**RISING FROM THE DUST**

A design that is focused to inspire people on how building with nature can be a wonderful experience. This concept not only keeps on growing, it also provides an everlasting opportunity for people to interact with the nature encapsulated in this design, that does not cease to develop.

There are three main components for each module.

1. **The Baubotanik Framework** – Baubotanik structure is one in which tress are planted and manipulated in certain pattern to achieve a living, breathing building. It is a zero waste technique as the structure only becomes stronger over time with less maintenance structurally. This framework can later become supports to construct a ramp so that people can access the deck.
2. **The Deck** – The main function of the deck is to provide an interactive space for people to work hands-on with the cultivation of nutritious food without the release of greenhouse gasses and not polluting soil, air or the ground water. The deck is 8 meters in diameter, 6 meters in height and a depth of 0.75 meter (Suitable for soil depth according to the plant species). It holds connections for water channels using reused P.V.C pipes connected to sprinklers to water the plants on the deck. The outer edge of the deck has pipes that drains the excess water out of the deck to water the vines and creepers growing on the baubotanik structure.
3. **The Steel Frame work** – The deck is supported by a steel frame work at the centre that is made of 0.12 meter diameter steel rods arranged in a circle. The framework holds the pipe connections through which the deck has access to the water required for plants. The deck can be accessed by make shift move able staircase.

Willow trees are planted in Criss cross pattern for the baubotanik structure. Careful maintenance should be done during the initial stages. 0.4 meter spacing is provided between each sapling. As the structure grows, vines and creepers can be let to grow along the patterns. People can actively participate in the growing of these structures. The ramp is made of willow wood planks and railings made of wood. The bridge supported by baubotanik stays at a height of 4.8 meter and at a distance of 4.5 meter from each module.

These three components make up one module in “RISING FROM THE DUST”. The complete structure will have a deck with vegetables growing, a ramp from the ground level that has access to the deck, the deck supported by steel framework and baubotanik frameworks. Each module will be connected to two other modules by a bridge connection which is supported solely by baubotanik trees. It is a rather slow process but keeps people engaged every day. The variety of plants that can be grown are listed which includes vegetables and flowering plants.

The site for “RISING FROM THE DUST” is located near the water reservoir for ease of water accessibility for permaculture. This area is also at an advantage to the structure as the plants that require direct sunlight, are compatible with it. Going back to the roots of the burning man event, it was discovered that a group of people had come to enjoy the summer solstice. Keeping that in mind, the structure as a whole (3 modules connected by the bridge) is aligned in such a way that, during summer solstice in the month of June, light passes through the voids created by the baubotanik, giving a sense of calm and godly ambience to the unit as a whole.

During off season of the event, people residing in the nearby areas can actively take part in maintaining and growing the structure, bringing together a community and reconnecting with nature. The harvest from the deck and the baubotanik can be used for economic benefits as well. The structure as a whole does not pose any harm to the environment or the economy, rather it creates a space where people can gather for better learning and understanding of various techniques that baubotanik can offer. The space below the bridges will act as a gathering space for people to move around and interact. The circular opening at the centre of the bridge allows direct sunlight to the permaculture area below it as well.

This module or unit can be replicated anywhere on site making it an ever growing structure that keeps on engaging people throughout eternity. If the project gets decommissioned, the grown trees can be used as a building material for any other structures. There is no waste generated while growing, maintaining or uprooting the structure. The full life cycle environmental footprint of the module is net positive. The building materials can always be reused.

Various vegetables and flowering plants that are proposed to be grown on the deck are given in this tabular column.

[](file:///C:\Users\Admin\Desktop\Permaculture_Worksheet.xlsx)

**ENVIRONMENTAL ASSESSMENT**

Baubotanik is a process in which young trees are manipulated to grow and mature in desired patterns. Although this technique involves human intervention to build, the structures ensures that all positive aspects of trees like provide shade, filter the air, produce oxygen and absorb carbon dioxide. Thereby they contribute to a higher-quality of an individual's life and provides a resilient ecosystem. This vegetation will attract more insect species to the site. As the number of units expands, it will become an ecosystem of its own that can cater to a variety of species of plants and animals enhancing the biodiversity. The initial steel frame required for this method can be removed when the trees have matured. This lets us reuse the material for later construction.

This project is an ongoing process of change and growth involving the user and their experience within the space. Throughout the course of the project there would be a continuous engagement with the local communities to maximise benefits, and to gather indigenous knowledge.

After careful assessment, we have proposed native species to be grown in this area. This is twofold as it helps visitors embrace the natural surroundings and avoids introduction of invasive species that could cause other environmental distress. A critical eye is required in the process of maintaining the plants and soil. Lack of proper care can lead to undesired fungal and bacterial growth. In order to ensure soil fertility we are proposing crop rotation. It is important we have organic manure to enrich the plants and provide any additional nutrients to the soil. This gives us scope to have a proper waste management system in place by composting the natural waste produced in this area. The yield produced in the permaculture can be used during the burning man event and in other seasons. The crops can be sold or consumed by the people living in the surrounding communities.