of Let's Beat Diabetes (LBD) by the School of Population Health (SOPH), the current report presents the results of the process evaluation of the Gardening for Health and Sustainability (GFHS) initiative, in Counties Manukau. The initiative being evaluated is comprised of a variety of gardening projects undertaken by a number of organisations. Data has been gathered on the progress of the gardening initiative through documentary analysis and key stakeholder interviews.

## 1.1 Literature summary

It is widely known that a healthy lifestyle should include both a healthy diet as well as following the recommended physical activity guidelines. A nationwide survey was undertaken in 1997 to establish the nutritional habits of the adult population in New Zealand. This survey found that approximately two thirds of adults in New Zealand consumed the recommended three servings of vegetables per day, and just under half met the guidelines for two servings of fruit per day (Russell, Parnell, & Wilson, 1999).

The national physical activity guideline is for people to participate in thirty minutes of moderate physical activity on at least five days of the week, and currently this is being achieved by 48.2% of the population (SPARC, 2008). These results suggest that activities to help boost population activity levels need to be promoted. In addition to the likelihood of increasing physical activity, a person's contact or interaction with a natural environment, such as a park, has been shown to provide many emotional and physiological benefits (Maller, 2008). Therefore, it is not surprising that SPARC (2008) found that gardening rated, overall, as the second most popular sport and recreation activity for men and women aged over twenty-five years. This suggests that gardening initiatives could appeal to a wide range of people.

Gardening has been credited as; promoting physical and mental health (Groenewegen, Berg, Vries, & Verheij, 2006), building community, saving money for participants, improving access to fresh produce, and increasing participant's knowledge and skills (Wakefield, Yeudall, Taron, Reynolds, & Skinner, 2007), and increasing self-esteem of participants (Hoffman, Morales Knight, & Wallach, 2007). Of the thirteen home gardening initiatives reviewed by Berti, Krasevec and Fitzgerald (2007), eleven successfully improved the nutrition of participants. In consideration of the many realms of benefits from gardening, such as providing a nutritional, sustainable, economic, and cultural source of food, a form of physical activity, and social benefits, ensuring the success of gardening programs is of great importance.

In order to realise such benefits, it is important to address the many factors that are essential for long-term success, or risk disappointing results. Marsh (1998) posits that the frequent failure of gardening initiatives could be the result of mismanagement and lack of sustainability, whereby the appropriate resources and approaches required for the local context were not duly considered and accounted for during the planning and development. Campbell et al (2008) provide an example of the extent of planning that the development of a communally used garden can require, and how a sense of permanency and usefulness is perceived as important in order to establish the value necessary for a garden to be permanent.

Twiss et al (2003) reported that the Californian Community Garden programs they studied relied upon three key factors for their success; commitment from city council of land and staff, contributions of resources from a variety of volunteering individuals and institutions, and opportunities for participants to increase their gardening knowledge and skills. After reviewing literature on the subject, Marsh (1998) argues that the following ideas are critical to the success of food gardening initiatives:

- Introduce initiatives into areas where the population have some gardening experience or knowledge.
- Provide technical training through the use of group/community leaders.
- Include education regarding nutrition.
- Engage whole families.
- Ensure the initiative allows participants freedom and flexibility in choices of what they plant and the approaches used.
- Work towards self-reliance of participating communities/families for the resources required to maintain their food garden.
- Ensure the initiative is monitored and adaptable.
- Incorporate understanding of, and solutions to, local constraints upon gardening, such as economic, biophysical or agronomic.

In the long term, there is potential for successful pilot gardening projects to expand into larger areas, such as one case in Bangladesh, which expanded nationwide, with over 40 NGO's involved. Evaluation of the roll-out found that success was supported by; the development of a local pilot and thorough evaluation of this, partnership and flexibility, community participation throughout the process, provision of technical assistance and support by the overseeing organisation, nutritional education and promotional marketing of healthy choices, sustainable and easily accessible resources for gardeners, and ongoing evaluation (Talukder et al., 2000).

## **1.2 Let's Beat Diabetes**

Type II diabetes is a chronic disease that leads to serious complications such as heart disease, kidney failure, stroke, and blindness. Counties Manukau communities experience very high rates of type II diabetes, with more than 12,000 people currently diagnosed as having diabetes. It is estimated that almost double this number remain undiagnosed. Given population growth, the ethnic, youthful and generally low socioeconomic make up of the Counties Manukau population, it is estimated that the number of people with diabetes will more than double by 2025.

In 2004, LBD commenced within the Counties Manukau region. Its programme goals and strategies were developed to include ten key Action Areas for achieving the overarching goal of diabetes prevention and management. One of these action areas focuses on 'Strengthening Health Promotion Co-ordination and Activity' (Action Area 5), which works on a number of levels to support the LBD strategy within CMDHB. One work stream is designed to develop multi-agency collaboration in support of increasing gardening and food gardens throughout the Counties Manukau area, and to contribute towards the goal of improved nutrition leading to a reduction in diabetes and obesity [LBD Operational Plan 2008/2009].

### **1.3 Alignment to HEHA strategy**

Healthy Eating Healthy Action (HEHA) is a Ministry of Health initiative to improve nutrition, increase physical activity, and achieve a healthy weight for all New Zealanders. The introduction of the GFHS initiative is clearly aligned to the outcomes and actions under the HEHA framework (Ministry of Health, 2004). For example, the work being done with the GFHS initiative, under the Health Promotion Action Area of LBD, and HEHA both seek to ensure that community garden projects work collaboratively and in a co-ordinated manner to improve nutrition (HEHA outcome 1). The initiative also reflects HEHA's focus on creating environments' that promote and support healthy eating (10). The population of the communities in which gardens are being established comprises of Maori and Pacific Island peoples, and many young people, children and their families. The GFHS initiative that is being implemented aims to improve the nutrition environment by improving the access to healthy options for these high-needs groups, this is a theme throughout the HEHA framework.

### **1.4 Aims and objectives of the evaluation**

This evaluation's aim was to investigate the development and implementation of the initiative through the following objectives:

- To collaborate with the GFHS initiative to develop and conduct a process evaluation that meets the needs of the programme providers and key stakeholders, as well as the overall LBD programme.
- To describe and evaluate the implementation of the GFHS initiative.
- To support the GFHS initiative and incorporate lessons learned.

### **1.5 Structure of the report**

This report was prepared by the Centre for Health Services Research and Policy at the University of Auckland, and was commissioned by LBD. It presents the evaluation of the GFHS initiative supported by LBD. The previous section provides the context in which the initiative was carried out and the aims and objectives of the evaluation. The following section presents the background and objectives of the GFHS initiative. In the third section, the evaluation methodology is explained. The fourth section details the results of the evaluation and the report concludes with a discussion of the results and some issues to be considered.

## 2. Gardening for Health and Sustainability Initiative

This section presents the background and objectives of the GFHS initiative.

### 2.1 Initiative background

The GFHS initiative is part of the Health Promotion Action Area of the LBD plan. Action Area 5 focuses on improving collaboration within the health sector and strengthening health promotion for community settings. The promotion of food gardening is seen as addressing and promoting LBD's goals of improving nutrition and physical activity, and requires multi-agency collaboration to provide the necessary resources. Health promotion initiatives are typically targeted at communities within lower socio-economic locales. In lower socio-economic communities, there can be limited affordability of, access to, and knowledge of how to grow and prepare fresh, nutritious fruits and vegetables. The aim of this initiative is to increase knowledge about gardening and preparing food from the garden. In addition to this, the initiative aims to encourage the uptake of gardening at home to improve family relationships, encourage cross-generational learning, save money in household food budgets, increase environmental awareness and improve school-community relationships.

As part of their efforts to tackle the epidemic of obesity and diabetes in the community, LBD seek to be a part of a multi-agency gardening initiative because of the multi-ranging benefits of food gardening. Community consultation by LBD in early 2008, indicated that there was a desire amongst people to learn to grow their own food-gardens. In June 2008, the LBD Partnership Steering Group (PSG) Chairman convened a multi-agency cross-sector group, with the aim of further exploring potential interest for and objectives of a proposed food gardening initiative. The multi-agency group has had over 16 agencies participate in discussions, including:

- CMDHB's LBD Partnership Steering Group
- Manukau Parks, Manukau City Council (MCC)
- Manukau Institute of Technology School of Horticulture (MIT)
- Mangere Community Health Trust (MCHT)
- Monte Cecilia Emergency House
- General Mills company
- Otara Boards Forum
- Housing New Zealand
- A number of marae, schools and kohanga reo within Counties Manukau

The initiative plan developed by the multi-agency group centres around the use of community food gardens as a hub for resources and training of neighbouring households, with links to school and Early Childhood Education (ECE) Centre gardens. The garden projects include:

- Marae-based gardens with NZQA accredited training through the Manukau Institute of Technology (MIT) School of Horticulture
- Community situated gardens (both council-run and community-run)
- School gardens (Primary and ECE)

## 2.2 Garden project descriptions

Currently the initiative is actively supporting seven community gardens with another seven being supported towards a launch date. Descriptions of three garden projects currently being supported by the initiative are presented below. A full list of current gardens associated with the initiative is presented in Appendix A.

