



Situation Analysis
of
Urban Agriculture in Gampaha:
A concept document

**“Towards a Firm Urban Development
through Urban Agriculture”**

RUAF South and South East Asia Regional Office
IWMI South Asia Regional Office, c/o. ICRISAT, Patancheru – 502 324, AP, India
Tel: 00 91 40 3071 3745; Fax: 00 91 40 3071 3074 / 3071 3075

Index

Introduction	3
Gampaha Municipal Council.....	3
Administrative Boundary	3
Municipal Council	4
Agro-climatic Features of Gampaha Municipal Council.....	5
Socio- economic features of Gampaha Municipal Council	6
Land use Classification of Gampaha Municipal Council	8
Stakeholder Analysis	11
Western Province Department of Agriculture	12
Department of Agrarian Services.....	13
Gampaha Municipal Council	14
Gampaha Botanical Gardens	17
Western Province Health Department.....	18
Western Province Department of Education.....	18
Animal Products and Animal Health Department	18
SANASA City Bank Ltd Gampaha	19
Irrigation Department	20
Policy Support.....	22
Family Business Garden (FBG)	24
Municipal Solid Waste Management.....	25
MSF in GMC Nagara Haritha Balakaya Urban Green Force.....	26
Constraints	28
Future Expectations	28

Introduction

Gampaha is a name which is synonymous with a number of administrative boundaries of an area located in western province of Sri Lanka. The name originated not more than hundred years. The area which is referred to as Gampaha is believed to be conurbation of five villages which were then known as Henerathgoda, Ihalagam, Pahalagama, Medagama, Orutota. Literally the word “*Gama*” in Sinhalese means Village and “*Paha*” is five. Thus, Gampaha means five villages. Interestingly, whatever may be the validity of this view those villages names are still in use and the different territories of Gampaha city are still known by these names while entire territory is commonly referred to as Gampaha.

Gampaha Municipal Council

Administrative Boundary

Gampaha Municipal Council is situated between the north latitude 7°5' -7°10' and 79° 59'-80° 15' east longitude (Source: UDA Gampaha) in the western province. It lies within in the District Secretariat Division of Gampaha. The total extent of land is 27.18 Km² (27184 hectares). The Municipal council of Gampaha is young and only came into existence in April 2001 by a special Government Gazette notification (LDB 2/78 issued by Ministry of local Government dated 27 July 2000). The Municipal council covers 33 *Grama Sabhas* divisions (GS), which are lowest unit of administration

The present municipal council of Gampaha was created by uniting the territories of former Gampaha Urban Council and a section of former *Gampaha Pradeshiya Sabha*.

The former Gampaha Urban Council includes the Gampaha city limits and 6 GS divisions (Medagama I, Medagama II, Medagama III, Medagama IV, Bandiyamulla North and Bandiyamulla East). *Gampaha Pradeshiya Sabha* includes 27 GS divisions (Pahalgama, Ihalagama West, Ihalagama East, Gampaha Aluthgama West, Aluthgama Noth, Aluthagama East, Indigolla, Baduwatugoda, Karaneyakamulla, Keselwatugoda North, Kesalwatugoda South, Boraliyawatta, thithalapitigoda, Aluthgama, Bogamuwa North, Aluthgama Bogamuwa South, Maheepalagoda, Morenna, Weediyawatta, Galtotamulla, Yakkala North, yakakla west, Yakkala South, Yakkala east, Papolgasmeyya, Henerathgoda, Bandiyamulla West and Kidagammulla).

Administrative structure

Municipal Council

The Municipal Council of Gampaha has a mix of rural and urban characteristics and one of the newest additions in Sri Lanka. Presently the council consists of 18 elected members called councilors for a term of 4 years. The affairs of the council is managed by a standing Committee, as per the Municipal Council Ordinance. Numbers of Standing Committee and members are variable.

One of the councilors is chosen as the mayor. A councilor other than the Mayor is not entitled to be part of more than one standing committee and only if there is a vacancy left. The standing committee meets once in a month to consider new proposals. . If they involve financial commitment then they are handed over to finance committee prior to final adoption.

Mayor

The Mayor is the ex -officio Chairperson of the standing committee for finance. The council also appoints advisory committees to deal with specific issues and field activities.

The Mayor is the Chief Executive Officer of the Council and also provides the political leadership to the Council.

All the executive acts and responsibilities which are fall under the ordinance or law of Municipal council are done and discharged by the Mayor.

Municipal Commissioner

Municipal Commissioner acts as the head of all the departments of the Municipal council office and is responsible for administrating, supervising and monitoring all activities of the MC.

Municipal Secretary

Municipal Secretary is the head of the secretariat department and this position is held by Class I officer of Sri Lanka Administrative Services. He acts as the Secretary to all the standing committees and prepares the agenda on monthly council meetings in consultation with the mayor and maintains the minutes of the meeting.

He also prepares the annual budget estimate for the council.

Departments

Municipal Council affairs are managed under five departments namely

1. Secretariat Department
2. Finance of Accounts
3. Health and Environment
4. Public Works
5. Public utilities

Agro-climatic Features of Gampaha Municipal Council

Gampaha town is in the wet zone coastal plains of a Western Province district that is in the process of becoming urbanized. As Gampaha is located close to the sea its humidity is 76% and nighttime and 80% in the daytime. The annual average temperature has been nearly 28 °C to the maximum of 31.6° C and minimum temperature of 23.6°.

