



2012 Update: Digging in and Branching out, assessing the feasibility of capacity reinforcement and sustainable agroforestry garden expansion program in Ranobe, SW Madagascar



Previous page, giant dikon radishes, thriving in the soft sandy soil in Ranobe, just one example of new varieties of vegetables introduced at Ho Avy's half hectare demonstration garden. Pictured here, the state of the garden in March 2012 around the time of Katja's visit, note the ground covered in 'strangler' weeds and not much other productivity surrounding the house.



Papaya

Coco

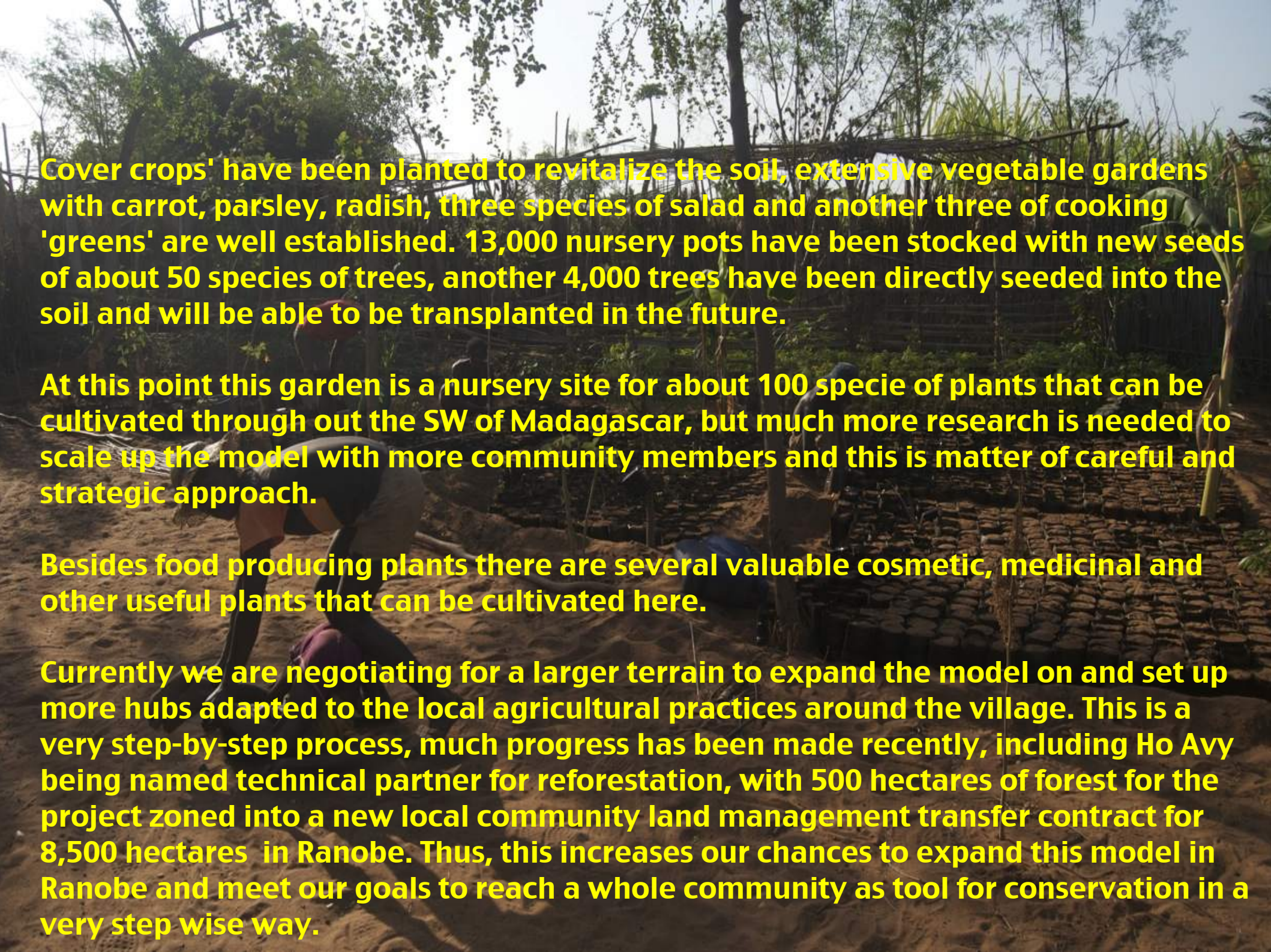
Banana

Nursery

Citron

Cover crops

Same view as previous slide, the entire area has been converted since having planted hundreds of small fruit trees including banana, citrus, coco, mango, cashew, avocado and other natives thriving (explanation continues on next slide).

