

Project proposal

1. Project Information

1.1 Project Title:- food security form Ultra High Density 36 Method Home Garden

1.2 Objective:-

- 1.2.1 Minimize monetary investment for purchase of key inputs like seeds, fertilizers and plant protection chemicals from the market
- 1.2.2 Maximum use the useless agriculture land to the cultivation
- 1.2.3 Get multi nutrients for a family
- 1.2.4 Make Recourse recycling and cost reduction in farming
- 1.2.5 Efficient use of irrigation water

1. Home Garden Invention

The basic concept of home garden system arose thousand years ago. At that time, it was called as agro-forestry in Sri Lanka. Most of the living places abundantly found home gardens in each district. Home garden in any pace may be either a traditional or cultivated home garden.

Traditional home gardens are,

- ◆ closely related to geographic location, cultural backgrounds and socioeconomic conditions of their owners.
- ◆ ideal forms of land use (combines agriculture, forestry and livestock).
- ◆ trees are grown in a multi-tiered arrangement.
- ◆ terraced areas planted according to local topography and soil conditions.
- ◆ traditional practice of mixed cropping of trees yielding timber, small wood, fuel wood, fodder, fruits, spices, nuts, medicines and other cash crops.
- ◆ entire system provides an ideal healthy microclimate for both man and animals.

Home garden consists of annual, biennial and perennial crops including livestock production. Plants with different canopy depths are located in these home gardens and then known as multi- spiced and multi-storied cropping system. The synonyms are, mixed garden, compound farm, kitchen garden, household home garden, home garden agro forestry system. The basic structures of the home garden varied from place to place, based on their ecological, socio- economic and cultural factors.

Generally home gardening practiced in a small piece of land which is close to the family residence. The cultivated materials which are usually added to the daily nutrient supplements of the family members. And also, home gardening, is a mixed cropping

system of various types of vegetables, fruits, plantation crops, herbs, spices, ornamental plants and medicinal plants, parallel to livestock production. Home garden is a kind of organic farming technique to cooperate with the food safety. Research found reported that, it is a multi-storied combination of various type of trees and crops, compiled with domestic animals, nearby residences and cultivated fully or partially for domestic consumption.

1. Definition of Home Gardens

There are various definitions for the home gardens.

1. The home gardens or household garden is a small-scale production system supplying plant and animal consumption and utilitarian items either not obtainable, affordable, or readily available through retail markets, field cultivation, hunting, gathering, fishing, and wage earning. Household gardens tend to be located close to dwelling for security, convenience, and special care. They occupy land marginal to field production and labor marginal to major household economic activities. Featuring ecologically adapted and complementary species, household gardens are marked by low capital input and simple technology (Ninez,1984).
2. Home garden is an area of land, individually owned, surrounding a house and usually planted with a mixture of perennials and annuals (TERRA, 1954)
3. A plot of land that has a residence on it, fixed boundaries and a functional relationship with its occupants is called as a home garden (Second Home garden Seminar Indonesia, 1978)
4. A subsystem within larger food procurement systems which aims to produce household consumption items, either not obtainable through permanent shifting agriculture, hunting, gathering, fishing, livestock, husbandry or wage earners. (Anonymous)
5. A home garden is defined as a supplementary food production system that is under the management and control of household members. A household garden can be consumption-or market-oriented, but at least some of the produce will be consumed by the household. As a supplementary production system, the household garden is secondary to both the primary source of household food, whether from field production or purchase and to household income, whether from sales of field produce, wage labour or other sources (Soleri, Clevel and Frankenberger, 1991).

