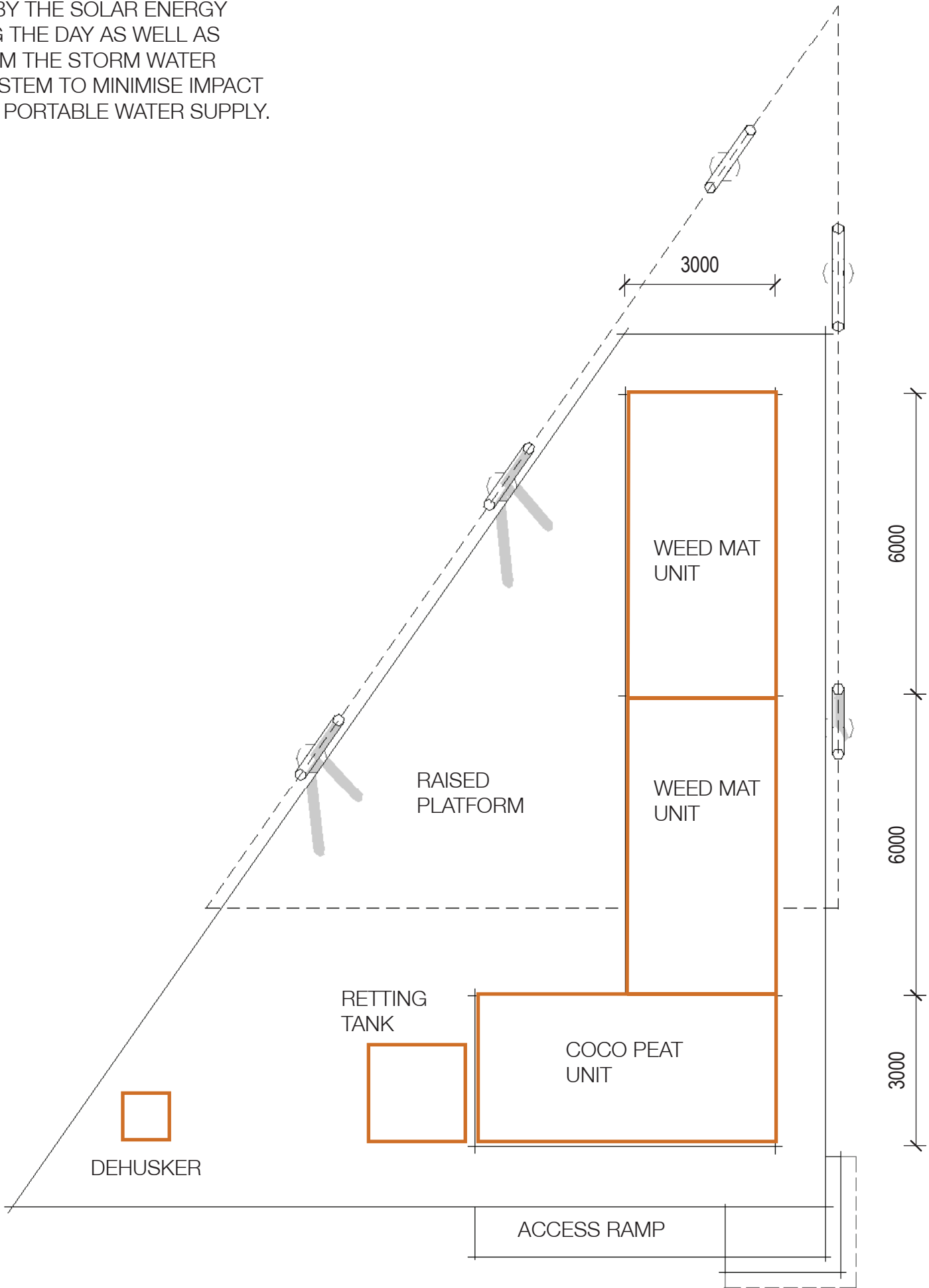


LOCAL ENTERPRISE WITH REGENERATIVE LAND USE

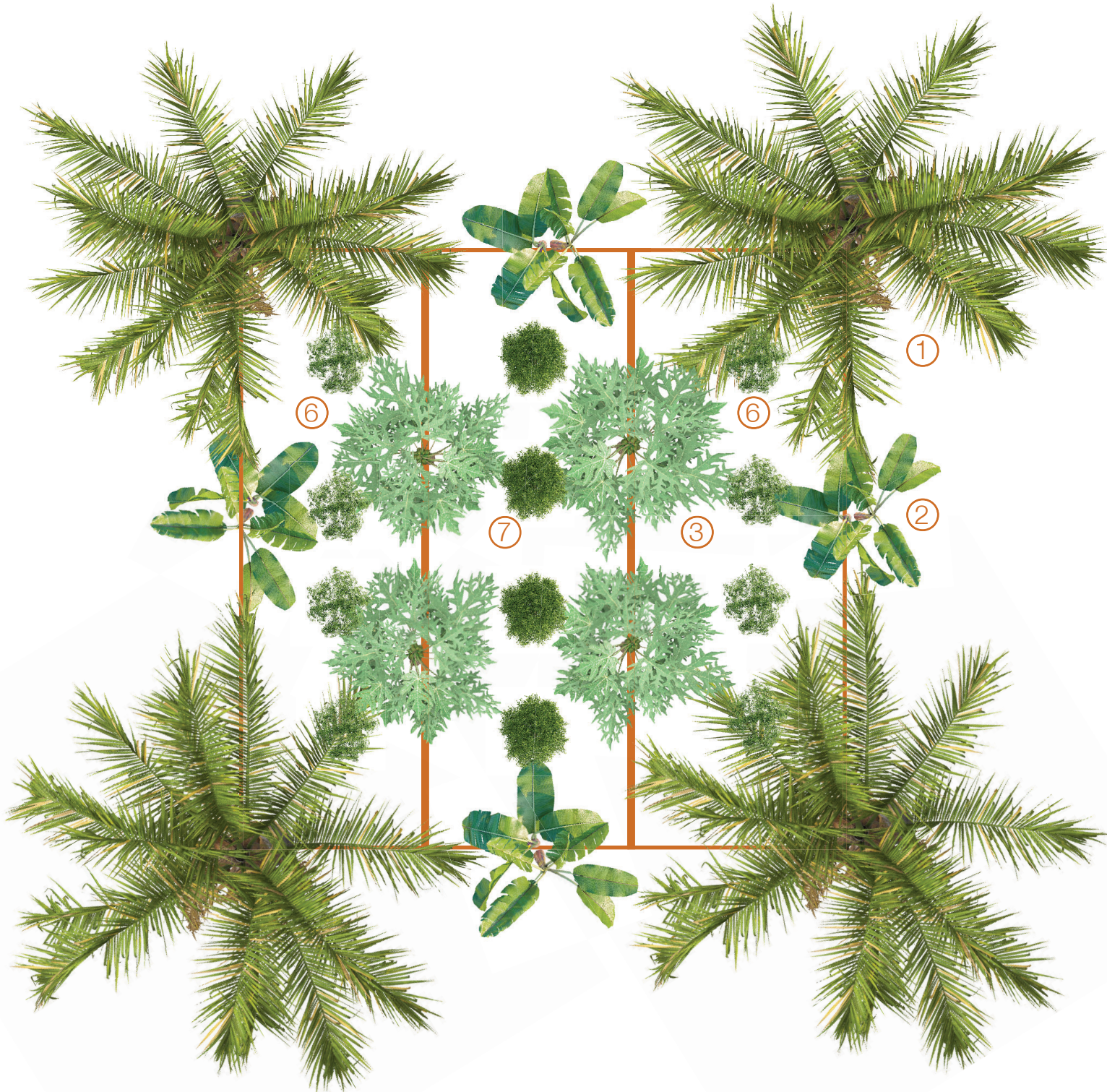
THE FIBRE HUB

FIBRE HUB PROVIDES THE CAPACITY TO PROCESS MATERIALS LIKE COCONUTS, HUSKS INTO BIOCHAR, AND GEOTEXTILES.