The annual rainfall of 1,700-2400 mm contributes enormously in agriculture of the area. The highest rainfall is received during the North-West monsoon period. There are two peak periods of rainfall that are during in the month of May and October.

Further, the zone is also blessed with natural surface water in the form of Attanagalu oya and its tributary Oruwal Oya. However, presence of large extent of flood plains associated with Attanagalu oya has contributed to flood related problems in the area. The river flows on the northern boundary of the Gampaha City.

The entire region of GMC can be divided into two ecological zones namely the main river valleys and alluvial plains and outer laterite plain. The main river valleys and alluvial plains include Attanagalu Oya, its tributaries and the adjacent flood plains. The outer laterite plain includes the highland plains containing red lateritic soil soil. Some zones also have humic and regosol soils with poor drainage.

Soil groups namely red and podzolic soils are extremely suitable for crop cultivation especially paddy.

Geographically GMC is part of alluvial flood plain. When climate, geophysics and soil factors are considered as a whole, Gampaha town shows a good potential for agriculture.

Socio- economic features of Gampaha Municipal Council

Population

Gampaha Municipal Council is the district headquarters of Gampaha. The total population of the Gampaha Municipal Council was 57429 as per the 2001 census. The Gampaha city limits area, i.e. The urbanized zone of GMC consisting of 6 GS divisions* of the former urban council is small i.e. 2.5 KM² compared to the total GMC area of 27.18 KM² with small population i.e. 9438 person as per the 2001 census. The population of Gampaha city limit (former urban Council area) was 10656 persons in 1981. The population has declined to about 11.5% when compared to 1981 while the decrease is of 5.3% in comparison with 1971, which were 9964 persons. (Ref: table Ref: 1.3.9).

However, as per the census of 2001, Gampaha District has recorded a second highest growth rate in the country amounting to 1.9%. The increase is mainly due to migration from adjacent districts. The population of the district was 2066096 in 2001 against the population of 1390862 persons in 1981. (Ref table 1.3.1).

The drop of population in Gampaha city limit, (the RUAF project zone) could be explained in terms of scarcity of land and increasing cost of land in the city limits. The residential zones in the city have been converted to commercial and business zones and are being used for non residential purposes. The population is now mostly concentrated in the suburban where the cost of land is less comparatively. Also the low-lying paddy fields and water ways have restricted the growth of population.

According to the census of population 2001 the urban population of MC is 16.4%. The census figures on the sectoral composition of population do not provide clear picture on urbanization. The definition of term urban in case of Gampaha has been used based mainly with administrative boundaries. The population in the 27 GS divisions (Gampaha Pradeshiya Sabha), which later became the part of GMC 2001, is more populated. (Ref. Table 1.3.8, 1.3.10 1.3.11 and 1.3.12).

Poverty

Gampaha is not an exception to poverty. It is believed that majority of the population are in the grip of poverty. Within the city limits there are no highly visible units of poverty in the form of shanties and slum as could be seen other urban centers. However, there are two location of very small size where poverty is visible namely UC Watta and Mola Watta. These two localities together have 45 families. The condition of Gampaha core city area is different. It has only a small population.

However the poverty is more towards the more populated zones of the GMC. A book titled Gampaha rahas (Secrets of Gampaha) published in 2000 by Divaina News paper mentions that in Gampaha district 6% of the population is poor. The main cause is lack of regular source of income. However the true nature of the problem is not known. There are two important indicators to measure poverty in Gampaha District and Gampaha Municipal Council. As per the report form Research on Household Income and expenditure 1995/1996 from department of Census and Statistics the estimated income of Gampaha district is 8538 which is very much less when compared to the monthly average income of Western Province but is higher than the national average income.

The monthly household income and expenditure figures indicate the general income level of the people living in the Gampaha district. It reflects that the average income is very low and after paying for the basic needs hardly anything is left for savings. However the figures do not indicate the income distribution and also the true picture of the poverty situation.

The other indicator is the Samurdhi program; it is a more reliable indicator showing unequal distribution of income among different sections of people. With the Samurdhi program a subsidy is paid to families with monthly household income of less than Rs. 1500.00. The amount of subsidy ranges from 140 to 1000 depending on the number of family members.

The percentage share of households receiving Samurdhi subsidy is a direct indicator of families with income under the poverty line (less than Rs. 3000/- month). The regional distribution of number of families within GMC area reveals that a large percentage of families living in rural areas in the new territory are very much poor and in many instances exceed even the national average. However, the subsidy upper range of Rs. 140 is miniscule to contribute to family.

Migration and urbanization in Gampaha Municipal Council

GMC is the main administrative town with government offices of the district of various departments, Municipal Council and Divisional Secretariat located in its limit. In addition, it has several education institutions, popular schools and Railway station, Base Government Hospital, Courts Complex and Police Station.

Super markets are also located in this town, thousands temporary migrants who work in the GMC commute daily from GMC and surrounding areas. The city is transit point with approximately over two hundred thousand people entering into the city on a daily basis. Also nearly 400 buses operate in 20 different routes from Gampaha

and there are 3 different bus stands over 17000 children come to Gampaha for schooling daily.