6. Home garden covers the production of vegetable for family use. It is an important but inexperienced way of providing a continuous supply of fresh vegetables for family table. Yields from the home garden contribute to the family nutrition and may even provide additional income (Soriano and Villareal, 1969).
7. Home garden is a land use with definite boundaries and a house, which is usually (but not always) a mixture of annual, perennial plants and animals and serves as variety of biophysical, economics and sociocultural functions for the owner (Soemarwoto and Soemarwato, 1985)
8. Home gardens is a small area where vegetable-growing is being done. In this type of garden, planting is done regularly. Its primary purpose is to provide a continuous supply of nutritious but cheap good quality vegetables for home use. In certain cases, it also provides an extra income when excess vegetables are sold. (Aycardo, and Creencia, 1981)
9. Home garden refers to garden within the household perimeter, including the garden located out in the field, the produce of which is normally intended for household consumption. (Eusebio, 1988)
10. Home garden is an area within the home lot or elsewhere cultivated for home consumption. (Torres, 1988)
11. A piece of ground usually adjoining a dwelling where vegetables, fruits and ornamentals are cultivated is called as home garden (Javier, 1988).

2. Characteristics of Home Gardens

There are important characteristics of a home garden.

- Located near the residence
- Contain a high diversity of plants
- Production is supplementary rather than a main source of family consumption and income
- Occupy a small area
- A production system that the poor can easily enter at virtually no economic resources, using locally available planting materials, natural manures and indigenous methods of pest control (Figure 01 and table 01).



Figure 01: Key components of a home garden

Table 01: Key characteristics of a typical home garden

Characteristics	General practices
Species density	High
Species type	Staples, vegetables, fruits, medicinal plants
Production objective	Home conception
Labor source	Family
Labor requirement	Part time
Harvest frequency	Daily, Seasonal
Space utilization	Horizontal and vertical
Location	Near dwelling

Cropping pattern	Irregular and row
Technology	Simple hand tools
Input cost	Low
Distribution	Rural and urban areas
Skills	Gardening and horticultural skills
Assistance	None or minor

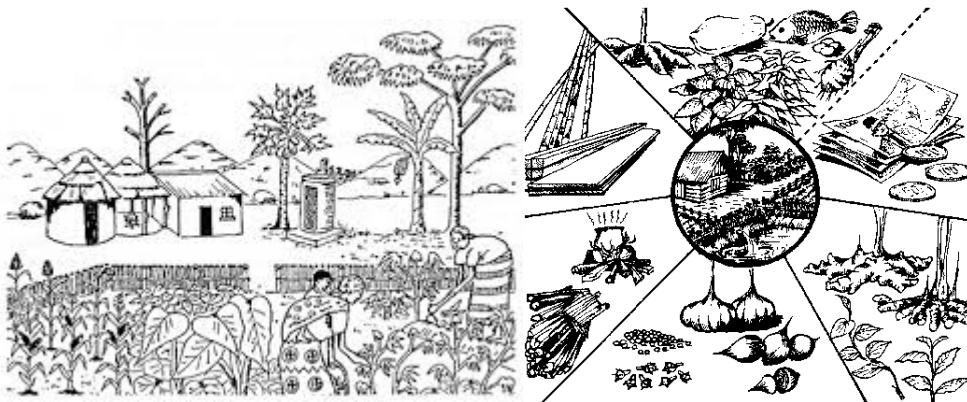


Figure 02: Traditional pattern of a home garden

2. Benefits of Home Gardening

Home gardens give more benefits for gardeners. It can be categorized in to social, economic and environmental benefits.

2.1. Social Benefits

Sale of products of home gardens significantly improves the family's financial status. Mostly home gardening is subsistence level of farming method and fulfill the daily meal of a family. If it farming with cash crops those are sell including vegetables, fruits, animal products, wood and timber as fuel and construction materials. Research papers stated that, home garden practiced in Nigeria increase the family income by 60% and in Russia, rural home garden with sustainable farming increases their income by two third. A study of urban home gardens in the Philippines revealed that home gardening families spend less on food than non-gardening families, while home gardening families who plant a

larger number of varieties of fruits and vegetables spend even less spending on their food purchasing.

Some of the social benefits of the home gardens are elaborated below.