### **Mangere Community Health Trust (MCHT) Food Forest**

The MCHT Food Forest community garden exists on MCHT land, and was launched with great publicity on Friday 14<sup>th</sup> November, 2008. The garden project manager has employed a gardener and a nutritionist/dietician on a part-time basis. It is principally a large organic garden, and includes a worm farm, composting, and a beehive.

Programme inputs and resources.

- Initial funding for setup by General Mills
- Time and expertise of gardener (funded by ASB Emergency Grant)
- Employment of dietician/nutritionist to run cooking workshops
- MCHT land
- LBD assistance with launch publicity
- Collaboration with local lawnmower businesses
- **MIT** donated plants and herbs, **Living Earth** donated compost, **Tui Products** donated grow guides and snail and slug pellets, **5+ A Day** donated posters, and many others donated either products or their time. The biggest volunteer effort came from the large group of staff members of **General Mills** (personal communication, 23<sup>rd</sup> January, 2009).
- Website, with calendar of upcoming workshops, and other useful information
- Workshops/cooking classes scheduled to occur fortnightly

### **Manukau City Council (MCC) Manukau Parks Teaching Gardens**

The MCC Manukau Parks Teaching Gardens project has set aside public park areas for registered (adult) individuals and groups to learn basic food gardening skills, practising within their allocated plots for one seasonal period. The gardens are currently located in Papatoetoe (Middlemore Reserve and Stadium Reserve, both launched in March 2009) and Mangere (Walter Massey Park, Old School Reserve).

Programme inputs and resources

- Garden plot areas in four MCC public parks
- MCC funding
- MCC Park Rangers
- Garden Mentors

### **Monte Cecilia Housing Trust Garden**

The Monte Cecilia Housing Trust has set up a food gardening programme as part of their emergency housing residential programme in Mangere, which assists twelve families at any given time. Gardening topics being taught include growing fruit and vegetables (including taro), harvesting and

cooking from the garden, worm farming, composting, and recycling. A gardener has been employed on a part-time basis.

Programme inputs and resources

- Housing Trust land
- Time, enthusiasm and expertise of gardener
- Time of staff to learn gardening and work with families in the garden & kitchen
- Funding assistance from LBD
- Existing community network
- Access to indigenous plants

## 2.3 Initiative objectives

The multi-agency group had the following objectives stated in the draft business plan:

- To expand knowledge in families and communities about how to start growing and maintain a vegetable garden i.e. teach **vege-gardening skills**.
- To expand knowledge in families on how to prepare vegetables for cooking and eating, in so doing promoting **healthy eating**. As part of this, provide **nutrition education** to help families identify nutritious fruit and vegetables, and encourage healthy eating habits and a healthy diet.
- To expand knowledge in families and communities about how to start growing and maintain **fruit trees**.
- To increase the number of families in the region who have **food gardens**.
- To strengthen **communities** through shared food or communal gardening.

## 2.4 Initiative logic model

The following logic model was provided to the evaluation team and was developed by the GFHS initiative. Reviewed programme logics have been developed by the evaluation team based on the evidence collected and are presented in the Section 4. The logic model in Figure 1 shows that the programme was intended to bring wide-ranging long-term benefits to well-being (physical, social, economic, environmental and cultural) through using community and school food gardens as training hubs to teach families how to grow their own food garden at home. Expected inputs included a range of partners, including schools and communities committed to food gardening, who would engage with the community to assess their needs and wants.

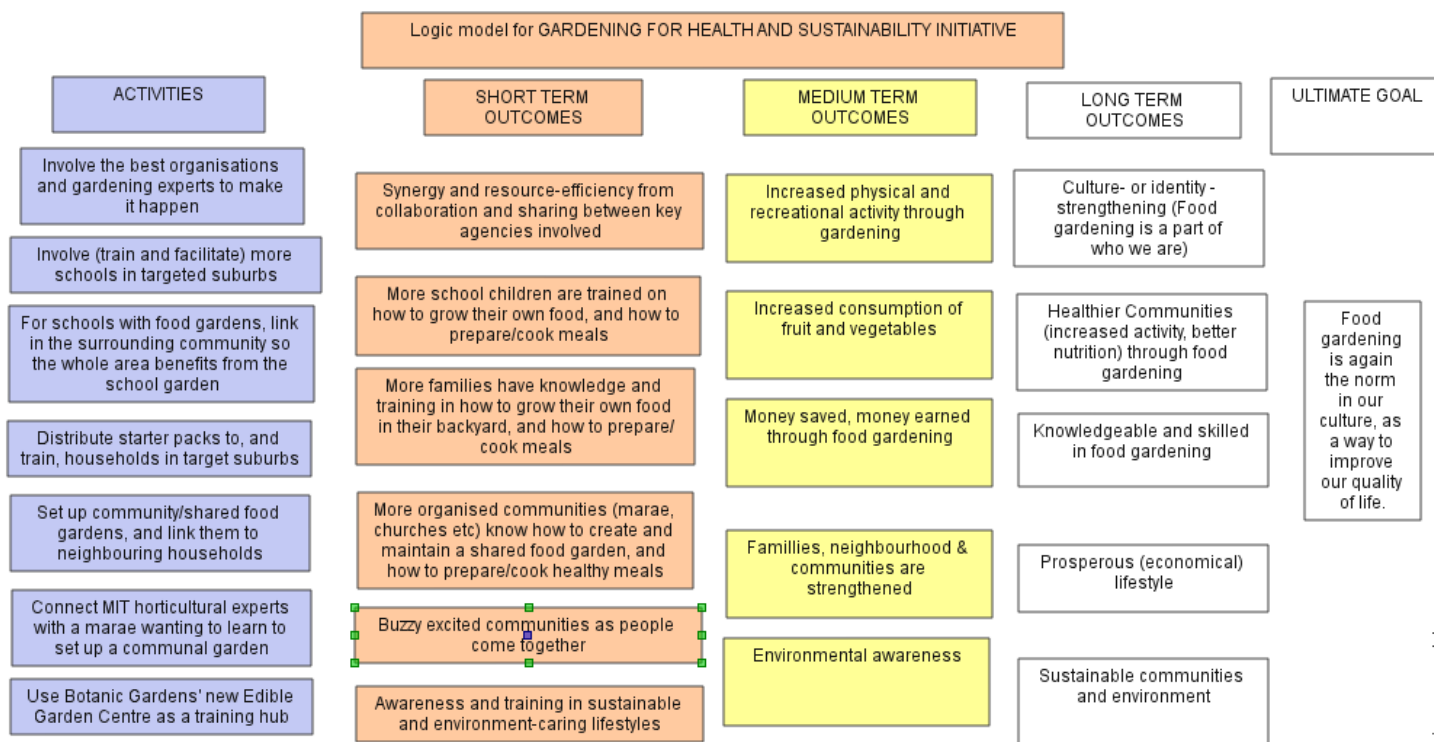


Figure 1: CMDHB LBD Business plan logic model

### 3. Methodology

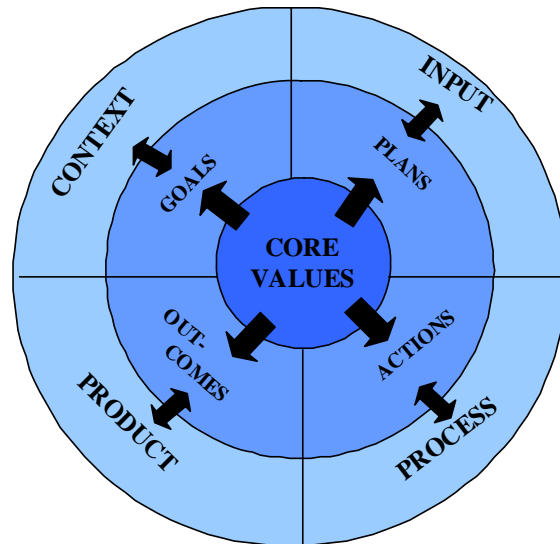
The time frame and needs of CMDHB required a timely and focussed insight into a sample of projects supported by the LBD programme. Subsequently an in-depth evaluation of all the gardening projects was not feasible; instead, this report provides a snap-shot of the implementation and progress of the GFHS initiative as well as presents case studies to provide further depth. This is designed to provide an overview of progress to date, and to identify a set of recommendations to inform the future development of the GFHS initiative.

Programme evaluation is designed to support programme development through evaluating different components of a programme. Evaluation is useful for finding out whether a programme is being implemented as intended and whether what is being done works. Evaluation is also important for maximising the potential of a programme and, ultimately, the benefits to the community.

