

TAGI-LAGI



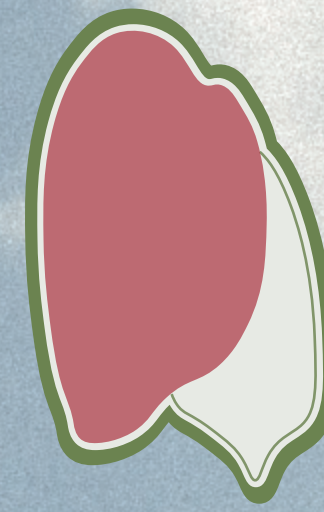
PLUGINS FOR CLEAN ENERGY

MORPHOGENESIS



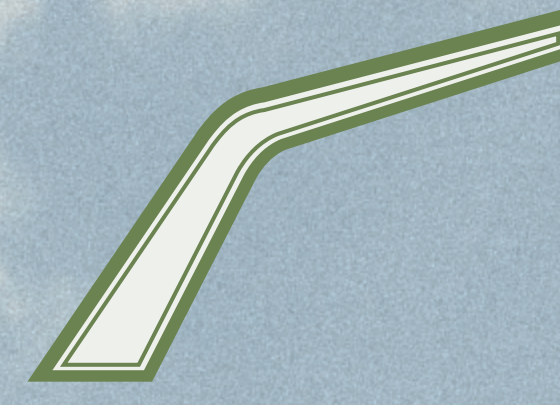
Tagimoucia flower

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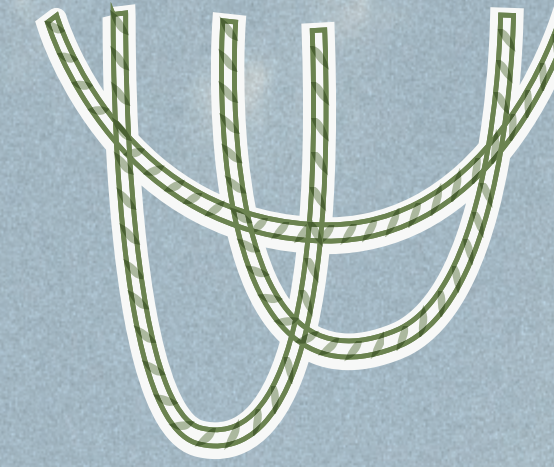
Modular petal

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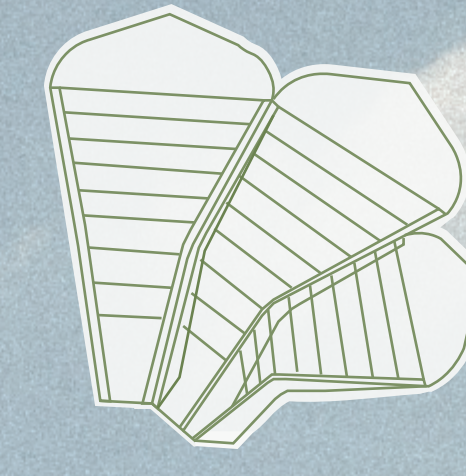
Main Stem

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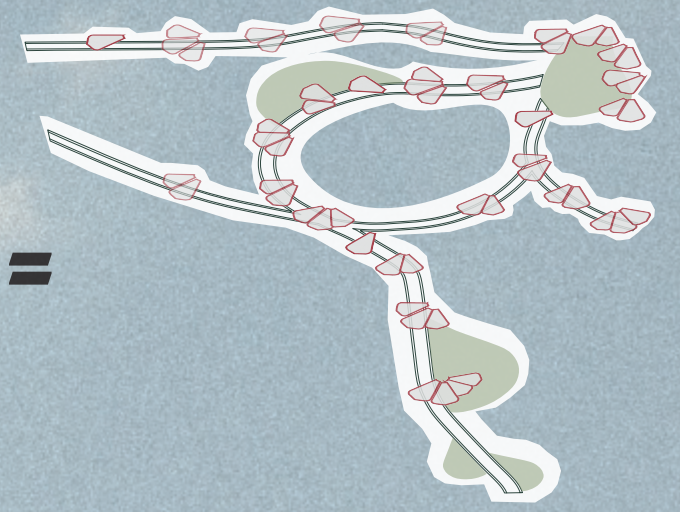
Flower Growth