1. Improving health

Plants are an important source of medicine for humans and livestock and are used as biological pesticides to protect crop from diseases and pest infestations. Herbs and medicinal plants are grown in home gardens all over the world. People use herbal and medicinal plant to treat various illnesses, diseases and also to improve their health conditions.

2. Enhancing food and nutritional security

The most fundamental social benefit of home gardens stems from its direct contributions to household food security by increasing availability, accessibility and utilization of food products. Home gardens are maintained for easy access to fresh plant and animal food sources in both rural and urban locales. Food items from home gardens add substantially to the family energy and nutritive requirements on a continuous basis.

3. Social equity and gender balance

In many cultures, women play an important role in food production and are active participants in home gardening activities. While women's contribution to household food production is immense, it is incorrect to conclude that home gardening is a predominantly a female activity. Women's participation in home gardening varies across cultures ranging from land preparation, planting, weeding, harvesting, and marketing.

4. Preserving indigenous knowledge and building integrated societies

Home gardens consist of a variety of species that represent social and cultural aspects of the different societies. There is a rich indigenous knowledge base in communities around the world that is valuable and expressed in home gardens through the selection of plants and animal species as well as in farming practices used by the local community. Home gardens can serve as a repository for preserving and transferring indigenous crop and livestock production knowledge and the skills from generation to generations.



Figure 03: Some indigenes plants in a home garden

2.2. Economic Benefits

Due to the product from the garden, their self-sufficiency is improved and the earnings from excess can be used to purchase other items than daily food needs. Home gardens contribute to a cohesive social environment, improve the house hold status and their wealth.

Some of the economic benefits of the home gardens are elaborated below.

5. Income generation and improved livelihood

Income generated from the sale of home gardens fruits, vegetables, and livestock products allowed households to use the proceeds to purchase additional food items as well as for savings, education, and other.

6. Improved household economic welfare

Home gardens products may be sold to earn additional income. Gardening activities can be developed into a small cottage industry. Furthermore, the direct earnings from the sale of home garden products and the savings from consuming home-grown food products can lead to more disposal income that can be used for other domestic purposes.



Figure 04 – High income crop in a home garden (ginger and konkuli)

2.3. Environmental Benefits

Home garden is a multi-cropping system and also it is a kind of integrated farming system due to crop farming and animal husbandry both are simultaneously practiced in a same land area. Recycling of nutrients is happening in soil. Solar energy is converted into the photosynthetic energy to produce food which is consumed by both animals and humans. Recycling helps to reduce soil erosion and making the crop canopy layer reducing the velocity of water falling to the soil and reducing split erosion and leaching.

Higher number of species are present in-home gardens. It provides habitats differ fauna facilitation higher biodiversity and controlling pest and diseases as well as the weeds. Different canopy layers control the light transmission and help to natural weed control.

Most of the traditional and local varieties are cultivated in home gardens and they are naturally resistant to pests and diseases. Some insects, reptiles and birds act as natural enemies in the traditional crop bases home gardens. Home gardens helps in solving sanitation issue in the country. In urban cities, town level shops and flat houses facing major problem is the disposing of their garbage. Instead of burning of the disposed kitchen wastes and degradable materials, they can be used for composing in urban home gardens. It reduces the waste issue, improves the ecological diversity and improves the food diversity for home garden families.

Soil conditioning and soil conservation is another advantage in home gardening. Even if the soil profile has disturbed with the incorrect practices, continuous practices of home gardening improve the soil structure and become infertile soil to the fertile soil. Sustainable practices regard to the crop production improve the soil biota and improve the biotic agents which help to improve the soil health. Mulching, soil covering, soil protection practices, organic manuring helps to recycle of nutrition and conserve the soil

properties. Though mulching by crop residues and green manures persist the weed growth in home gardens, it reduces the risk due to the soil erosion.

Home gardens provide a number of ecosystem services such as habitats for wildlife and beneficial organisms, nutrient recycling, reduced soil erosion, and enhanced pollination. The high density of plants within the home garden provide ideal habitats and refugia for wildlife species such as birds, small mammals, reptiles, and insects.