At the same time, the rural population migrates to the town in search of better facilities. The rate of migration to Gampaha District has been very high. According to the census report of 2001 only 69.6% of population has been living in the district since birth. Around 11.85% of the population is living for more than 10 year and about 16.4% have migrated to the district and have been living for less those 10 years. The largest migrant share is from Colombo district, which is around 28.4%. (Table for Reference).

Land use Classification of Gampaha Municipal Council

As per the local available data from 2004 census the extent of land within the municipal limits is 2,790 hectares. The population is 63,335. The number of houses and the population within the project area (Former UC) is 2,500 and 10,135, respectively.

Land use Classifications

Description	Extent in hectares
Residential	1,685
Commercial	105
Common use	40
Industries	16
Coconut	210
Rubber	13
Owned by religious places	19
Cultivated fields	39
Fallow fields	202
Bare land	10
Areas of sports	05
Burial/cremation grounds	05
Roads	50
Reservoirs	20
Swamps	15

Source: 2004 Census – Land use

As per ground truthing done by IWMI and Nagarika Haritha Balakaya, the following classification of land has emerged in 2007-08.

Another source from 2001 suggests that the total agriculture land includes paddy area of around 2300 Ha. The unproductive agricultural land and homesteads are around 3410 Ha. The newly included 27 GS Divisions in 2001 are different from the core area and have characteristics of rural setup with low lying flood plains with paddy field and homesteads accessible through narrow lanes.

But since the land prices in the core MC area has gone up, the population is moving towards the less urbanized zones of the newly included divisions. The land is parcelised for other land needs in housing, highways, byway and creating commercial centers. The agricultural land has therefore gone down and the paddy fields have been abandoned due increasing cost of production. Most of the people are now employed in industrial sector and mostly agriculture is additional activity.

Current Status of Urban Agriculture in Gampaha

Gampaha town is located in the Western province was known for its paddy cultivation in the past. The paddy cultivation has decreased rapidly and most of the paddy lands have been left abandoned. The lands cultivated in *Yala* season came down to 62 % in 1992 and 13% in 1995.

Because of urbanization lands are prone to be parcelised and land has to be used for essential sectors like houses, highways and byways and shopping complexes in Gampaha MC. The extent of agricultural lands has decreased also because people tend to focus on other industries.

Status of agriculture in Six GS Division

The predominant land use category is still residential and it occupies 58.24 % of developed area. The city is surrounded by environmentally sensitive low lying areas covered with waterways and paddy lands most of which are idle. In the newly adjoined 27 GS divisions merged in 2001 to former UC area nearly 96 percent of land was under agriculture for paddy, mixed crops and perennial crops. The residential land was treated under cultivated category due to presence of homesteads of total land only 46 % was used for residential purpose.

Gampaha district along with city as a whole had a reputation of high paddy growing zone, however paddy cultivation has decreased rapidly and most of the paddy land have been neglected. Of the total land, 92 % of the land was cultivated in Maha season (October to January), 70 % during the Yala Season (April to August)

The extent has gone down to 62 % in Yala in 1992 and plunged further to 13 % in 1995. The rapid drop in the area is attributed to high cost of production, shortage of labour, low yield and lack of marketing facilities and many other reasons.

Challenges in practice and promotion of UA

Constraints in practicing Urban Agriculture, which were discussed with the direct stakeholder during the PRA and MSF, pointed the following immediate needs to carry out UA in Gampaha. The exercise was carried out in Six GS Divisions namely Medagama I, II, III, IV and Bandiyamulla North and East.

Problems encountered

- Lack of agricultural knowledge about FBG
- Lack of planting materials such as low country seeds and plants
- Lack of capital, positive attitude to UA
- Lack of skill in Nursery management, pest and diseases problems
- Lack of skill for entrepreneurship, capital investment
- Lack of training in floriculture, mushroom cultivation, food technology skills in No space methods for cultivation and Stray cattle
- lack of knowledge about composting and sales outlet for the same
- mosquito problem, no proper drainage, irrigation problem
- rehabilitation, barren land

Actions were recommended on the time in terms of urgency of intervention to promote Urban Agriculture

Immediate	Mid Term	Long Term
Training on FBG	Composting making	Compost Making
Awareness Programme	Sales outlet / Market	Model School Garden
Home Gardening materials	Model Farms	Marketing
Compost making, Nurseries, Knowledge Materials	Urban Forest	Provide Quality Seeds, Planting Materials
Provide Seeds & Fertilizers		Technical Knowledge & Support
Technical Knowledge & Support		Abandoned paddy lands (Drainage / Cultivate)
Monitoring, Advising, Supervision from the Dept.		Develop Irrigation System
School Garden		
Planting Material Sales Out lets & Structures		

Perhaps prevention of water clogging through better drainage and irrigation service, high yielding varieties and new productive technologies will help in bringing back the abandoned paddy lands back to cultivation.

