

This land art generator is “Steps fall”, is a combination of staircases, rain water harvesting, vertical farming and shelter. This structure allows the flow of water through stairs when it rains and get stored at reservoir below the each landing intervals. The stairs allows people to interact in with the structure. The human kinetics is further channelized by kinetic tiles on steps. At center of structure a farm is provided for livestock, recreation and shelter for under storey inhabitants. The reservoirs below each landing is provided with turbine at top, rotating when water falls on it and thus generating electricity, railings on staircases can be used for display of colour, artwork, material and fabric. The reservoir has metal mesh embedded in it cut-out to generate water from air moisture.

The technologies used in this land art generator are-

- 1- Kinetic tiles
- 2- Hydro power generation from turbine
- 3- Water generation from air moisture through mesh.

list of activities supported by the structure –

- 1- Rain water harvesting
- 2- Hydro power generation
- 3- Water generation from air moisture
- 4- Kinetic power generation
- 5- Art work display
- 6- Vertical farming, recreational breathing space, etc.

Environmental impact

This land art generator not only encourages recreational activities, it provides live stock and breathing space for the people visiting. Generation of food stock will provide food and livelihood to people maintaining it. Structures providing food is important in crisis like corona pandemic. Farms also reduces carbon footprint and brings in the fresh air. The energy generating on site i.e. kinetic and hydropower is non-thermal in nature beneficial to environment. The energy generated can be battery-stored which minimizes the chances of energy wastage. The main structural material must be concrete block and local stone minimizing the embodied energy. The concrete structural look with greens also pleases the aestheticism.

Important Area and material

Steps would be constructed of local material available or else concrete blocks.

Farm plate would either have natural food or artificially driven ones.

Total area – 918.4 sqm

Clear head height area – 800.8 sqm

Ground coverage – 29.4 sqm

Farm area plate – 21m x 21m

Reservoir – 1400mm x 1400mm.

Energy

Kinetic tiles would be embedded on tiles; power generated by kinetic energy will be supplied to nearby habitat. Power generated by rain water would be stored in detachable lithium ion battery can be used later.

Steps should be made water resistant and should be renewed annually. Food stock generated by farm plate should be distributed amongst the nearby habitats, waste crops can be used as manure for farmland on which this land art generator is created.