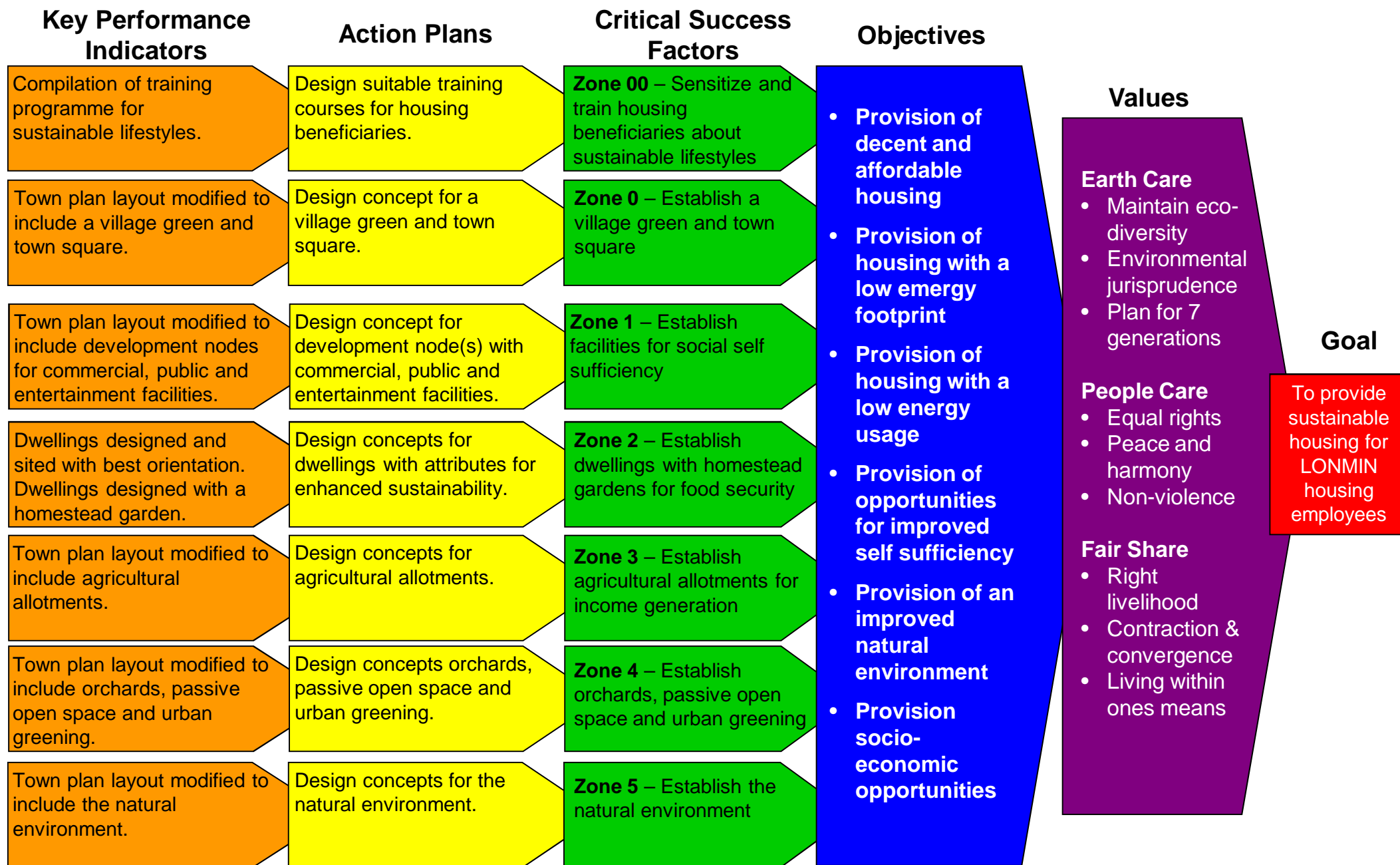


MARIKANA HOUSING PROJECT

THEORY OF PERMACULTURE DESIGN ZONES

Zone	Permaculture zones for homesteads	Permaculture zones for village clusters
Zone 00	The Individual	The People
Zone 0	Home dwelling	Village green and town square
Zone 1	Domestic self sufficiency - pick and pluck plants for daily usage	Social self sufficiency - commercial, public and entertainment facilities
Zone 2	Small animal stock and orchards	Dwellings and homestead gardens
Zone 3	Crops, forage and stored food	Agricultural allotments
Zone 4	Gathering, forage, forestry and pastures	Orchards and passive open space
Zone 5	Natural environment	Natural environment

SUSTAINABLE DESIGN STRATEGY



MARIKANA HOUSING PROJECT

HOLISTIC DESIGN COMPONENTS

#	Critical Success Factor	Action Plans	Sub #	Design Components
1	Zone 00 – Sensitize and train housing beneficiaries about sustainable lifestyles	Design suitable training courses for housing beneficiaries.	1a	Sensitisation towards sustainable lifestyles
			1b	Basic Permaculture design course
			1c	Natural earth building course
			1d	Advanced Permaculture design course
			1e	Ecovillage design course
2	Zone 0 – Establish a village green and town square	Design concept for a village green and town square.	2a	Playground
			2b	Amphitheatre
			2c	Tea garden
			2d	Community hall
			2e	Pedestrian walkways
			2f	Water features
			2g	Sports kick around area
3	Zone 1 – Establish facilities for social self sufficiency	Design concept for development node(s) with commercial, public and entertainment facilities.	3a	Commercial facilities for SMEs
			3b	Public facilities for local municipality
			3c	Entertainment facilities
4	Zone 2 – Establish dwellings with homestead gardens for food security	Design concepts for dwellings with attributes for enhanced sustainability.	4a	Residential buildings for young families
			4b	Residential buildings for mature families
			4c	Residential buildings for pensioners
			4d	Homestead gardens
5	Zone 3 – Establish agricultural allotments for income generation	Design concepts for agricultural allotments.	5a	Site infrastructure for allotments
			5b	Rainwater harvesting / irrigation system for allotments
			5c	Fruit trees and plant material
			5d	Sheds and small tools
			5e	Market gardeners co-operative
6	Zone 4 – Establish orchards, passive open space and urban greening	Design concepts orchards, passive open space and urban greening.	6a	Fruit and nut trees for orchard areas
			6b	Rainwater harvesting / irrigation systems
			6c	Tree nursery
			6d	Demarcated walkways and footpaths
			6e	Indigenous, fruit and nut trees for urban greening
7	Zone 5 – Establish the natural environment	Design concepts for the natural environment.	7a	Earth embankment and water course for visual and sound barrier
			7b	Indigenous trees and plant materials
			7c	Earth embankments for wetlands
			7d	Demarcated walkways and footpaths
			7e	Aquaculture species

Design components to be agreed to by Client. Thereafter, detailed planning & design can be undertaken together with;-

- **Scope of Works**
- **Budget estimates**
- **Project Programme**
- **Project deliverables**
- **Key Performance Indicators**