The GFHS initiative evaluation is based on the Centres for Disease Control and Prevention (CDC) framework for the evaluation of public health programmes. A mixed methodology was proposed as the most appropriate means of successfully implementing the evaluation. Mixed methods inquiry deliberately pulls together different research methods designed to collect different kinds of information (Greene & Caracelli, 1997).

#### 3.1 CIPP model

Guiding the evaluation will be the CIPP Evaluation model (Stufflebeam, 1983) which will provide a valuable structure for the evaluation. The core parts of the CIPP model are context, input, process, and product evaluation of the programme (see Figure 2) which assists the decision making process within the programme.



**Figure 2: The CIPP Model**

*(The CIPP model is adapted from Stufflebeam, 2003)*

The four parts of the model assist decision-makers in answering these four general questions:

1. What needs to be done? [Context]
2. How should it be done? [Input]
3. Is it being done? [Process]
4. Did it succeed? [Product]

### 3.2 Evaluation questions

In order to guide the evaluation, evaluation questions were developed in collaboration with the key stakeholders. These are structured using the CIPP model components:

#### Context

1. How was the initiative developed?
2. What are the key goals and target groups and how were these determined?
3. What is the intended programme logic?

#### Input

4. What are the key programme resources?
5. Were the resources appropriate?
6. Were the resources used as intended?

#### Process

7. What are the barriers and enablers to stakeholder engagement?
8. How are the processes/ activities achieving (or intended to achieve the key goals)
9. What evaluative process are occurring/ planned
10. What are the barriers and enablers to community participation?
11. What is the process and level of collaboration for stakeholders involved in the initiative?

In order to achieve the objectives set out in Section 1.3, the evaluation utilised two key methods of data collection which include documentary analysis and key stakeholder interviews. These methods are described in more detail below.

### **3.3 Data collection**

This section outlines the methods that were used to collect data for the evaluation. The two key methods included documentary analysis, and key stakeholder interviews.

#### **3.3.1 Document analysis**

Documentary analysis is a systematic process that can identify the individuals and activities involved in a programme or intervention (Garman, 1982). The documents provided to the evaluation team were analysed to:

- Identify who is involved in the initiative.
- Determine key achievements and outcomes to date.
- Provide information about the implementation of the programme.
- Identify programme inputs and resources

Documentary analyses were conducted using a range of documents provided by stakeholders in the initiative. The documents used included:

- Gardening for Health and Sustainability Draft Business Plan
- Newsletters

The Draft Business Plan was used to provide insight into the intentions, expectations and goals of the initiative, as well as a source for the key elements of the programme logic, being the inputs, activities, and outcomes.

#### **3.3.2 Key stakeholder interviews**

Nine key stakeholder interviews were conducted to provide insight into the experiences of those involved in the GFHS initiative. This information is important to understanding current processes and programme implementation, as well as the engagement and experiences of different stakeholders. The interviews lasted no more than one and a half hours and were conducted face-to-face. The interviews identified key stakeholder perceptions of the initiative aims, stakeholder relationships, communication and collaboration among stakeholders, resources, community involvement, appropriateness of the initiative, key achievements, enablers and barriers to implementation, and the future sustainability of the initiative.

### **3.4 Data analysis**

Documents provided were reviewed by the evaluation team, and used to inform this evaluation report. Thematic analysis was used to identify the issues that the key stakeholders identified as relevant to the GFHS initiative. Comparisons of responses ensured that the findings reflected the views of all key stakeholders, while also allowing for any interesting or unexpected data to be shared. The interview findings were discussed with the interviewers and evaluation team to ensure inter-rater reliability.

## 4. Results

This section outlines the data collected from the stakeholder interviews and presents the reviewed programme logics for the GFHS initiative.

### 4.1 Key stakeholder interviews

Stakeholder interviews were conducted in order to understand the development, implementation and current enablers and barriers to the success of the initiative, from their perspective. Face-to-face interviews were held during the period between April and May 2009, with key stakeholders of the Gardening for Health and Sustainability initiative.

The following section presents the findings from these interviews and is structured under the key themes identified through the analysis of the interview transcriptions. The key themes include understanding of the initiative vision and aims, enablers and barriers to the success of the initiative, stakeholder perspectives of change and impact for participants, resourcing and key achievements of the initiative, and the communication and collaboration between key stakeholders.

#### 4.1.1 Initiative aims

All stakeholders appeared to share and support the LBD project aim, to use food gardening as a way to improve the vegetable and fruit intake of the various communities within Counties Manukau;

*To increase the amount of fruit and vegetables that people are eating, and to get people active... and eventually to reduce diabetes.*

*It's about empowering, [and] teaching people those skills as one of those steps towards better diet and lifestyle and health...with the focus being on reducing diabetes.*

*To get people to increase their intake of fruit and vegetables through growing their own... and that's being delivered through schools and various other organisations.*

However, each garden had a unique perspective that has brought them to this initiative, whether it was a desire for reducing green waste going to landfill, community development, empowerment, or increasing physical recreation;

*Key point is to increase physical activity, even passively... most people like gardening and it can be as passive as you like, and it's still activity. Our plants... what started it was that there was a huge amount of organic waste coming from all the houses... that's been an issue for me as far as our landfill goes, so I'm wanting to reduce that.*

*To get the families doing something in the weekend... and to provide some healthy food, and to encourage them to eat greens, as our families tend to be quite big meat eaters.*

The initiative is expected to provide stakeholders with multiple benefits and help them achieve a variety of goals that suit each of their visions.

#### 4.1.2 Appropriateness of the initiative

The garden models were all seen as appropriate for the communities in which they were situated, and all stakeholders believed that the initiative could really help their community in many ways. One such explanation of appropriateness given was the rate of diabetes in the region, and how their primary community initiative created a captive audience that would benefit from the GFHS initiative in conjunction;

*We're Maori, we live in South Auckland, and we have a huge population that has diabetes... and the two initiatives together work really good.*

Perceived appropriateness was not only due to the positioning within the community, but also that the gardens provided a means to get involved in informal and collective activity;

*Community gardens are based where people are based, and that's really important... Pacific people like that communal, doing things together type situation. That really suits how they do everything. The informality of it is good too. It's not too structured.*

Whilst some garden models require a limitation to be placed on participation, some of the models being planned and implemented are expected to serve all members of the communities in which they are situated. This ties in to the acknowledgement that not only is a community garden intended to develop community and social cohesion, but also that this initiative is seen as being practical and appropriate for everyone due to the current economic climate;

*The concept of gardening fruit and veg ties into household budgets and putting food on the table in difficult times... It's an idea that relates directly to people's pressing needs right now. It's a tangible, helpful idea that's of value to families right now.*

#### 4.1.3 Partnership within the initiative

There were mixed views about the level of buy-in from the stakeholders as a group, with agreement being on the vision and not necessarily on what their partnership in the initiative involved;

*On one level, yes, which is that they all think this is a great thing to be doing. There is support, I think, from everybody for pulling together and having a gardening initiative. At the next level, so that's 'if you're interested, what can you put into it?', there is still buy-in but it starts to drop off.*

The focus for each stakeholder has been on their own project, and they do not feel that it is their role, or in their ability, to assist with the success and sustainability of any other gardening project;

*I had a bit of grief when one of the other entities tried to get stuff off us... nagging, going around nagging to anybody to donate anything. I'm not here to support other [initiatives] than [our own] and I can't use our resources on anything other than [our own project], and of course her going around doing that was spoiling it for other people who wanted materials from the same sources.*

As this comment highlights, expectations of collaboration and partnership differed between projects, and each project is currently seen to be on its own entity rather than being a link within a partnership. The independence of projects has also been described in a positive way;

*The garden is what the clients want... you know, I'm thinking about the clientele, and I need to make sure that when [the Project Manager] and everybody else goes away, that it's still going to be used and I have to make it as user-friendly as I can for the clients. And he's been really good like that. He understands that he's just there to facilitate a process rather than to come in and say you need to do it this way and this way and this way. So he's been really good.*

The project independence gives freedom to groups to develop and own their project to meet their own needs. However, some projects have felt that the partnership has not lived up to their expectations for assistance;

*It's meant to be a partnership and I thought we were going to get more help than we have. We've got zilch, essentially.*

An important point from this quote is that something was felt to be missing from the partnership. It appears that all stakeholders have their own relationship with the LBD Project Manager, but very few have other connections amongst the key stakeholders of this initiative outside of the few meetings they have attended;

*There's not a lot [of communication]. We met a number of stakeholders at the initial meeting and we've had one or two meetings since, and we've shared experience... The only person, apart from [the previous Project Manager] when she was there, we have an ongoing relationship with her replacement...*

*I feel quite out on a limb really. I didn't at first, but, I mean it's a huge project I think, I mean I don't really know as I don't know what's going on, but then I didn't go to that last meeting so I probably missed something there. But yeah, there isn't any interaction. We're basically left to our own devices.*

Not knowing what other garden projects are happening or how they are progressing, as mentioned in a quote above, appears to contribute to gardens feeling isolated and not part of a group initiative.