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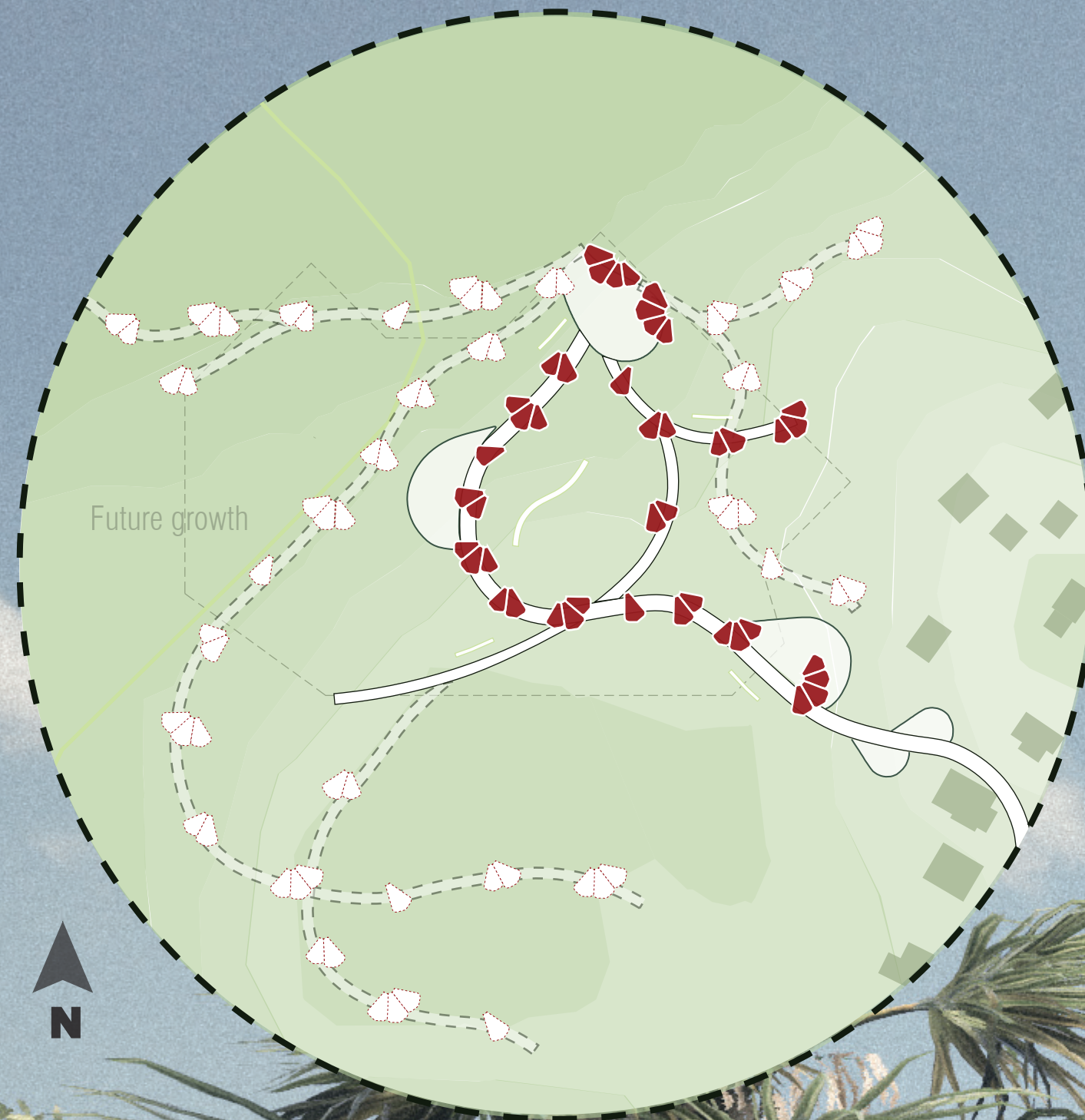


Unified structure

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TAGI LAGI:Plugin network



TAGI-LAGI is a PV micro-grid instalation inspired by the Tagimoucia, Fiji `s National flower endemic to this rare ecosystem. This project consists of 45 modules designed with a nature-inspired structure that mimics the shape of the flower, and harmoniously blends itself with the landscape and the Marou village.