Stakeholder Analysis

Preparation

Sensitisation through Inception Seminar (policy awareness and partners orientation workshop), 22 May 2007 Gampaha

A one day Inception Workshop was organized in Gampaha on 22nd May where 31 (16 female + 15 male) from 11 different organisations/ government departments including the Mayor and the Chief Secretary of the Ministry of Agriculture honored the occasion. The participants expressed a strong interest and support to the program which was demonstrated throughout 2007 by active participation in the capacity building workshop of Multistakeholder Process in Policy Design and Action Planning. As a result of the workshop stakeholders and their representatives were identified to form the enabling team.

MPAP planning and capacity building workshop 25th to 28th July 2007

A 4-day “MPAP planning and Revisiting MPAP Process Workshop” was organised in Gampaha post the inception meeting. The first day was opened with formal inauguration by the Mayor of Gampaha and Dr. Thilak Ranasinghe, Director, Western Province Department of Agriculture. 22 participants (9 male and 13 female) from the following organisations, Western Province Department of Agriculture, Department of Animal Husbandry, Department of Health, Department of Education, Gampaha Botanical Gardens, SANASA City Bank, Department of Agrarian Services and Municipal Council of Gampaha attended the workshop.

The objective of the workshop was to nominate members for enabling team, joint vision setting, understanding MPAP and UPA, develop progress markers and outcome journals for organisations agreeing to be part of the enabling team, naming the enabling team, developing the year calendar or work plan, developing the training schedule and division of tasks on for the situation analysis. Discussions on tools for primary data collection such as PRA were also held during the training as was developing the Terms of Reference (TOR) for the Enabling Team. With the support and cooperation of all the participants all objectives were achieved. The workshop also received training support from Mr. Nimal Shantha, Mrs. Aruni Premathupke, Mrs. Wasantha Malakanthi and Mrs. D Y Abeyrathna from WPDOA who

participated in the regional MPAP training held in Hyderabad. The enabling team for Gampaha namely Nagarika Haritha Balakaya was created. The work plan for the year was formulated. Outcome journals of the team and all stakeholders were drawn. Division of task for situation analysis was discussed and finalised during the meet.

Key stakeholders

1. Western Province Department of Agriculture
2. Gampaha Municipal Council
3. Department of Agrarian Services
4. Department of Botanical Gardens
5. Western Province Department of Health Services
6. Department of Education
7. Irrigation Department
8. Department of Animal Husbandry Central Environment Authority,
9. SANASA City Bank
10. Urban Development Authority

Western Province Department of Agriculture

Sri Lanka has many environments suitable for growing a wide range of crops. The Department of Agriculture has been in existence for more than 96 years, helping the farmers to keep pace with agriculture's time related changes. Of late, the DOA has had to accommodate changes resulting from the open economy and the involvement of the private sector in economic activities and environmental issues.

Concerns of a possible global food shortage and the emergence of new market forces have caused the DOA to develop new expedients for the future. If we are to succeed in securing food, our agriculture has to change with changing national and global priorities.

The DOA has aimed at breeding new varieties and developing crop protection methods and sustaining production systems to achieve self sufficiency in staple food crops, without adversely affecting the environment. To achieve these aims, new technologies such as drip irrigation, crop production under protected environments (plant houses) and biotechnological methods have all been experimented.

With the increase of free trade between countries, the influences exerted by external forces on the local producers can be strong. This has necessitated the DOA to protect the producers by showing them new ways of increasing their yields and profits. At the same time, free trade has also opened up new opportunities for our producers to

enter global markets. To send quality produce to global markets, appropriate production technology has to be developed that requires new varieties, new methods and new post harvest technology. This opens up an entirely new industry in the farming sector where access to the latest market information is essential.

The concept of Family Business Garden introduced in the year 2000 by the Western Province Department of Agriculture on the World Environment Day. The goals of the Family were to make Gampaha, a Green Town. While cultivation methods that suit limited spaces are introduced keeping in mind the limited space available in town for production of food. Not only the family business garden stressed the need of low space no, space methods but also demonstrated the use of medium such water through hydroponics, use of compost, water management and food conservancy.

Examples of cultivation methods to suit limited spaces are as follows

1. Cultivation towers
2. Potable cultivation tower
3. Cultivation tats
4. Cultivation bottles
5. Cultivation nets
6. Cultivation racks
7. Cultivation ladders
8. Cultivation lanterns
9. Cultivation cradles
10. Cultivation holders
11. Cultivation tripods
12. Cultivation bags
13. Square foot gardening
14. Hydroponic boxes
15. Roofscrpes
16. Cultivation frames
17. Cultivation pyramids
18. Cultivation walls
19. Cultivation fences
20. Cultivation cages
21. Cultivation pockets
22. Cultivation mats
23. Cultivation tubes
24. Cultivation umbrellas
25. Cultivation antennae
26. Cultivation consortia
27. Edible aircapes

Department of Agrarian Services

Key Activities involve

- Processing applications pertaining to Agricultural
- Organizing farmers
- Organizing all activities pertaining to the activities of creating or maintaining farming lands
- Releasing of loans and supplying other services by agrarian banks

The Department of Agrarian Services is able to contribute a lot to agriculture through the activities of the Agricultural Research Production Assistant Field Officers appointed at the GS level.

Current Activities related to UA

Henarathgoda and Aluthgamabogamuwa are the agrarian development centres located in the domain where the urban agricultural project is being implemented.