Figure 05: Poison free medicine vegetables from home garden

3. Factors Considering Composition and Structure of a Home Garden

There are several factors which determined the type of home garden in the particular climatic zone. Mainly it depends on the environmental, geographic, tree composition, socio-economic condition and based on the cultural practices in the field level.

Factor	Condition	Examples and remarks
Environmental condition	Agro-ecological region; Soil parameters	Wet zone home gardens are diverse, dense and structurally more complex than that to Dry zone home gardens; Low soil fertility reduces diversity of crops and density of vegetation.
Geographic location	Urban vs rural; Adjacent to and away from natural forests	Urban home gardens often smaller and more aesthetically oriented; home garden adjacent to natural forests may consist of more endemic species.

Dominant trees or crops	Annual, perennial nature of dominant crop; Density of species; Degree of complementarity to open field cultivation; Level of dynamism; Level of stratification; Presence or absence of animal components	Coconut based, spice crop based, tea-based home gardens; Presence of animal component and crop components; Incipient gardens first dominated by annual crops followed by increased incorporation of tree crops; Stratification based on common forest type of the area.
Socioeconomic condition of households	Size of home garden; Wealth status of owner; Access to market; Access to off-farm	Smaller size more species per unit area included to achieve various food items; With increase of wealth increased importance
	employment; Gender related issues; Contribution to household economy	of commercial and aesthetic plants; Commercial crops stimulated by good market access; Financially lucrative employment decreased importance of commercial crops; Gardens of female headed households often more household use oriented.
Maturity of home garden	Age of home garden mature home gardens are	Structurally more complex than recently established gardens.
Cultural factors	Food preferences of owner or community	Cultural preferences in respect to consumption of vegetables and spices.

Source: Modified from Wiersum (2006).

4. Constraints in Home Gardening and Ways to Overcome

Home gardening has identified constraints as below.

- High competition of weeds with the growing crops
- Insect pests and diseases within cropping season
- Shortage of capital and labor which is also dependent on family members.
- Damages due to adverse weather conditions
- Lack of access to information and extension/advisory services.

Ways to Overcome the Constraints

- Need for timely information for growers, education, and training. However, it has been identified that neighbors and other farmers are the most dominant source of information for home gardening related activities
- Practical aspects courage with home garden management including bee keeping, composting, maintaining nurseries of planting materials, pest and soil management, as well as integrating livestock activities and cultivating mushrooms.



Figure 06: Training for make to home garden

5. Home Gardening and Food Security Relationship

Food security, being one of the Millennium Development Goals, requires a nutritionally adequate and safe food supply at both national and household levels, a reasonable supply of food during the year and in all years, and access by each household to sufficient food to meet the needs of all. Food security has three main facts, namely availability, access and utilization. These are easily completed with the home gardening. Home gardens directly contribute to household food security increasing food availability, accessibility, and utilization.

Home gardens offer great potential for improving household food security and alleviating micronutrient deficiencies. Gardening can enhance food security in several ways, most importantly through:

01. Direct access to a diversity of nutritionally-rich foods,
02. Increased purchasing power from savings on food bills and income from sales of garden products, and
03. Fall-back food provision during seasonal lean periods.

Home gardens are maintained for easy access to fresh plant and animal food sources in both rural and urban locales. Urban home garden systems are little different due to scarcity of land availability. Urban garden can fulfill the same requirement of the family members. Mostly urban families are localized in flats and their day today life activities are arranged into the busy schedule. In flat houses balconies, walls and air spaces used to prepare home gardens into various types and arrangement styles to maximum utilization of the spaces. Poly bags, P.V.C pipes, tiles, racks, bottles, tires, empty buckets used as filling materials (Figure 09). The purpose of the urban home garden is to fulfill the food supplement for their family members and improve the food security level.