Each plug is comprised of two main laminated timber structures that support a series of hollow pur-lings fastened via galvanized plates and bolts setting the roof that support 21 m² of thin bending monocrystalline solar panels, allowing ease of assembly. The design is aimed to optimize solar energy collection by ensuring that the PV surface is above ground and tilted towards the south reducing contact with the ground. It also incorporates a structural steel buttress that support hydroponic food production while providing stability against wind loads. The petal shape which maximizes rain water capture is connected to a water collection system underground, that reaches 3.7 m³ annully per plug.

Due to the clustering pattern of this flower, the TAGI-LAGI's plug system is highly scalable and adaptable to different environments, allowing expantion as needed. It produces clean energy that accounts for up to 40% of the local power demand, but also deliver shaded spaces for community gathering or cultural activities, depending on the number of modules in each cluster.

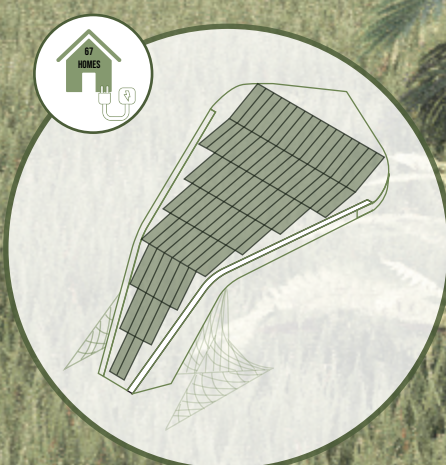
TAGI-LAGI is a self-sufficiency clean energy model that combines nature, cultural imaginaries, art and technology, ensuring a more resilient future for Fiji.

Lack of a stable power grid

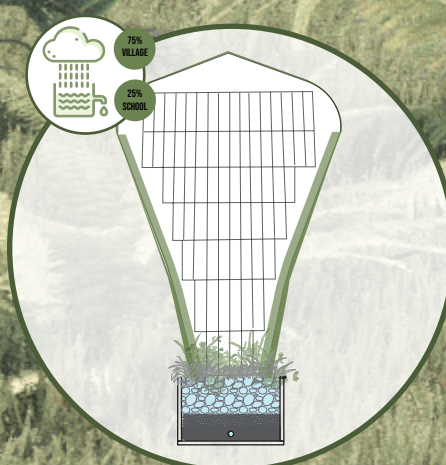
Lack of fresh water

Water shortage during the dry season.

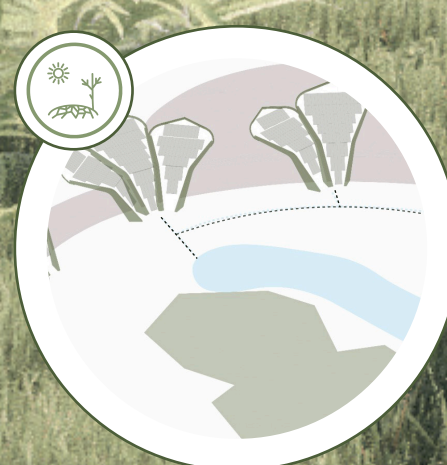
Food security concerns



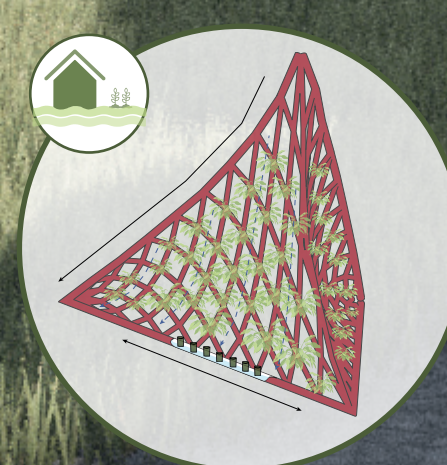
Mini PV power stable self-sufficient network



Water harvesting, plant filtering and runoff water managment



Rainwater storage network



Hydroponic agriculture systems