Name of centre	No. of Farmer Organizations	Female	Male	Total
Henarathgoda	35	591	1,704	2,295
Aluthgamabogamuwa	30	515	1,188	1,703

Land use at this Agrarian Services domain

Name of Department of Agrarian Services Centre	No. of Agri. Research Production Assistants	Total extent of land (hectares)		Cultivated lands (hectares)	Fallow fields (hectares)
		Fields	Highland		
Henarathgoda	17	674.8	760.4	74.8	600
Aluthgamabogamuwa	15	453.2	1,217.2	96.4	356.8

Of these, only the extent of fields of the Medagama II Division comes under the project domain.

Cultivation loans and projects loans are given to the people of the area by the Agrarian Banks relevant to the following two centres.

Name of centre	Total amount of loans issued (Rs)	Number of farmers who received the loans
Henarathgoda	3,027,500	213
Aluthgamabogamuwa	2,265,000	154

Gampaha Municipal Council

Gampaha municipal council is situated approximately between the north latitude 7° 5' – 7° 10' and East longitudes 79° 59' – 80° 02' in the western province. It lies within the District secretariat division of Gampaha. It is a sub division of the DS division extending over an area of 25.7 sq. kilometers of 33 GS divisions.

It was established in April 2001, the official functioning of the MC was decreed to be commence on the 15th April 2002. GMC has been created by amalgamating two local

bodies which were previously controlled by two different local authorities namely Former Gampaha Urban Council and section of the former Gampaha Pradeshiya Sabha.

Key Activities involve

- Planning, directing and administering of all engineering and public works
 - Maintenance and improvements to roads
 - Municipality buildings
 - Maintenance of the drainage system
- Libraries and reading centres
- Maternity and childcare centres
- Health clinics
- Tax collections
- Solid Waste Management
- Preschool services
- Sports facilities and play grounds
- Community Centres
- Fire brigade

Current Activities related to UA

- Solid Waste Management

National Level

With the aim of finding remedies for the management of solid waste matter which has become a national problem due to the lack of a suitable management methodology, in 2000, the Ministry of Environment and Natural Resources has introduced national strategies for the management of waste matter.

In this connection, the threefold concept of minimizing waste matter, reuse and recycling, healthy exit of the final product and burning, generating energy and obtaining biogas, separation of the waste matter where it is generated have all been analyzed.

Provincial Level

According to Sections 129, 130 and 131 of the Municipal Ordinance, it is the responsibility of the Provincial organization to gather and remove garbage found within its jurisdiction.

It is stated that street garbage, home garbage, excreta or other matter are the property of the Town Council and that the Provincial organization has the full responsibility for their sale or removal.

GMC level

Although 55 tons per day of garbage are produced in the town, the municipality has the capacity to remove only 15–20 tons per day of the total garbage. In search of a solution to this problem, the Gampaha Municipal made a proposal to the Central Environment Authority. In 2007, an indoor garbage management project was begun as a result of the proposal.

The following actions are being taken under this project called *Kasalata Milak*:

- Waste matter of households is selected and collected separately
- Spreading awareness for citizen, schools, government and private sectors for production of compost and recycling for management of solid waste matter

Over all goals is to make Gampaha a clean and green town through environmental conservation and management.

Parallel to this project, Use of home-made compost fertilizer by practicing urban agriculture is being promoted.

For the joint indoor garbage management and keeping the urban environment clean project recycling materials like polythene, plastic, paper, cardboard, glass are collected separately. For this three polysack bags per household are distributed. To collect these bags *Jangama Sampath Siyaya* (Hundred Mobile Resources) are placed with separate cubicles at popular places. A permanent store has been built in the municipal land to store the daily collected recycling matter.

Through this measure, the recyclable matter can be collected by to recycling units and thus providing means to earn an extra income.

Keeping the roads and home gardens within the Gampaha town limits clean and beautiful through the management of indoor garbage is expected to be fulfilled through the development of urban agriculture.

The aims and targets of His Lordship the Mayor of Gampaha for this are to convert the garbage that gets accumulated within the Gampaha municipal limits to a source of wealth by the following actions:

- Obtaining compost in the house by recycling decaying carbonic garbage

- Re-using and minimizing waste of resources by recycling non-decaying garbage
- Directing the urban population of Gampaha towards agriculture with the use of home-made compost
- Raising the nutritional, social and economic status of low-income earners and affording an opportunity for self-employment
- Designing urban infrastructure (parks), using agricultural activities
- Opening a sales centre in the Gampaha town for organic agro-products
- Preparing a methodology in the urban agriculture to minimize the lack of mental leisure in the town environment
- Acting with the support of relevant organizations to make use of marshes and fallow land constituting around 1/3 of land within the Gampaha town limits

Gampaha Botanical Gardens

The Garden was laid out in 1876 to introduce Para Rubber to Sri Lanka by the British rulers. In 1919 Rubber seedlings were imported from the Royal Botanic Garden, Kew and the Project was handed over to Muhandiram A. de Soyza who was the first OIC of the Garden. The trees blossomed in 1880 and from the next year Rubber seeds were distributed throughout the country as well as some other British colonies. Remnants of these first Rubber trees are now protected as a national monument. Later the garden was developed as a standard Botanical Garden by adding and developing new plants and sections. Many of these trees of the 19th century are still available in the Garden. It now serves as a tropical low country Botanic Garden.