Figure 07: Intigradered home gardening strictures in local areas

Food insecurity has been identified as the prime cause of malnutrition while poverty has been shown to be one of the underlying causes of food insecurity. Presence of any food at any time it completes the food security of the community and minimize the food scarcity. Reduce the mal nutrition and improve the health status of the community through home garden.

Home garden is a multi-farming system of crop farming and animal husbandry. Home gardens provide easy day-to-day access to family nutrition of fresh, healthy and nutritious foods for the household. Home gardeners earn 50% of the vegetables, fruits, tubers, and yams from their garden while increase the calorie supplement through the human nutrition. Human's balanced diet requirement fulfilled with the significant

proportion of protein, vitamins and minerals. Growing spices and herbs improve the palatability and the flavor of the meals. In other global trends move on to the increasing and consumption of vitamin A rich foods through the home garden development programs.



Figure 08: Poultry rearing in home gardens

Animal rearing with home gardening, provide milk, egg and meat from the home raised animals (Figure 10). Instead of that most families engage in beekeeping, fish rearing in small pond and mushroom production as the hobby and that added esthetic value for the gardeners and improve the protein supplement and excess production selling earns money. Foods from home gardens as horticultural crops to roots to palm and animal products. Although home garden crops are not always staple, some countries like Nepal staple food is yams. Therefore, their requirement fulfilled by their own home gardens.

Home gardens are help to improve the status of farm families by improving the living stands by earning additional income and also improve the nutritive status of the members of the farm family. This concept helps not only for their family but also for broad community level. Typical home garden comprises of food materials, timber, fuel wood, medicine fodder etc.

In Sri Lankan home gardens, total vegetable production reported as leafy vegetables - 60% and other vegetables -20%. Even it taken as the hole consumable materials level it is more than 50% of vegetables, fruits, medicinal plants and herbs. Therefore, home garden concept improves the family nutrition and their food security status. Further medical reports detailed that, home garden families have lower risk for night blindness due to most of home garden vegetables are rich in vitamin A especially dark green leafy vegetables. Therefore, improving consumption it improves the vitamin supplement.

Evidence reported from Java that the 14% of protein requirement is from the home gardens. In Ghana, it produces considerable amount of family income through the meat production from home gardens. In India, combined farming with livestock specially with poultry is common aspect. Home gardens use organic manures, poultry manures, cow dung, kitchen waste as the plant nutrient supplement sources. Also, timber materials, woody plants, forestry plants are use as fuel sources.

(Source from Sri Lankan Home Gardens and Household Food Security)

1. Project Rationale

1.1 Introduction to the Project

In Sri Lanka, home gardens (HGs) have been identified as an integral part of the landscape and culture for centuries and remain today one of the major and oldest forms of land use in the country. Although the term Ultra high density 36 method home garden (UHD 36 HG), as a subset of HGs in Sri Lanka and it is a unique method of farming which requires absolutely no monetary investment for purchase of key inputs like seeds, fertilizers and plant protection chemicals from the market. The farmer can grow hardy local varieties of crops without application of fertilizers and pesticides. Since it is a zero budget farming no institutional credit would be required and dependence on hired labour is also reduced to bare minimum. All that the system requires is native breed of cattle which in any case forms an integral part of farming families in rural areas. It is claimed that one cow is sufficient to take up this method of farming on thirty acres of land. UHD 36 HGs are considered a result of farmers' conception, investments and long term planning. UHD 36 HG in Sri Lanka will be evolved to satisfy households' food and other needs while countering the resource constraints resulting from population pressure and shortage of arable lands and capital.