*I would encourage it to continue to bring everybody together. Otherwise we're not in touch. We live in our own worlds, sectors. But this is something that cuts across.*

Stakeholders appeared to want to receive more communication, especially in regards to information about the activities, progress and general experiences of the various gardening projects. Communication is a vital part of stakeholder relationships, and connections between projects need to be facilitated. Whilst a number of key stakeholders discussed visiting the MCHT Food Forest, and

some had also benefited from being shown other community gardens within the Auckland region, not all had had this benefit, especially at their own planning stages.

The GFHS initiative encompasses projects with very different approaches, and there have been quite differing expectations of what this partnerships purpose is, and what assistance that they could expect to be provided or required of them through being a part of the collaboration. It was clear that stakeholders did not feel that there was a collaborative relationship as a group, which appears to primarily be due to the need for development of connections and network sharing across projects.

#### 4.1.4 Networking and collaboration

A lot of time and energy has been invested in the establishment of each gardening project. A number of groups willing to collaborate were mentioned during interviews including LBD, Housing New Zealand, Living Earth, the Department of Corrections, and the Council.

It was suggested in a few interviews that the experiences of each garden could be very useful for others to learn from and is a practical component of working collaboratively;

*I think that the trade-off from working collaboratively is that people can learn from what the others are... I guess the successes and failures of each garden. Experiences. Each garden could do a spot analysis of what has worked and what has not, and what are the potentials etc. Because the programme is in its infancy I think there's tremendous opportunity if what one garden are doing and succeeded perhaps another garden could utilise those ideas, those practices.*

It was suggested that the ~~Programme~~Project Manager role has the capacity for enabling this learning;

*[The ~~Programme~~Project Manager] could transfer knowledge... monitoring, assessing, recording what works and what doesn't, and communicating that to people.*

Stakeholders mentioned that such intangible benefits of collaboration, through sharing of experiences, processes and knowledge gained, are valuable for the planning of new projects;

*Seeing someone who is a fair way down the track... [to know that] these things worked, and these are things to be aware of...so that was good for us before we got started. It did actually change a bit about how we were going to do things.*

A number of key stakeholders expressed a desire to continue meetings, especially in a format that will promote sharing of experiences and knowledge;

*Just to keep sharing, the knowledge that everyone's got... sharing... just to keep communicating with one another... just to see what everyone else is doing... but it may be just another burden for everybody, I don't know.*

When asked about collaboration within this initiative, one stakeholder commented that timing was important;

*For me it's been getting my head around what's happening... there are a lot of benefits and it's just a matter of getting it when you need.*

This comment highlights how the implementation and progress of each garden project was seen as a journey, and that this initiative could provide many benefits through collaboration, but that these need to be available at certain points in the life of a garden project, which has not been the case for all of the gardens. As one stakeholder mentioned, the initiative is still in the early stages and therefore the networks are still being developed;

*The Project Manager's toolkit will grow as he gets involved with different groups who'll give something... We're coming in, in the relatively early stages, but I think later on, when some of the gardens are more established, and he's able to say go down and have a look at such and such. I mean, he's bought on Living Earth, and different places, so once he's bought on Bunning for tools and whatever else...*

Whilst some stakeholders were looking to the partnership to receive assistance, there were also comments from some, indicating a hope to share resources with others;

*We talked about visiting other gardens and hopefully sharing plant material and stuff like that later on. I've got a small collection of some of the national flaxes... which I'd like to be able to give to the other [gardens], because some of these flaxes and things are getting rare now. So the more that I can get that plant material out there... you know, it works both ways.*

As these comments reveal, there were quite varied expectations amongst stakeholders of what level of collaboration this initiative should involve, and what contributions and/or benefits should be expected. To many, partnership and collaboration meant the sharing of knowledge and experiences for the benefit of others. Benefits sought included useful tips or guidance for gardens being planned, reduced prices for gardening consumables (e.g. compost), and assistance with funding.

#### **4.1.5 Resources**

There appeared to be little desire as a whole group to share resources amongst some stakeholders, aside from their experiences. However, as evident from comments shared above, some expected resource sharing from either LBD or other stakeholders as part of the collaborative nature of the initiative. The resource mentioned most often as being invaluable was knowledge of gardening, whether it was that of the Project Manager, garden mentors, or the key stakeholder themselves;

*It just so happens that I have a background in horticultural production and that's invaluable. When it comes to site selection, knowing the sorts of people you need.*

Having an understanding of the requirements and sources for establishing a garden was reported as an essential resource. Not all of the stakeholders had background knowledge at their disposal, and this made a big difference to their experience of this initiative;

*This is all new to me... I don't do gardening, so I've needed support and help... We've been left on our own there's been very little involvement at all. I don't know what I expected, but I expected more... Basically there were no resources. I mean, the Project Manager doesn't have a budget at all, there's no budget attached to the project, so really it's been up to us.*

As the comment shows, some looked to LBD for assistance with sourcing funding as well as guidance, and there was a sense of frustration that the project was undertaken without the attachment of funding. Others felt that they are well positioned to seek assistance through their own community and networks;

*What are my expectations... because it is new, and because I'm quite a resourceful person... those blocks that are out there, they were \$25 each, but I got them for \$2... and because I know what I want and I know what the needs are for the group that I'm servicing, I can just go and source that stuff myself, and I'm not opposed to doing that.*

*In terms of the resources most of that will be donated. Particularly to get it off the ground and the first crop in...the people that we've spoken to there just want to keep it really basic. There's some social issues with vandalism there, and what they're saying is that the more that's there, the more risk there is of things getting damaged...we were budgeting on providing a little garden shed...and they're saying it's better that people just bring whatever they need from home... We can pull on a lot of those kind of contacts that we've got.*

Even though financial resourcing itself may not be seen as a critical issue, the quality of the human resourcing is, which is enabled through having the funds to pay them;

*The garden has been set up for a while now... the resources are not a problem for us. Having [the garden mentor] as a tutor has made a lot of difference for us, I think, because she can keep us moving ahead. It's that resource of that enthusiasm, someone to drive it... It's about using your community... it's not about money, really, but being able to pay her will make a difference.*

The differing approaches to seeking the resources needed, and the available network each had to call on for assistance, also appeared to make a considerable difference to their outlook of the future sustainability of the project.

#### **4.1.6 Community involvement**

Some gardens were necessarily targeted at a community within a community, and therefore not open for wider community involvement. For those that the garden was created for, participation has needed little encouragement;

*Well, I've got people ringing me constantly, do you need this?, do you need that?, some are [community members] sitting at home on their phones doing quotes and things. So I've got them coming in all the time saying this is what such and such is gonna offer, and I walk outside and there's people out there measuring up for doing quotes because the [community members] have got them in, and it's like they're finding their space in it because right now they're not overly involved in the physical setup, so they're finding other ways to add value to it.*

There are also a number of ways in which some are considering maximising community involvement;

*So far it's been word of mouth and [the garden mentor] talking to different people. Certainly, for me... the community newspaper is one way we'll look at...to involve the school in the garden, that's one way for this to be taken home by the kids.*

Various methods of participant recruitment and promotion of the community garden are being sought on an individual project basis. Some gardens are making efforts to ensure their sites are visually appealing and noticed by foot traffic. Another method being used to attract participation is letterbox drops, although the downfalls mentioned include the cost and the manpower required to deliver it.

*Well, I've had to stop taking on board applicants and we're putting them into the summer programme... what we found is that once we got going, word of mouth... people saw what was happening, and more and more applicants come in. We did a letterbox drop to churches... \$700 they cost.*

#### **4.1.7 Key achievements**

Stakeholders reported various achievements, ranging from the discussions and sharing of technical knowledge that has occurred between stakeholders, to the successful launching of MCHT Food Forest, and Manukau Parks Teaching Gardens. The launched gardens were repeatedly mentioned as being notable achievements, with talk of gardening becoming a reality, acknowledging the hard work of those people involved.