IT IS POWERED BY THE SOLAR ENERGY SYSTEM DURING THE DAY AS WELL AS THE WATER FROM THE STORM WATER COLLECTION SYSTEM TO MINIMISE IMPACT TO THE VILLAGE PORTABLE WATER SUPPLY.



THE 10X10M PLOT LAYOUT



THE DEMO PLOT

THE CROPS SELECTED FOR OUR 10x10 METRE "COCONUT-BASED STRATA INTERCROPPED HORTICULTURE DEMO PLOT" - COCONUT PALMS, PIGEON PEA, LEMONGRASS, BELE, CHILLIES, GINGER, TURMERIC, EGGPLANT, VETIVER GRASS, BANANA, AND PAPAYA - HAVE BEEN CAREFULLY CHOSEN TO DEMONSTRATE A REGENERATIVE, CLIMATE-RESILIENT, AND INCOME-GENERATING FARMING SYSTEM FOR FIJI.


TOGETHER, THESE CROPS FORM A MULTI-STRATA AGROECOLOGICAL SYSTEM: TALL COCONUTS, MID-STORY FRUIT TREES, AND PRODUCTIVE GROUND CROPS SUPPORTED BY EROSION CONTROL SPECIES. THE LAYOUT MAXIMISES SUNLIGHT USE, IMPROVES SOIL FERTILITY, CONSERVES WATER, AND ENHANCES BIODIVERSITY - ALL WHILE GENERATING FOOD, FIBRE, AND INCOME.

THIS APPROACH DIRECTLY ALIGNS WITH FIJI'S NATIONAL DEVELOPMENT PLAN VISION 2050, THE CLIMATE CHANGE ACT, AND REGENERATIVE PRINCIPLES, MAKING IT A SCALABLE MODEL FOR SUSTAINABLE COMMUNITY DEVELOPMENT.



THE STRATA


TOP LAYER



COCONUT

COCONUT PALMS FORM THE TALL CANOPY, STABILIZING THE SOIL, PRODUCING BIOMASS (HUSKS AND FRONDS) FOR FIBRE AND BIOCHAR, AND ANCHORING A CIRCULAR AGRICULTURAL SYSTEM.


MIDDLE LAYER



BANANA

BANANA AND PAPAYA ADD A MIDDLE LEVEL CANOPY LAYER, PROVIDING SHADE TO THE UNDER STORY CROPS, PRODUCING NUTRITIOUS FRUITS, AND CONTRIBUTING TO YEAR-ROUND FOOD AND INCOME DIVERSIFICATION.

LOWER LAYER



PIGEON PEAS


PIGEON PEA IS A NITROGEN-FIXING LEGUME THAT IMPROVES SOIL HEALTH, OFFERS WIND PROTECTION FOR DELICATE CROPS, AND PROVIDES FOOD.

GROUND LAYER



LEMONGRASS

LEMONGRASS IS DROUGHT-TOLERANT, REDUCES SOIL EROSION, AND OFFERS HIGH-VALUE OIL AND HERBAL PRODUCTS.



BELE

BELE (ABELMOSCHUS MANIHOT), A TRADITIONAL LEAFY VEGETABLE, STRENGTHENS NUTRITION SECURITY WHILE PRESERVING INDIGENOUS FOOD KNOWLEDGE.



HIGH VALUE CROPS

CHILLIES, GINGER, TURMERIC, AND EGGPLANT ARE HIGH-VALUE CASH CROPS SUITED TO FIJI'S CLIMATE, PROVIDING QUICK RETURNS THROUGH BOTH FRESH MARKETS AND VALUE-ADDED PROCESSING.

POTENTIAL OUTCOMES



COCOPEAT



COIR FIBRE & GEOTEXTILE



BIOCHAR & ACTIVATED CHARCOAL



COIR BASED BIOCOMPOSITE



VETIVER GRASS

VETIVER GRASS STRENGTHENS THE SYSTEM'S RESILIENCE BY CONTROLLING EROSION, STABILIZING SLOPES, AND NATURALLY FILTERING RUNOFF, SUPPORTING LAND DURABILITY.

SDG OPPORTUNITIES



COCONUT-BASED STRATA INTERCROPPED LAYERS