The Garden is situated near Asgiriya town, Gampaha, In the Gampaha District of the Western Province, about 1 km from the city of Gampaha. The total land area is 37 acres. It falls under the wet zone and a typical wet zone climate prevails. The Southwest monsoon is the main rain source and to some extent from conventional rains. Annual mean rainfall is approximately 2500 mm. Mean temperature is about 28°C.

Current program related UA

Gampaha Botanical Gardens plays a major role in the greening of Gampaha MC. It helps in protecting the biodiversity by conserving the flora, supports in beautification of park. It acts as a conservatory of indigenous and exotic plants and also holds a demonstration unit of Family Business Garden for the awareness of onlookers. It provides recreation zone for the public, implementing a variety of programmes and projects such as greening roundabout in the city and ornamental gardening at home.

Western Province Health Department

While treatment of patients in the Gampaha District is done through hospitals activities to prevent of diseases are done by 15 offices of Medical Health Officers.

Hospitals in Gampaha coming under the Western Province Health Department.

District General Hospitals	02
Base Hospitals	01
District Hospitals	05
Peripheral Units	03
Rural Hospitals	05
Central Dispensaries	45

Of these, District General Hospital is located within the Gampaha Municipal area.

While the Gampaha District is divided, for activities concerned with the prevention of diseases, into 15 Divisions of the Medical Health Officers, it is sub-divided into 90 Divisions of Public Health Inspectors and 550 Divisions of Midwives.

Current Activities Related to UA

The Western Province Health Department should be commended for its service concerning to raising the nutritional status of the people, controlling contagious and diseases, non-contagious diseases and raising the nutritional status of mothers and children.

Western Province Department of Education

Role in UA

Giving knowledge to the next generation whilst creating an agricultural environment within the school with the aim of making the next generation self-sufficient in food, a foundation is being fashioned by the Department of Education to be involved in urban agriculture, which is a satisfactory state of affairs.

Animal Products and Animal Health Department

Current activities in UA

The contributions of Animal Products and Animal Health Department in developing urban agriculture at Gampaha are as follows:

- Control of disease in animals and treatment of sick animals whether used or connected to agriculture or not and domesticated by citizens in GMC
- Promoting livestock rearing in meeting the protein needs through animal proteins like milk and eggs and meat production
- Motivating the rearing of necessary animals through making urban people aware of nutrition

SANASA City Bank Ltd Gampaha

SANASA was founded throughout the country as a cooperative business. It is across cities and villages. SANASA members act in a cooperative way without considering nationality, religion, and caste. As a result, it has achieved the following fourfold status:

- SANASA Development Bank Ltd
- SANASA Insurance Company Ltd
- SANASA Engineering Company Ltd
- SANASA Production Consumer Company

More details on the group which established the bank, when and how many urban members are enrolled in the loan programs.

Members are trained at the national levels for which there are two training centres:

1. Kegalle Training Centre
2. Yatagama Training Centre

The unit established to serve the urban public of Gampaha is the SANASA city Bank, which serves about 1,200 members and customers. The aim is to supply services by reaching to the customers. It provides loans and the collection is done on daily basis.

The solutions for economic and social problems necessary to take the concept of urban agriculture and family business parks to the urban public are expected to be given by this institution.

Current activities related to UA

Only Loans are provided to urban citizens, however currently there are no program related to UA that are supported by the bank.

Role in UA

While providing a social and economic support to the public in the Gampaha town, the SANASA Town Bank consider UA as important activity in which the urban citizens can participate to generate income. The loans for agricultural needs can be availed from the city bank unit for this purpose.

Irrigation Department

Current activities

- Planning, Design, Construction and Management of infrastructure facilities required to harness the surface water for land development
- Integrated natural and human resource management in major irrigation systems in order to increase productivity
- Promoting participatory management in inter provincial irrigation schemes
- Assessment of water resources in river basins for river basin planning and development, inclusive of stream flow forecasting and flood warning
- Providing drainage facilities to low-lying coastal areas and preventing of flooding and salt water intrusion

Role in UA

While Gampaha is a town that comes under the low-country wet zone boundaries of the town have been identified as Uruval Oya and Aththanagalu Oya and water is supplied to the area by the principal irrigation systems associated with them. The Peragas *Amuna* (anicut), which is the principal irrigation system, supplies water to around 120 acres. All the administrative and maintenance works connected to this system are done by the Irrigation Department. Therefore, the department will play a major role in ensuring the water supply to the fields in GMC area.

Urban Development Authority

An urban development plan for the Gampaha town has been submitted by the Urban Development Authority.

Road Development Authority

In the development of roads a plan has been submitted so as to safeguard either side of roads for urban agriculture.

Existing platforms for promotion of urban agriculture in GMC

State and Private Institutions

- **Central Government**

Among the line departments of the Democratic Socialist Republic of Sri Lanka, the Department of Agrarian Development and the Department of Botanical Gardens hold equal membership. Other institutions that contribute to development are the Irrigation Department, Urban Development Authority and the Road Development Authority.

