

Grid Scale $=1: 2 \mathrm{~m}$


Grid Scale $=1: 2 \mathrm{~m}$

Soil \& Water Conservation / Berms \& Swales


Grid Scale $=1: 2 \mathrm{~m}$

Alleys of Nitrogen-fixing Trees \& Grasses


Grid Scale $=1: 2 \mathrm{~m}$

## Compost Piles



Grid Scale $=1: 2 \mathrm{~m}$

Family Permagarden with small fruits, beds and rows of perennials for IPM


Grid Scale $=1: 2 \mathrm{~m}$


Grid Scale $=1: 2 \mathrm{~m}$

## Permagarden for Market Vegetables



Grid Scale $=1: 2 \mathrm{~m}$

## Small Fruit Orchard



Grid Scale $=1: 2 \mathrm{~m}$


Grid Scale $=1: 2 \mathrm{~m}$

Field Crops


Grid Scale $=1: 2 \mathrm{~m}$

## Large Fruit Tree seedlings planted



Grid Scale $=1: 2 \mathrm{~m}$

Field crops planted in nascent fruit orchard


Grid Scale $=1: 2 \mathrm{~m}$

Timber plantation planted


Grid Scale $=1: 2 \mathrm{~m}$

Field crops planted in nascent timber plot


Grid Scale $=1: 2 \mathrm{~m}$

Field crops planted in maturing orchard


Grid Scale $=1: 2 \mathrm{~m}$

## Maturing Forest Garden



Grid Scale $=1: 2 \mathrm{~m}$


Grid Scale $=1: 2 \mathrm{~m}$


Grid Scale $=1: 2 \mathrm{~m}$

1 Homestead
2 Green Wall
3 Compost Piles
4 Fa mily Permagarden
5 Tree/Vegetable Nursery
Market Permagarden

12

Small Fruit Orchard
Livestock Corral
Intensive Fodder Production
Field Crops
La rge Fruit Orchard
Timber Plantation

## Forest Garden Component and Tree Data

| Forest <br> Garden Component | Approximate area ( $m^{2}$ ) or length (m) | Species examples | Tree spacing | Number of Trees | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Green Wall | 425 m | A. polycantha, Calliandra calothyrs us, L. Ie ucocephala, L. trichandra, Dovyalis caffra, | $15-30 \mathrm{~cm}$ <br> between <br> trees; $30-$ <br> 50 cm <br> between rows | Outer row: <br> 1400 <br> Center <br> row: 2125 <br> Innerrow: <br> 400 | Surrounding the entire 1ha plot. Outer row of thorny fast-growing trees; middle row of MPFG/NFTs; inner row spaced further of mixed species of MPFG, fruit, and timber. |
| Alleys | $\begin{aligned} & 500 \mathrm{~m}- \\ & 1000 \mathrm{~m} \end{aligned}$ | Cajanus cajan, Calliandra calothyrs us, L. tricha ndra, vetiver, napier, etc. | .5-1m <br> between <br> trees; 10- <br> 20 m <br> between rows | 500-1500 | Rows of MPFG/NFTs and gras ses spanning a cross the site a nd segmenting sections. |
| Family Permagarden | $100-200 \mathrm{~m}^{2}$ | Diverse, nutritious veg.; small fruit; Moringa oleifera; perennial herbs | 2-4m <br> between <br> small <br> fruit <br> (papaya, banana, moringa) | 20-30 | Fa milies grow diverse vegetables, small fruits/trees, herbs, IPM plants, etc a round/near theirhomes for easy access throughout the year |
| Tree and Vegetable nurseries | $100 \mathrm{~m}^{2}$ | Majority of trees and vegetables requiring nurs ery production | N/A | NA | Area where tree and vegetable seedlings are raised for planting |
| Market Permagarden | 500-1000 m ${ }^{2}$ | Selection ofmarketdriven vegetables | NA | NA | Market vegetables are plantedina grid, segmented byalleys and surrounded by perennials forIPM |
| Small Fruit Orchard | $300-600 \mathrm{~m}^{2}$ | Orange, lime, grenadine, moringa banana, papaya, tree tomato | 2-4 m | 50-100 | Production of s mall fruits, prima rily for ma rket |
| Fodder Plot | $600-1000 \mathrm{~m}^{2}$ | Chamaecytisus palmensis, Calliandra calothyrsus, Le ucaena species, Cajanus cajan, napier grass, bracharia, etc. | 3-4 m | 60-125 | Intensive production of a mix of livestock fodder (shrubs and grasses) for cut-a nd-carry. Livestock housed in on-site corral and kept fromgrazing the site. |
| Large Fruit Orchard | $\begin{aligned} & 1000- \\ & 1600 \mathrm{~m}^{2} \end{aligned}$ | Mango, Avocado, Ma cadamia, Tamarind | 6-9 m | 15-45 | Orcha rd for larger, highvalue fruits and nuts |
| Timber Plantation | $\begin{aligned} & 1500- \\ & 2000 \mathrm{~m}^{2} \end{aligned}$ | Albizia, Warburgia, Terminalia, Markhamia, Ficus, Trichilaspp. | 3-5 m | 100-200 | This plot should be in the least accessible area of the site; to be left to grow fora long period/indefinitely |