A person wearing a red cap and a light-colored shirt is bent over, working in a nursery site. The ground is covered with many small, dark-colored pots, each containing a young plant. In the background, there are trees and a fence made of sticks. The scene is outdoors, with sunlight filtering through the trees.

Cover crops' have been planted to revitalize the soil, extensive vegetable gardens with carrot, parsley, radish, three species of salad and another three of cooking 'greens' are well established. 13,000 nursery pots have been stocked with new seeds of about 50 species of trees, another 4,000 trees have been directly seeded into the soil and will be able to be transplanted in the future.

At this point this garden is a nursery site for about 100 specie of plants that can be cultivated through out the SW of Madagascar, but much more research is needed to scale up the model with more community members and this is matter of careful and strategic approach.

Besides food producing plants there are several valuable cosmetic, medicinal and other useful plants that can be cultivated here.

Currently we are negotiating for a larger terrain to expand the model on and set up more hubs adapted to the local agricultural practices around the village. This is a very step-by-step process, much progress has been made recently, including Ho Avy being named technical partner for reforestation, with 500 hectares of forest for the project zoned into a new local community land management transfer contract for 8,500 hectares in Ranobe. Thus, this increases our chances to expand this model in Ranobe and meet our goals to reach a whole community as tool for conservation in a very step wise way.

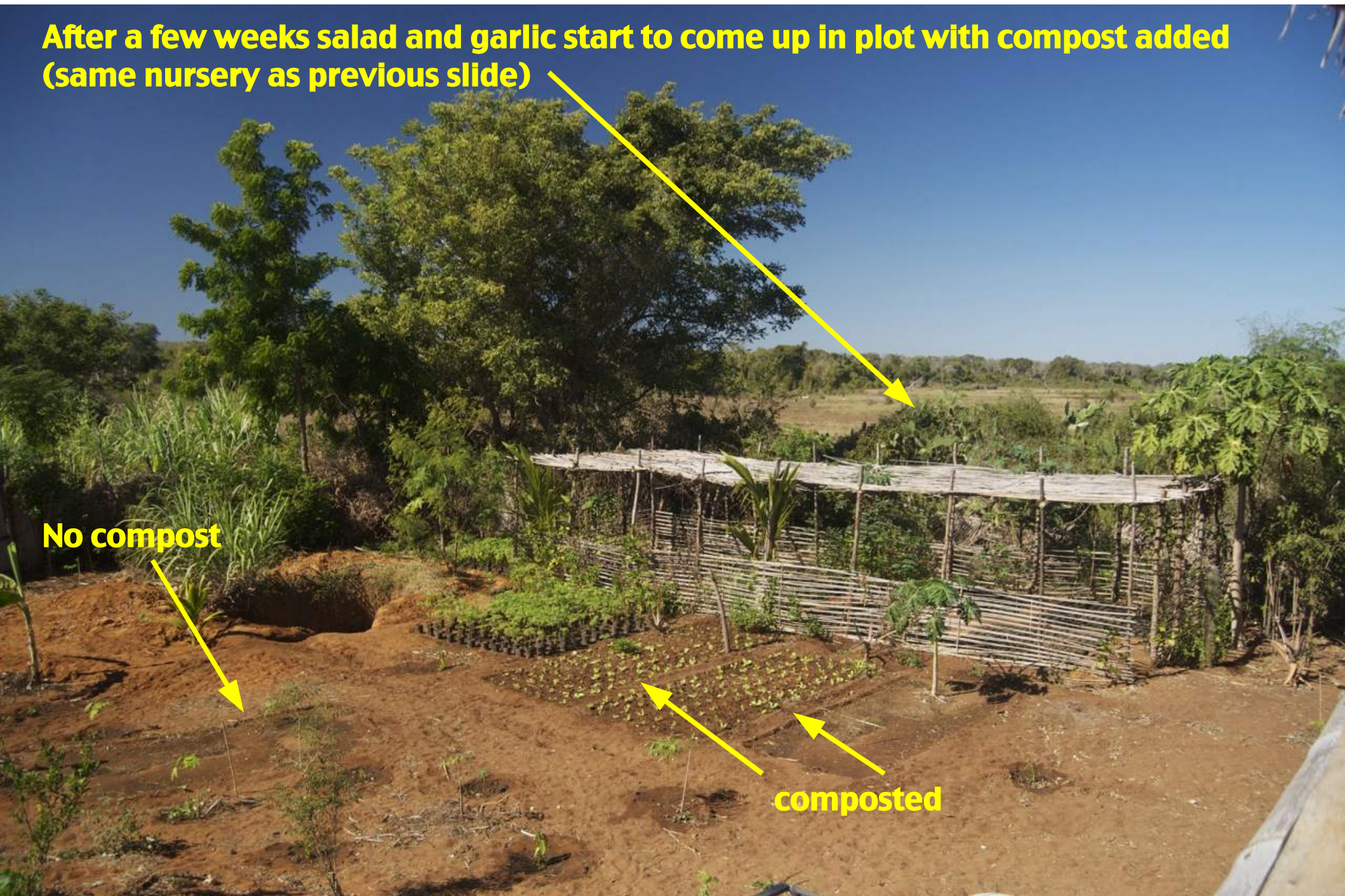
New garden composting system piloted, (notice nursery behind garden here)