UHD 36 HG represent of perennial mixed cropping comprising a variety of tree crops with multiple uses and to a lesser extent livestock. This traditional ,complex and risk averse multi story production system comprising several perennial food crops, vegetables, fruits, roots, tubers, medicinal plants, sugar crops, spice crops and timber crops has continuously provided high levels of nutritional and diet diversity to households while medicinal species and tree species provide substantial additional income. While similar to other home garden systems in other parts of the world, UHD 36 HGs are unique in high levels of functional plant diversity they contain. The farmers and households with UHD 36 HG have also tended to have a better livelihood from a broader range of market and subsistence products compared to those with other home garden systems.UHD 36 HG provide connectivity and linkages to other agricultural and natural land spaces, and this in itself is important for biodiversity conservation and adaptation, will become more important under a changing climate, particularly as the risk of population fragmentation and the need for gene flow and species dispersal and migration increase.UHD 36 HG may well provide the quality matrix through which such linkage and connectivity may occur. For these reasons, past present and future, this important for the contribution it makes to sustainable diets and livelihoods as well as enhanced conservation of globally important biodiversity.

2.2 Salient Features of Ultra high density 36 method Natural Farming

1) Lesser monetary investment farming

In this system of farming no monetary investment on the part of farmer is required for purchase of seeds, fertilizers and plant protection chemicals from the market. The farmer can produce his own seed or he may use seeds that are available with other farmers. More importantly, there is absolutely no place for fertilizers and plant protection chemicals in this scheme of farming. Dependence on hired labor is also reduced to the bare minimum as the system discourages intercultural operations. The whole philosophy behind this system is to make the farmer self-reliant so that he is freed from the clutches of money lenders and market dispensed high cost inputs.

2. Mixed Cropping and Crop Rotation

UHD 36 HGS advocates cultivation of diverse species of crops depending on site specific agro climatic conditions. Mixed cropping provides buffer against total failure of single crop and also widens the income source of farmers. There is stress on inclusion of leguminous crops to ensure replenishment of soil fertility. Crop rotation is also emphasized to discourage build up of endemic pests. In the scheme of mixed cropping, cereals, millets, leguminous crops, horticulture crops particularly vegetables and even medicinal plants can be included to make farming more lucrative. The system also advocates wider spacing of crops to facilitate inter cropping.

Table 03:

This chart will show the trees grown in UHD 36 HGs and their purpose and nutritional values

Purpose of grown	Examples
Staple and other food items	Breadfruit, cassava, coconut, jackfruit, maize

Fruits	Avocado (Bud), banana, cashew, citrus, custard apple, guava, jackfruit, mango, orange, passion fruit, papaya, pineapple, pomegranate.
Ornamentals	Anthurium, cacti, crotons, begonias, orchids, palms, roses, ferns
Timber trees	<i>Alastonia, Alibizia, Berrya, Coconut, Gmelina, jackfruit, mahogany, Melia, Michelia, Pterocarpus, teak</i>
Medicinal plants	Most herbs and trees in homegardens are medicinally used
Vegetables	<i>Amaranthus, brinjal, cabbage, leafy vegetables, okra, pumpkin, Sesbania, wing bean, Tomato, Capsicum</i>
Spices	chillies, curry leaf, ginger, lemon grass, pepper, rampe, turmeric
Cash crops	Anthurium, Avocado, coconut, mahogany, teak.
Animal products	Local breeds of chicken, eggs, goat and cow milk.

Nutrient	Examples
Energy	Avocado, banana, breadfruit, cashew nut, cassava, coconut, groundnut, jackfruit, maize, sugar cane, sweet potato, yam
Protein	Cashew nut, cowpea, eggs, ground nut, beans, <i>sesbania grandifolia</i> , wing bean
Fat	Avocado, cashew nut, coconut, ground nut, milk and milk products
Vitamin A	Amaranth, banana, bitter gourd, cassava and drumstick, mango, papaya, sweet potato, water spinach
Vitamin C	Anona, banana, cashew nut, citrus (many kind), custard apple, guava, mango, nelli, orange, passion fruit, papaya, pineapple, pomegranate.
Minerals	Most green vegetables and fruits
Fibre	Most green vegetables and fruits

UHD 36 HGs is farmer friendly, eco friendly and above all extremely cost effective. These reasons are cogent enough for them to give this method a fair trial and hence will switch over to this new method.