*The Mangere Community Health Trust, I think that was the first one and I describe that as an achievement, including having the mayor Len Brown there for the launch, TV coverage... and Manukau City Council identifying and agreeing to set up four community gardens and now actually going ahead and doing it. So it's gone beyond words, we're actually doing it now. The gardens are being worked on. I think that's an achievement.*

The meetings that have been held were seen as being successful in providing motivation and encouragement to those considering a gardening project. For gardening projects in the early stages, the groundswell of interest garnered from the community and both the willingness and ability of those involved to use their social networks is also seen as a step toward achieving success;

*There's definitely been some commitment from some key people...in terms of successes...the project success is how many people we get growing at home, and it's a bit early to see that...*

*for our project it's the interest that it's generated in its early stages... and it's the ability of those involved to use social networks to get it off the ground.*

For the gardening projects that are already functioning, the leaders are seeing very positive changes in those participants that they have worked with;

*Over the summer they all ate much better. They all ate heaps of the food that was out of the garden. They really enjoyed eating and harvesting it and enjoyed it. We specifically tried to grow stuff that they wanted to eat... bok choy they ate mountains of...taro, the corn, and all this salad and tomatoes, and all that stuff. So, I think over the summer they ate fantastically, which included the kids because they loved it, and we were trying to cook what we grew as a class because we were trying to teach them as well... and I know quite a lot of them and done gardens when they've got to their place as well, they've said to us you should come and look at my garden. So, they've actually reclaimed their gardening skills.*

#### **4.1.8 Enablers to implementation**

As already mentioned, during the initial stages of planning and setting up a community garden, those with horticultural experience appeared to have an advantage over those without it. For those without horticultural knowledge, the Project Manager was reported as being of great assistance and an enabler for the project;

*It's taken a really good step forward since [the Project Manager] came on. He's probably the...him keeping me going... he's been really helpful.*

Meetings and discussions have served an important function of maintaining the motivation of some stakeholders;

*The great thing about going to those meetings is that you can't help but get caught up in the enthusiasm of it. There are a number of people who are really into it...that was really good for me to see.*

Whilst the economic recession was mentioned as a barrier, due to the reduced availability of funding, a positive outlook was also found and seen to be an enabler to the establishment of home gardens;

*It's an idea that it's time has come. It's very topical now. Everybody is talking about gardening. In this recession, unemployment issues, prices are going up and household budgets are getting squeezed.*

This initiative encompasses a variety of food gardening projects. As the quote below shows, some stakeholders talked about how they appreciated that their unique approach to the common goal has been respected and that they have not had anything enforced on them;

*I think everybody's got the same goal, and because they've got the same goal, though we've all got our own flavour on it, and [the Project manager] is very careful, because I may have a*

*few ideas of my own and be quite strong-willed with those. But [the Project Manager] is very open to the fact that it's not his garden.*

The acknowledgement that different communities will have different needs in regards to a garden has been of value. Therefore, the flexibility of this initiative to include different models has been highlighted as an enabler, through facilitating support and encouragement of independence.

#### **4.1.9 Barriers to implementation**

Barriers have been encountered by the various garden projects at multiple stages. Some gardens were held back by aspects of bureaucracy, such as council requirements, which forced them to put a lot of time and effort in to get the access to the land;

*Issues with land and it's... issues over dealing in-house with engineers who thought that that was a possible site for a ...can't remember what it was...but working around them and making them understand that what it is we're trying to do and bringing in the community, and it turns out that what they were wanting to do wasn't for another ten years anyway so that was frustrating and stalling. Working around the Reserves Act..we had to do a number of things through the Reserves Act to have it there and useable.*

Barriers to the establishment and ongoing sustainability of community gardens were mentioned, with most barriers being associated with either financial or knowledge resourcing. At the heart of this initiative is the barrier believed to be preventing most people from gardening, which is a lack of knowledge;

*Another one to come up is knowledge of gardening – the basics. In our parents' and grandparents' time, gardening was in the family, it was done by every generation every year. We had the basic knowledge, just by doing it. It's almost like in this area, particularly in this area, a lot of families in this generation haven't grown up with that, so they don't even have the basic knowledge. So that's one of the barriers in implementing this. It's not asking people to restart what they already know. In a lot of cases we're up against having to teach people.*

The lack of gardening knowledge that prevents people from gardening, translates into a necessity to teach them, which means that community gardening projects must find a way to provide this education. The contribution of garden mentors through their time, energy and knowledge are seen as vital, for their assistance with the planning and development of gardens as well as the sharing of their gardening knowledge and skills with participants, however there is a lack of funding to support their role;

*I could go out there and create gardens on a shoe-string, but the intent is to sustain those gardens...and I can only sustain those gardens through ongoing funding...so we can pay those people on the ground...we cannot rely for too long on voluntary input.*

Before the need to teach participants gardening skills is addressed, the community garden must be set up, which also requires knowledge that not everyone has had;

*The biggest barrier we've come up to is that we didn't know what to do. It would have been nice if there had been a book that said if you have a garden you actually need water, and if you're going to have people in a garden you need a health and safety policy, and a toilet for them to use, those sorts of things that we just didn't even think about ... so all of a sudden somebody falls over and we think we should have had a policy about what to do if this ... and me getting rung on a Saturday morning to say we need to get into the toilets... It's the stuff you don't know, and although I searched the internet I never found the practical 'how to do it' stuff.*

This is a barrier that appears to now be addressed through the procurement of the Project Manager who has extensive gardening knowledge. One of the many decisions required in the establishment of a garden is the approach to be taken, which has also caused problems as staff can disagree;

*Because we are a small staff and people had their way of doing things, so you take one issue, like spraying, and some staff have been used to just spraying because it's quick and easy, and then you talk about an organic garden and ask them to not spray and there's resistance. And you can ask them not to and they continue to do it...there's been some educating.*

Once the issues relating to the establishment of a garden are worked through, and participation is sought, a further barrier arises, one stakeholder mentioned that low-income families struggle with many other issues and sometimes health and wellbeing come last on the list of priorities;

*We work with a lot of low-income families...sometimes health comes last. These people struggle with their housing, their income, their debt levels...*

Stakeholders felt that the important barriers that they wanted to be addressed through being in the partnership were the needs for knowledge-sharing and funding assistance.

#### **4.1.10 Future sustainability**

The primary concern regarding future sustainability for garden projects lay in their ability to pay and retain the garden mentors/managers;

*To ensure the sustainability... we're not going to find hundreds of [dedicated volunteer gardeners] to do it. I know the project is looking at securing some funding for that, we can actually employ some of these people. It might only be on a part-time basis, but give them some return for what is going to be a big commitment. I look at the amount of time she puts in...she does a lot of work behind the scenes before the garden is even up and running... if we can help them out financially that'd be great.*

*I think that we'll always need a tutor, because we have a changing group of people, and I think that the garden can sustain itself within the families but I think ... it's a rotating group of people so we do need to have a tutor... for the staff.*

The future of a community garden is seen as resting on the presence of a knowledgeable gardener to instruct others and maintain the garden, and there is the expectation that such a person should be

paid for their services. In contrast, one stakeholder expressed how they hoped that the aim of establishing home food gardening as a cultural norm would eventually remove the need for community gardening;

*In some ways I'm not that worried about how sustainable it is. We're not looking at a huge population ...what we want to do is essentially to give people the skills to do it in-house sort of thing. To do it in their own back yard. For the success of the community garden in some ways may be that that is succeeding when people are using that less and that they're not necessarily coming to the community gardens that much but are doing it at home. We're certainly looking at 5 years.*

Important to future sustainability is the ability to measure and monitor outcomes of the garden projects. Some stakeholders shared their plans and thoughts on how they might be able to monitor the outcomes of their project, these included collecting information through:

- A get-together of some description (Christmas reunion)
- Provision of a Home Starter Pack, and possible assistance with initial fruit tree planting
- Provision of one-on-one guidance and assistance by a Garden Mentor for setting up a home garden
- A follow-up questionnaire delivered to each participant

#### **4.1.11 Stakeholder suggestions for the development of the initiative**

In relation to a desire for collaboration amongst stakeholders, some mentioned that they would like a way to know about other groups or organisations undertaking a gardening project, and how they are going about it;

*It would be really nice to have a register of the gardens, who their key contacts are, that'd be really good. And if they specialised in anything, you know, that would be really helpful, just to do those links.*

*To see what other people are doing... hearing about how it's all going for everybody else, really. Everybody has a different community... so you have a different approach, so it's always good to see how others are doing it, so it's learning from what other people are doing.*

It was also suggested that the initiative should be promoted further, and a clear link established between gardening and health;

*The LBD initiative has had, locally, some good publicity, but the gardening initiative, I would still not have known about that had I not had that person to do the introduction initially, and we could have stumbled on, and they could have stumbled on, whereas together it has certainly happened a lot quicker.*

The linkage between gardening and diabetes could be promoted, not just to those in a position to establish a community garden, but also for people in the community to have another reason to be involved;

*Getting the community engagement through 'why are we doing all this?'. I guess that's some of the other social marketing that the District Health Board does through the Let's Beat Diabetes programme, but maybe link directly to this, maybe some of that kind of material focuses on the gardening initiative. That 'here is an easy, low cost, great way to beat diabetes', and... so that 'this is why you get involved' so that some of that marketing initiative focuses on that. The material on bus stops, it's out there and people are aware of it, but maybe just tying it back to why you should get involved in this.*

Gardening has not currently been marketed as relating to diabetes, or as a way to combat health and nutrition issues. This may impact upon stakeholder attempts to source funding, as potential funders may not see sufficient linkage between the wider scope of health issues such as obesity and diabetes, with the activity of community gardening.