**After a few weeks salad and garlic start to come up in plot with compost added
(same nursery as previous slide)**

No compost

composted



Full on difference, composted side has been harvested, non-composted side is still growing (same nursery as in previous two slides)



A photograph of a garden. In the foreground, a tall papaya tree with large, deeply lobed green leaves stands prominently. The ground is covered with a variety of green plants, including some with broad, rounded leaves and others with more slender, grass-like foliage. In the background, there is a dense line of trees and shrubs under a clear sky. The overall scene is a lush, green garden.

Papaya and native fruit trees

**Closeup of composted garden
growing under papaya and
next to aloe and other native
fruit trees**

Aloe




no-compost

with compost

On the ground comparison with Tony's composting system (right), garlic is double the size then with out (above), salad from the side with compost has already been harvested while the no-compost side is only about half grown



Compost has been built and is breaking down to expand composted garden idea seen in previous slides

A photograph of a garden area. On the right side, there is a large, dark pile of compost made of dry leaves and twigs. In the foreground, several aloe vera plants are planted in rows in the reddish-brown soil. To the left of the aloe plants, there are some other green plants and a small tree. In the background, there is a wooden trellis structure covered with a net, and more trees and foliage. The sky is clear and blue. Yellow arrows point from the text at the top to the compost pile and the aloe plants.

Diversifying our garden, here dozens of aloe plants that are harvested and sold in Toliara have been replanted in Ranobe, other native trees are planted near the aloe's, many easy to cultivate and with excellent medicinal qualities.



Vola & co. Expand their seed collection in Toliara where fruit trees like orange, avocado, java plum and other 'agroforestry' species like neem and acacia are prevalent and easy to collect (even by children). These species are not available in Ranobe, previously were not planted there until recently as a result of our seed collection project sponsored by NatureFund.



Seen here, orange seeds collected in Toliara directly seeded in 'nursery' beds in Ranobe



Another example of directly seeded trees (before).



(After) All seeds are second generation coming from plants planted by Ho Avy since 2007. Seen here around 4000 individual trees directly sown into the soil, these trees can easily be transplanted with no plastic bags necessary



Specialized seed collectors from Ranobe village bring seeds from the forest as part of the pilot seedbank project sponsored by NatureFund. Already this years efforts have surpassed previous years with number of participants and amount of seeds and species collected. Indicating this can be done with lots of participants and beneficiaries.



Toliara University Masters student Claude Marina documents and discusses seed collection efforts with yet another first time participant in the seed collection project which is part of Claude's masters thesis

Lots of interest from many new participants for the seed collection project happening currently in Ranobe because of NatureFund and Ho Avy's collaborative efforts to launch the project



Results have been outstanding over 50 species of trees collected from the forest including these extremely rare epiphytic orchid seeds





Seeds are planted as soon as possible after collection to maximize germination possibility. Seen here planting is some students from the University of Antananarivo and the Roots and Shoots Organization who are interested in helping with longer term environmental education program in Ranobe



Cashews growing better than ever in carefully managed nurseries and several have established as bigger trees in the surrounding garden. These are among the only cashew trees grown anywhere in the SW of Madagascar

Another look at our replenished nurseries, around 4000 seedlings is in this image, and we have four more nurseries with similar capacity. Only two men are needed to manage this many trees, indicating that if it is possible to scale up this model many tens of thousands of trees could be cultivated by just a handful of people





In support of scaling up Ho Avy's model, representatives from a national agricultural development fund supported by the European Union are in awe of Ho Avy pilot work. Aware of the difficulties in implementing such a project in Ranobe Ho Avy has been encouraged to apply in November as a technical partner, to scaling up our model with other villagers in Ranobe.



Lake

This is the land we are looking to expand the model on, cleared, unused by the locals and ideal with the lake and baobab near by. Initially we have been given the go-ahead to work here but knowing how things work in SW Madagascar buying some 10 hectares officially from the village will be the clearest way to being able to freely expand, research and develop the model. With out clear land tenure there is a high risk of the village 'not seeing a benifit' to Ho Avy doing the model on this land, buying the land will completely reverse that perspective especially when we eventually scale up the model around the village.