The system of UHD 36 HGs is eminently suited to the farmer's particularly small and marginal farmers because of its simplicity, adoptability and drastic cut in cost of cultivation of crops. The appeal to the farming community lies in the fact that maintaining optimum levels of production and keeping the cost of cultivation to the bare minimum will substantially enlarge the profit margin. All the sample farmers acknowledged it as farmer friendly and financially viable. However during the initial period of transition to new system, the results will not be encouraging because of the lingering effects of chemical farming. The results will become evident only after adequate mulching and restoration of biological activity in the soil. Hence, patience and perseverance are required on the part of farmers.

Treatment with Amirtham and Jeevamrutham gives extremely encouraging results for successful cultivation of crops. Amirtham does provide adequate protection to crops from insects and

diseases during the initial stages of germination and establishment. Mortality in case of treated crop is reported to be almost negligible.

Treatment with Jeevamrutham promotes rapid and enormous biological activity in the soil. However, it should be coupled with adequate mulching so that the soil is transformed into humans rich reservoir of nutrients. It is also observed that providing Jeevamrutham once in a fortnight is better than providing it once in a month.

Experience with this method of farming corroborates the fact that adequate mulching promotes humus formation, suppresses weeds and greatly reduces the water requirement of the crops. Live mulching particularly with leguminous crops has been found to be not only a subsidiary source of income but also a safeguard against depletion of nutrients by crops.

Mixed cropping particularly with short duration legumes, vegetables and even medicinal plants are certainly expanded the income source of farmers. Vegetables rich in vitamins and minerals are generally marketed after adequately providing for home consumption and this certainly augurs well for overcoming malnutrition which is widespread in rural areas.

The methodology will provide for conclusions regarding feasibility of the method at present and final conclusions regarding sustainability can be drawn only after constant monitoring for a period of two to three years.

4. Benefits

Benefits obtained from UHD 36 HGs

Multiple functions of UHD 36 HGs			
Provisioning Services	Regulating Services	Cultural Services	Supporting Services
1. Fruits 2. Vegetables 3. Spices 4. Medicine 5. Stable food 6. Timber 7. Fodder 8. Incoming 9. generation 10. Livestock Products 11. Poultry Products	1. C-Sequestration 2. Flood control 3. Ameliorating 4. Micro climate 5. Water quality 6. Soil erosion 7. Micro climate 8. Pest and disease control	1. Benefit Sharing 2. Scarification 3. Pride 4. Pleasure 5. Aesthetic 6. Employment 7. Social status	1. Nutrient cycling 2. Nutrient dispersal 3. Seed dispersal

Ultra High Density 36 Method Home Gardens are Good nutritional gardens. Thus, helping food and nutritional security

NEEDS AND BUDJECT

1. SEEDS

CROP	VARIETY	SIZE	PRICE
LONG BEANS	HAWARI MAE	5g	80.00
OKRA	LOCAL	5g	45.00
BITTER GOURD	LOCAL (THINNAVELI)	5g	185.00
SNAKE GOURD	THINNAVELI	5g	100.00
PUMKIN	ARJUNA	5g	125.00
TOMATO	PATHMA	5g	220.00
CAPSICUM	MURIA	5g	150.00
BRINJAL	THINNAVELI	5g	180.00
CHILLI	KA2	5g	80.00
BUSITAVO	BS1	5g	45.00
LUFFA	LOCAL	5g	80.00
RED ONION	TRUE SEED	10g	200.00
BEANS	LOCAL	5g	60.00
TOTAL			1550.00

2. FARM TOOLS

TOOL NAME	QYT	PRICE
HAND FORK	1	250
HAND MAMOOTY	1	300
WATER SOWER	1	550
TOTAL		1100

3. RESOURCE PERSION

TITLE	DURATION	PAYMENT
TRAINING OF HOME GARDEN	01	1500.00

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