- **Provincial Institutions**

Western Province Department of Agriculture was the pioneer in urban agriculture through Family Business Garden Concept.

- **District Farmer Training Centres**

Every year there 2-day, 5-day and 45-day short-term and farmer training course of studies and a 1-year vocational training course of studies are conducted.

- **Officer Training Centres**

In addition, for research activities the research institutions of the Central Government act as a coordinator. Examples are the Paddy Research Institute, Bathalagoda and the Fruit Research Institute, Horana.

Training institutes relevant to the Western Province Animal Products and Health Department are the following

- Animal Husbandry Training Centre, Kotadeniyawa
- Grass Resources Development Centre, Kotadeniyawa

District Level

District Resources Centres:

- District Training Centre, Ambepussa
- Institute of District Training and 1-Year Course of Studies

Youth Battalion, Werellawatte, Gampaha

Potential Land types for Urban Agriculture

- Re-cultivation of fallow land
- Cultivating on either side of roads
- Office premises
- School land
- Uncultivated land
- Roof cultivation
- Government land
- Private-sector land
- People's representative's land
- Army-camp land
- Trade-complex spaces
- Police barracks
- Railway conserves
- Town roundabouts
- Religious centres

Cultivation can be made effective by arranging to give farmers land associated with temples and churches in the Gampaha town.

Policy Support

National Agricultural Policy 2007-2009-03: Ministry of Agriculture Development and Agrarian Services.

Under Section 17 of the National Agricultural policy priority is given to urban agriculture as follows:

17.0 Home Gardening

17.1 Promote home gardening and urban agriculture to enhance household nutrition and income.

17.2 Promote women's Participation in home gardening

Urban agriculture is being implemented as the principal development theme of the Western Province Provincial Council. Of this, *Nagara Pibiduma* (Town awakening), takes a prominent place. Action has been taken to transmit this electronically as *Nagarika Haritha Piyasa* (Urban Green Area) program telecasted through media.

The Agrarian Development Department can be identified as the institution that implements the Agrarian Development Act No. 46 of 2000.

- Ensuring the ownership of lands relevant to owners of wetlands and tenant farmers
- Resolving farmer conflicts (about threshing floors, agricultural roads) and taking necessary legal action
- Establishing and registering farmer organizations
- Converting wetlands into highlands without permission and taking relevant legal steps
- Maintaining lists of agricultural lands in the prescribed jurisdictions
- Collecting acre-taxes
- Issuing regulations relevant to stray animals in agricultural land or in an irrigation structure
- Deciding the taxes that should be imposed when other agricultural crops are grown in wetlands
- Permit to obtain mineral resources from wetlands
- Handing over supervision of irrigation structures and their administration to farmer organizations
- Issuing directives relevant to the altering of the flow of drainage systems to paddy lands or channels
- Holding meetings of landowners and possessors of land
- Taking action against those who breach agricultural customs and laws
- Issuing permits and stating stipulations on the steps to be taken when wells are dug for cultivation

National Campaign to Motivate Domestic Food Production: Ministry of Agriculture Development and Agrarian Services. Under the theme *Api Wawamu –Rata Hadamu (let us cultivate and uplift the country)*.

Section 2.0: Promotion of Home gardening. “Paddy filed, chena, home gardens are identified as the main components of traditional agriculture in Sri Lanka. Development of home garden can be considered as a tool to address the existing problems of increasing cost of living, malnutrition and food insecurity etc”.

“It is expected is expected to develop the following types of home gardens with the participation of all communities expecting the contribution of all types of individual in the society. Hume gardening could be categorized in following manner:

- Rural and Urban Home gardens
- School Home gardens

- Home Gardens of school of School children
- Home garden & model farms in office premises
- Home garden in security forces camps
- Private home gardens of state officials
- Home gardens in office premises of private institutions
- Home gardens of Public Representatives

State (National) Policy

That the environment has to be protected is stated in the following: Chapter 27 (14) of the 1978 Government Constitution of the Democratic Socialist Republic of Sri Lanka on environment which states "It is the responsibility of the government to protect, conserve and develop the environment for the use and existence of the people." Similarly, the responsibility of the people is stated in Chapter 28 F as "It is the duty of every citizen of Sri Lanka to protect the natural environment as well as to conserve its diversity."

Provincial Councils have been vested with legal and executive powers regarding the environment and many other sectors in the decentralization process carried out according to the 13th Amendment to the 1978 Government Constitution.

Political Background

The immense joy of the project beneficiaries is due to the very high level of contribution from the Cabinet and Non-Cabinet Ministers of the area, the Chief Minister of the Western Province, Hector Bethmage, Hon. Minister of Agriculture, Lands and Tourism of the Western Province, Hon. Ministers and Members of the Provincial Council, and Ajith Mannapperuma, His Lordship, the Mayor of the Municipal Council. The active support given by the His Lordship, the Mayor of the Gampaha Municipal Council helps a great deal in encouraging us.

By now, in the government policy, an appropriate environment on agriculture is being created. It is with pleasure that we give here the example of *Api Vavamu-Rata Nagamu* (Let Us Grow-Let Us Develop the Country).