## **4.2 Programme logic**

The following diagrams are two programme logics developed by the evaluation team for the GFHS initiative that were drafted based on the evidence collected throughout this evaluation. The programme logics illustrate the links between programme inputs, activities, expected outputs and outcomes, and represent the evaluation teams understanding of what the initiative intends to achieve and the means by which it will achieve these goals. Furthermore, it can be used to clearly illustrate the links and theoretical relationships (represented by the connecting arrows) between the categories mentioned previously, for example, the links between inputs and activities; and activities to products.

The programme logics represent two levels of the GFHS initiative;, the first programme logic represents the overarching initiative. This is a high level programme logic representing the key activities that the initiative is seen to be undertaking. The second programme logic represents activity taking place on a garden project level. It should be noted that this is a generalised programme logic, and not all garden projects will fit this model.

### **4.2.1 Overarching Programme Logic**

The programme logic presented in Figure 3 depicts the evaluation team's understanding of the GFHS initiative. It is clear from the stakeholder interviews that there is little agreement as to the nature of support and collaboration within the initiative. While the programme logic presented below present links between various factors of the initiative, it is clear that the links are not yet leading to productive relationships.

The inputs are the existing, tangible resources used and include targeted suburbs, knowledge, a LBD Project Manager, and funding. Together with these inputs, three key activities take place. The first is collaboration with other organisations and gardening experts. Secondly, networking between groups and organisations that have set up or intend to set up a garden, and thirdly, support and facilitate the establishment and development of garden projects with knowledge, resources and funding.

The products that are immediate consequences of these activities include stakeholders being in productive collaborative relationship, networks are established and gardens have access to knowledge, resources and funding.

The expected short term outcomes resulting from these products are synergy and resource efficiency, knowledge transfer and relationships formed, and gardens are equipped to set up and maintain their gardens. Long term outcomes that would be expected include ongoing, sustainable relationships and gardens networking freely with other another and establishing relationships.

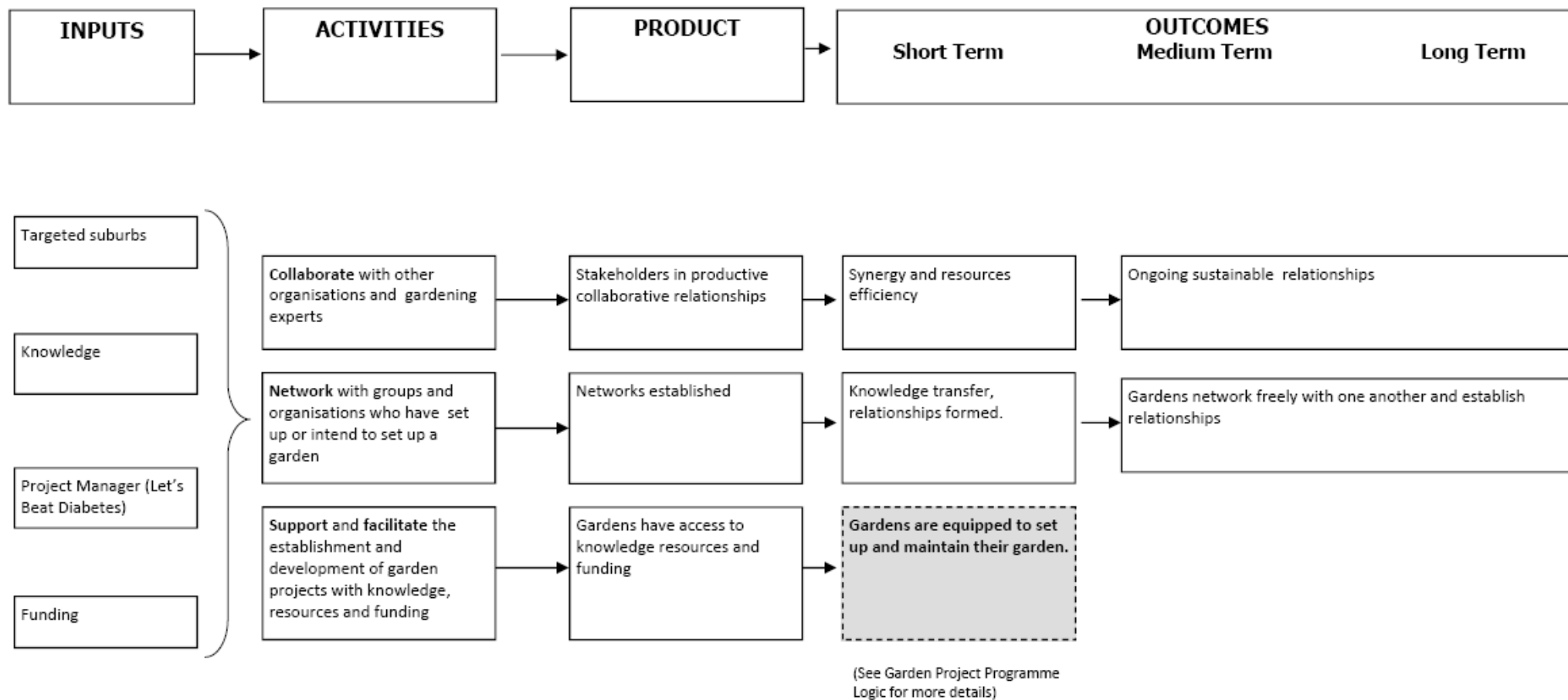


Figure 3: Gardening for Health and Sustainability Draft Overarching Programme Logic

#### 4.2.2 Garden Project Programme Logic

Figure 4 is the second programme logic and represents the evaluation team's understanding of the garden projects that are linked to the GFHS initiative.

The inputs include:

- LBD Project Manager
- Funding
- Gardening tools and supplies
- Networks
- Knowledge

A number of key activities are planned to be carried out for the Gardening for Health and Sustainability initiative. The first is to facilitate the establishment and development of linked gardens whether this is school gardens or community gardens. The gardens are intended to train people, run workshops (that focus on how to grow, prepare and cook food) and provide assistance with the establishment of home gardens. Other activities that may occur include distribution of starter packs to households and using the Botanic Garden's Edible Garden Centre as a training hub.

The immediate products that can be expected from these activities being carried out include firstly, from the establishment and development of linked gardens, gardens are maintained by the community or school, training is occurring, assistance is being provided to establish home gardens and workshops are being held. Secondly, starter packs are being used by households and the Edible Garden Centre is being used as a training hub.

Anticipated short term outcomes that result from the establishment and development of linked gardens include school children and families increase their knowledge and skills in growing, preparing and cooking food and organised communities know how to create, maintain shared food gardens and how to prepare and cook healthy meals. In addition to this, it is anticipated that there would be an increase in awareness and knowledge in sustainable and environmentally-caring lifestyles. Medium term outcomes include the establishment of home gardens which may impact or be impacted by increased physical activity and recreational activity, increased consumption of fruit and vegetables, money saved and money earned through food gardening, strengthened families, neighbourhoods and communities and increased environmental awareness. Through all of this, it is anticipated that the GFHS initiative through the garden projects in the long term will contribute to healthier communities, prosperous lifestyles, sustainable communities and sustainable environments.

In illustrating the causal links and theoretical relationships between inputs, activities, products, and outcomes, the programme logic has made several assumptions. These are as follows;

- Participation in gardening will increase physical activity levels and lead to health benefits.
- Participation in gardening will lead to improved healthy eating and behaviour.
- That gardening is seen to be an enjoyable activity.