Family Business Garden (FBG)

In inviting to work on urban agricultural goals and dimensions, the concept of "the Family Business Garden (FBG)" was introduced with field demonstration on 5th June or the World Environment Day of 2000, by the Department of Agriculture (Western Province). The concept attempts to convert the simple form of home gardening into a

supply source of family nutrition, income and mental satisfaction that based on sustainable entrepreneurship goals.

The mission of the concept of the FBG is to encompass limited urban horizontal space and maximizes available vertical space by applying “Vertical Development Themes” into the agricultural development process. For instance, mission addresses the following areas in urban communities: food security, micro-farming practices, value-added production, environment and/or commercial agriculture, and sustainable development initiatives. The prime focus of the concept is to integrate Indigenous Technical Know-how (ITK) with adaptable forms of Scientific Technical Knowledge (STK) available in different fields of sustainable development. The concept of the FBG carries five prime expectations or characters and four aims in its implementation with urban communities and is briefly pointed out bellow:

Expectations of the Concept of the FBG

- Scope - not only family nutrition but also additional income source
- Approach - a process not content, there is no fixed model, it is flexible
- System - technology development rather than technology transfer
- Means - as commercial agriculture or environment agriculture or both
- End - physical as well as mental satisfaction in agro entrepreneurship

Municipal Solid Waste Management

Although 55 tons per day of garbage are produced in the town, the municipality has the capacity to remove only 15–20 tons per day of the total garbage. In search of a solution to this problem, the Gampaha Municipal made a proposal to the Central Environment Authority. In 2007, an indoor garbage management project was begun as a result of the proposal.

The following actions are being taken under this project called *Kasalata Milak*:

- Waste matter of households is selected and collected separately.
- Spreading awareness for citizen, schools, government and private sectors for production of compost and recycling for management of solid waste matter.

Over all goals is to make Gampaha a clean and green town through environmental conservation and management.

Parallel to this project, Use of home-made compost fertilizer by practicing urban agriculture is being promoted.

For the joint indoor garbage management and keeping the urban environment clean project recycling materials like polythene, plastic, paper, cardboard, glass are collected separately. For this three polysack bags per household are distributed. To collect these bags *Jangama Sampath Siyaya* (Hundred Mobile Resources) are placed with separate cubicles at popular places. A permanent store has been built in the municipal land to store the daily collected recycling matter.

Keeping the roads and home gardens within the Gampaha town limits clean and beautiful through the management of indoor garbage is expected to be fulfilled through the development of urban agriculture.

MSF in GMC: Nagara Haritha Balakaya: Urban Green Force

To successfully implement urban agriculture in Gampaha town the following government and non-government organization got together and established an enabling team through Multistakeholder Processes in Policy Design and Action Planning. The team evolved in to a Multistakeholder forum to support and promote urban agriculture and formulated a draft City Strategy agenda based on the situation analysis.

1. Western Province Department of Agriculture
2. Gampaha Municipal Council
3. Agrarian Services Development Department
4. Animal Husbandry Department
5. Education Department
6. Western Province Health Department
7. Gampaha Municipal Council
8. Department of Gampaha Botanical Gardens
9. Gampaha SANASA City Bank

Townfolk

Townfolk of Gampaha can be divided into six categories:

- Business-folk
- Employed people
- Unemployed women with sources of income
- School-leavers
- Retirees

- *Samurdhi*-beneficiaries (those get money from the government because of poverty)

School children

When this concept is introduced to schoolchildren and their agreement with it is assured it would be possible to maintain a good health status and have food security in the future.

Organizations

1. Women's organizations
2. Farmer organizations
3. Small SANASA groups
4. Societies of elders
5. Small samurdhi groups
6. Young farmer societies
7. Three-wheeler unions
8. Youth battalions

A few farmer organizations and flower societies exist at the Gampaha town. However, in six GN Divisions a few fallow fields and cultivable, but uncultivated, lands can be seen. Our expectation is that through making the townsfolk realize the possibility of cultivating in limited spaces a satisfactory progress can be achieved.

According to the above-mentioned facts, the people have informed us their necessity regarding agriculture. Implementing them is our responsibility.

Constraints

Problems are considered here that have been obtained from the Gampaha public with the participation of the Urban Green Force who used the *pivisum kramaya* (access method).

The following are facts that have been gathered through interviews, posters and distribution of hand bills, all of which were necessary to enter the urban agriculture.

1. Deficiency of knowledge in agriculture (Concept of family business parks, limited space, crop cultivation, new technology, harm caused by pests).
2. Lack of knowledge on entrepreneurship.
3. Difficulty in obtaining quality seeds and cultivating material.
4. Congestion in the main drainage systems associated with towns especially for paddy growers.
5. Lack of basic capital to engage in agriculture
6. Deficiency of agricultural appurtenances
7. Harm done by stray animals

Future Expectations

Achieving the following aims is expected by taking urban agriculture to the Gampaha town with the hope of a clean, green town:

1. Family nutritional security by obtaining health-secure food
2. Control of contagious and non-contagious diseases
3. Physical and mental health development
4. Create a green environment through environmental management and conservation
5. Develop biodiversity
6. Minimize environmental pollution
7. Support occupation
8. Management of urban garbage and drainage
9. Develop correct food habits among schoolchildren
10. Make awareness as an appreciative and educational tool
11. The aesthetics of the home and town