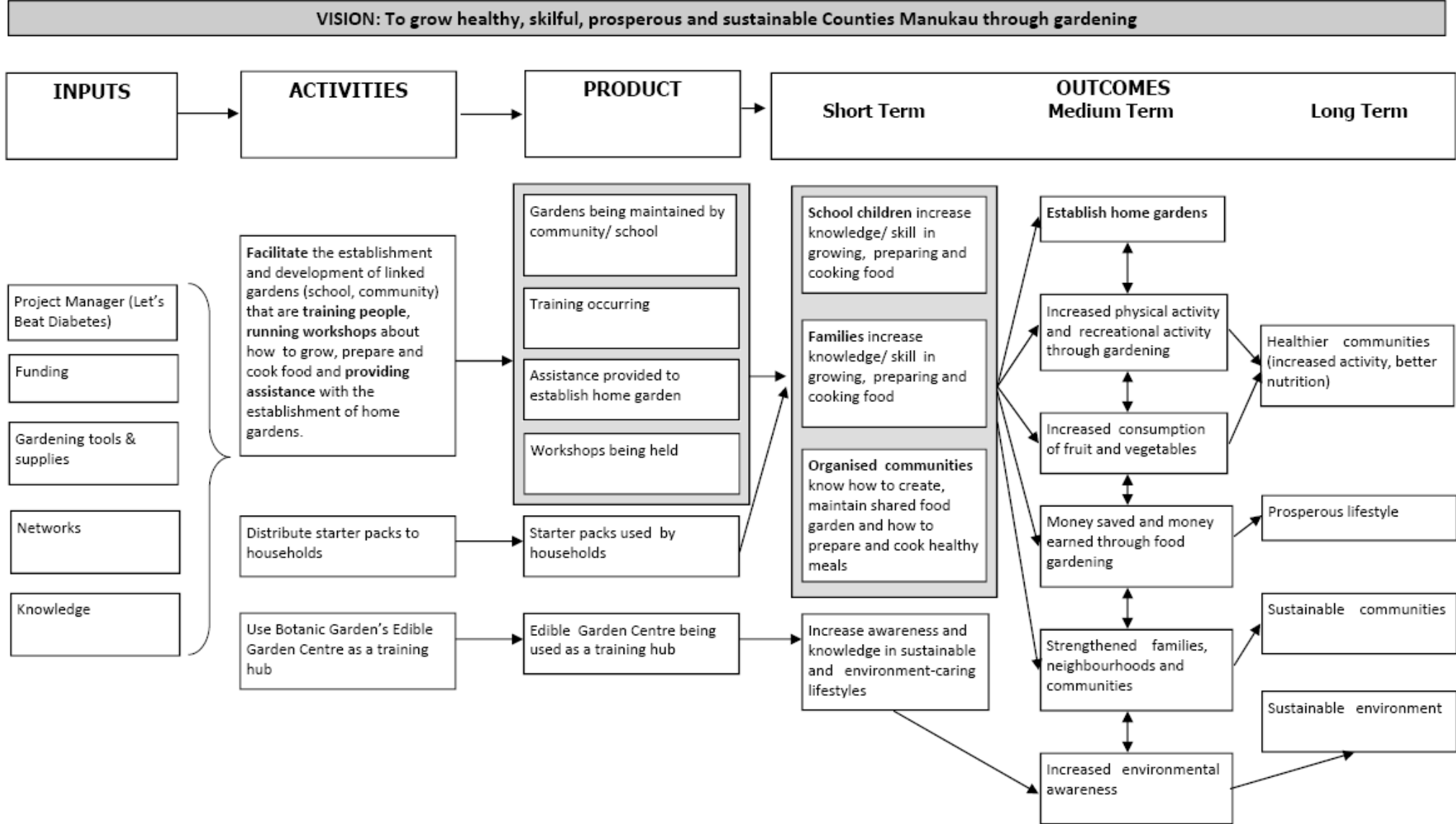


Figure 4: Gardening for Health and Sustainability Draft Project level Programme Logic

## **5. Discussion and conclusion**

Guided by key evaluation questions, the aim of this evaluation was to investigate the development and implementation of the GFHS initiative. Through the documents provided to the evaluation team and the key stakeholder interviews, a range of information was gathered around the GFHS initiative, its development, implementation and current status. This section provides a discussion of the key findings in relation to the evaluation questions that were developed in collaboration with the stakeholders.

### **5.1 Summary of findings**

The following is a summary of the evaluation questions posed in collaboration with stakeholders, which guided the evaluation of the Gardening for Health and Sustainability Initiative:

- Each garden is unique in several ways, from the level of gardening knowledge of those leading the garden, and their perception of their role as a partner or stakeholder in the initiative, to the support required in accessing resources.
- The overall initiative aim was aspired to by all stakeholders, and all stakeholders firmly believed that the initiative was appropriate to the community and their needs, especially as they were able to tailor their project to their specific community as they saw fit. However, there was significant confusion due to a lack of clarity regarding the purpose and nature of the initiative partnership, who was or should be leading it, and how.
- All stakeholders agreed that in order to achieve the aims, collaboration has an important role to play, although there were quite varied perspectives and expectations as to what collaboration should look like in this initiative.
- Stakeholders expressed a desire for more communication, especially of the experiences and processes undergone by other stakeholders so that they could learn from each other.
- Lack of knowledge and resources were identified by stakeholders as key barriers to implementing garden projects.
- The resources of networks, horticultural knowledge and funding, when available, were described as enablers by a number of stakeholders. With these resources, gardening projects were able to successfully plan, prepare, and launch.
- There were varied perspectives on what constituted achievement at this stage. For some, it was establishing discussion and knowledge sharing amongst stakeholders, for others it was the launching of community gardens, and for others it was the enthusiasm and engagement of community members in the gardening projects.

### **5.2 Answering the evaluation questions**

#### **How was the initiative developed?**

Through a number of key collaborative meetings and conversations in 2008, interest for the GFHS grew. Let's Beat Diabetes facilitated a meeting with key stakeholders to scope a business plan for the initiative, this draft business plan was created and formed the foundation for the development of the initiative. It is clear from the evidence, that while the business plan has provided direction and

the objectives are still relatively applicable, the initiative has not been implemented according to the business plan in several ways. The business plan was based on a neighbourhood cluster approach with three key garden models, marae-based, community-based, and school-based food gardens that would be linked to neighbouring households. While the long-term structure of the GFHS initiative may resemble the initial business plan structure, the development and implementation up to this point has been more around establishing relationships and networks and supporting community groups and other organisations to set up and launch community gardens. There is little evidence of “clustering” gardens in particular areas, and stakeholders are not yet aware of other garden projects that exist. While there is little evidence of a coordinated, sustainable approach to “systematic support, education and promotion of food-gardening” it is recognised that the approach to the GFHS initiative and the associated community gardens, has been particularly fluid in the last 6 months.

### **What are the key goals and target groups and how were these determined?**

The stakeholders agree that the key goals of the GFHS initiative are to increase the fruit and vegetable uptake of the Counties Manukau population, especially so those who are overweight and/or at risk of diabetes or diet-related health conditions. These goals were decided upon collaboratively taking into consideration the goals of LBD, and the goals of each participating organisation in relation to health and wellbeing. Given this, the objectives outlined in the business plan are still relevant to the work being carried out within the initiative.

According to the business plan, the focus of the initiative is on socially deprived and disadvantaged families, with priority being placed in particular areas such as Otara, Manurewa, Mangere East, Papakura, and Franklin. The business plan included target numbers of households to reach, but there are currently no coordinated and systematic processes for collecting monitoring information. This is in part due to the wide range of gardens, the different needs of the communities they are located in and limited resources and knowledge to collect appropriate data.

### **What is the intended programme logic?**

During the scoping phases of the evaluation, the initiative was not at the stage where a programme logic could be developed and validated in collaboration with key stakeholders. Due to the complex nature and current stage of the initiative, two programme logics have been developed by the evaluation team to present a picture of where the initiative is at. While the programme logics are based on evidence, they have yet to be validated with key stakeholders. The programme logics are intended to be used for continued development of the initiative and to inform future monitoring of outcomes.

While the programme logics cover the initiative as a whole and the associated garden projects, it is important to note that key structural elements such as meetings, communication and expectations around support need to be a focus of the initiative in order for other elements of the initiative to take place successfully.

Due to the complex nature of the initiative, it was deemed appropriate for two separate programme logics to be developed. The first outlines the activities, products and outcomes of the initiative as an entity that collaborates and networks with stakeholders and garden leaders and facilitates and supports the development and establishment of community gardens. Closely integrated with this

process is the development and establishment of community gardens or teaching gardens and due to the complex nature of gardens, a separate programme logic was developed. It should be noted that this programme logic will not fit all gardens.

**What are the key programme resources, are they appropriate and have they been used as intended?**

The resources vary between stakeholder organisations, as they each have different networks and opportunities for funding and assistance. Most resources used have been sourced individually from outside of the partnership; however the initiative has assisted a number of gardens in sourcing resources. A key resource provided by the initiative through LBD, has been the knowledge, experience and skills of the Project Manager, and the Communications Manager.

A commonality between gardening projects has been their need for a garden mentor or manager, to assist with garden planning, provide the gardening knowledge to be learnt and to maintain the garden. An important resource evident from the interviews, has been the positive attitude towards the LBD team and resourcefulness of some stakeholders.

Resources, of both funding and knowledge, have been insufficient according to some stakeholders' experiences, and yet appropriate for others. It is important that expectations are managed around the resources that are available through the initiative and that clear, consistent communication is made about processes for accessing these resources.

It is too early to evaluate whether the resources have been used as appropriate.

**What are the barriers and enablers to stakeholder engagement?**

Stakeholder engagement requires that the initial interest in gardening is maintained and is developed into an established food gardening project. Barriers can exist at multiple levels particularly during the set-up and planning stages, the recruitment phases, and planning for future sustainability. Community gardens have experienced problems with accessing resources, both tangible and intangible, required to establish a community garden. These included; suitable land, tools and supplies, access to funding, volunteers, and horticultural knowledge and contacts.

Likewise, the stakeholders felt their projects were enabled through having access to all the resources they sought, which varied between organisations. In particular, guidance, by way of community gardening experience and knowledge, was a critical enabler in the planning and development stage. An ongoing source of funding for payment of garden mentors was seen as enabling planning for future sustainability.

The networking function of the initiative is particularly important for addressing some of these barriers and enablers. Once networking is occurring freely among garden projects associated with the initiative, both formal and informal discussions can provide further support around the development, launch and maintenance of community gardens.

### **How are the processes/ activities achieving or intending to achieve the key goals?**

Stakeholders noted that the work being done on their respective garden projects was impacting on the participants. Through providing food gardening spaces and education at no cost to participants, stakeholders are on their way to achieving the objectives of expanding knowledge in families and communities about how to start growing and maintaining a vegetable garden and how to prepare healthy meals from the food grown in the garden. The production of fruit and vegetables as part of the learning process is intended to produce savings in the household food budgets of participants, increase their uptake of fruit and vegetables, and strengthen communities through the sharing of food and communal gardening activity. While some impacts are being noted, progress towards other goals is difficult to measure, especially because this evaluation was conducted at an early stage in the development and implementation of the initiative. Again, it is important to highlight the importance of having clear goals that are measurable among the garden projects, this will be crucial for the future monitoring of the initiative.

### **What evaluative processes are occurring or planned?**

A number of gardening projects have either implemented or discussed plans for ways to evaluate and monitor the progress of their project. These include the development of registration processes which will allow for follow-up with participants regarding their gardening activities at home, and plans to provide participants with post-participation support, which could provide monitoring data. For other stakeholders, this is not seen to be a priority as they are still in the early stages of development. It is important to note that evaluative processes, both occurring and planned, are not uniform across garden projects.

### **What are the barriers and enablers to community participation?**

Stakeholders identified a number of barriers that participants face when considering participating in a community garden. Participants may not understand all of the benefits that gardening can have on health and lifestyle, have the time and freedom to attend workshops, or their health and diet may not be a priority at present. A barrier that stakeholders felt they could address was lack of knowledge around the benefits of food gardening. A number of stakeholders were seeking ways to promote it within their means. Stakeholders also identified that participants may feel that weather is a barrier, if they do not want to be outside in the garden during winter months. Furthermore, if participants only view gardening as a way to save on groceries, and not in relation to nutrition and health, they may be less likely to continue gardening if the financial need to do so decreases in priority.

Community participation was seen as being enabled through a number of factors, but predominantly through their desire to learn gardening skills for themselves. Other contributing factors include; visibility of community gardens, word-of-mouth, social position of garden mentors, no-cost learning opportunities, and the need for savings on grocery bills. Some garden projects are located where the targeted community members live, and therefore, participation in gardening is enabled through the tangible change in their environment.

It would be valuable for these factors to be communicated among all stakeholders to maximise community participation in gardening.

### **What is the process and level of collaboration for stakeholders involved in the initiative?**

The processes undertaken towards collaboration have been irregular partnership meetings, individual site visits, and electronic sharing of information. While collaboration was seen to be a key factor for the future success of the initiative, the potential benefits of collaboration were not clear to all, and neither were there any group agreements or understandings of what collaboration that was taking place or intending to take place as part of the initiative. For some stakeholders, the extent of collaboration was attendance at partnership meetings. For others, it was seeking assistance from other stakeholders to access resources, and for a few stakeholders, it was about contributing resources where possible.

Stakeholders shared that they wanted more communication, and a clear and specific understanding of what the partnership, including each member organisation, was about and what could be expected of each other. This should also be reflected in a review of the role and structure of meetings, as stakeholders have different levels of engagement and different perspectives on the current role of the meetings. Once these aspects of the partnership have been materialised, stakeholders will be in a better position to participate in mutually beneficial relationships.

### **5.3 Issues to consider**

Based on the analyses conducted for this evaluation, there are a number of issues to consider:

- **Clarify the nature and function of the initiative with all stakeholders**

There is a lack of clarity around the nature and function of the initiative among stakeholders. It is important to clarify this, in order for relationships to function at maximum capacity and for networks to be established and sustainable.

- **Increase communication to facilitate information sharing among stakeholders**

A need for knowledge sharing amongst stakeholders was expressed. Increased communication around activity within the initiative would be beneficial for all stakeholders especially those that are in the planning and development stages of their garden project. This could be in-part facilitated by the initiative.

- **Develop garden support methods**

A toolkit with guidelines for establishing a community garden could be very useful for people or organisations wishing to participate in this initiative through creating a community garden. Such a resource could be developed through a collaborative effort of the stakeholders.

- **Continue building networks between stakeholders**

An important resource for stakeholders is a supportive network, encompassing strong links, and meaningful collaboration. While this will be initially facilitated by the initiative, all stakeholders should take responsibility for building meaningful relationships with other garden projects.

- **Review the role and structure of meetings**

Meetings play an important role in collaboration through effective and clear communication. Currently there are mixed views about the role and structure of the meetings. In addition to a high level steering group or something similar, an informal meeting whereby stakeholders can come together and share experiences may be more relevant for the current needs of the stakeholders.

- **Review the role of School/ECE gardens within the initiative**

In the original business plan, school gardens linked to the community were seen as training hubs. Based on the evidence collected for this evaluation, there is limited evidence to suggest further work is occurring in this area. Given this, the role of school gardens within the initiative needs to be reviewed in collaboration with key stakeholders including potential schools and ECE services.

- **Monitoring of the initiative**

If monitoring of outcomes is to occur, particularly monitoring the establishment of home gardens, a number of factors need to be considered. This includes clarifying the definition of a home garden, the timing of data collection, and logistics of participant follow-up. Monitoring is an important part of evaluating any project, however if stakeholders agree that there is a need to systematically evaluate a range of projects within the initiative a coordinated and systematic approach needs to be taken to collect this type of information across the varying garden projects.

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## Appendices

### Appendix A: Current garden projects

The initiative is intended to build and improve upon collaboration between a variety of gardening projects. Details of the current garden projects associated with the GFHS initiative are presented below. It should be noted that an additional 6 gardens are currently being supported by the GFHS initiative and are yet to launch.

- **Mangere Community Food Forest Gardens**  
*Mangere*  
[www.mangerecommunitygarden.com](http://www.mangerecommunitygarden.com)
- **Manukau Parks Teaching Gardens (four teaching gardens in total)**  
*Middlemore Reserve, Papatoetoe*  
*Stadium Reserve, Papatoetoe*  
*Walter Massey Park, Mangere East*  
*Old School Reserve, Mangere*
- **Monte Cecilia Housing Trust**  
*Mangere*
- **Tuakau Community Gardens**  
*Tuakau Water Tower Reserve, Tuakau*

## Appendix B: Key stakeholder interview questions

### Interview Guide – Key Stakeholders

- 
- Thank you for taking part
  - Introduce yourself
  - Make sure they understand that all information will be kept confidential and that they will not be named in any reports.
  - Any questions before we start?
- 

#### Background/ Development

1. What is the vision or aim of Gardening for health and sustainability Initiative? Do you think the initiative is in the process of achieving these aims?
2. Please tell me about your role as a key stakeholder in the Gardening for health and sustainability Initiative? What specific aspect of the initiative are you involved in?
3. Can you please describe your relationship with other stakeholders involved in the Gardening for health and sustainability initiative?
4. Where do you see yourselves fitting within the LBD Gardening initiative? Do you see your initiative part of the wider gardening initiative (or as a separate/ single initiative)?

*If you see yourself as part of the wider gardening initiative, are the objectives in the business plan still applicable? [refer to business plan, page 2]*

*If you see yourself as a separate/ single initiative, what are the aims and objectives of your gardening initiative?*

#### Collaboration

5. Buy-in describes the level of commitment a person puts forth toward a shared goal. Do you think that there has been buy-in from all stakeholders?
6. How easy or difficult has it been to communicate and coordinate with other stakeholders?
7. What would you identify as the key benefit in participating collaboratively with other stakeholders involved?

#### Resources

8. Are the resources appropriate for the needs of this initiative? How could the resourcing be improved? Have there been shared resources among stakeholders?

### **Key achievements and barriers/ enablers**

9. From your experience, what would you identify as the key achievements or impacts of the Gardening for health and sustainability Initiative so far?
10. What are the key factors that contributed to this success?
11. What are some of the enablers you have encountered in implementing this initiative?
12. What are some of the barriers you have encountered in implementing the Gardening for health and sustainability Initiative?

### **Community involvement**

13. Is the Gardening for health and sustainability Initiative meeting the needs of the local community? What else needs to happen in order to meet these needs?
14. How engaged is the community with the Gardening for health and sustainability Initiative? What might increase their engagement?

### **Initiative appropriateness**

15. Are the initiative models (marae based, linked community and linked school gardens) appropriate for the target groups?

### **Future of initiative**

16. How do you see the project moving forward in terms of sustainability?
17. Do you have any suggestions for the future work with the Gardening for health and sustainability Initiative?
18. What would be the most useful information that could be gathered from an evaluation, to help you move forward with your initiative?

*If the interviewee says they feel part of the initiative (question 4) , ask the following question:*

19. How are you planning to follow up people (e.g. Are you keeping a register of participants in your gardening initiative?)