



New Protected Area of Sahafina

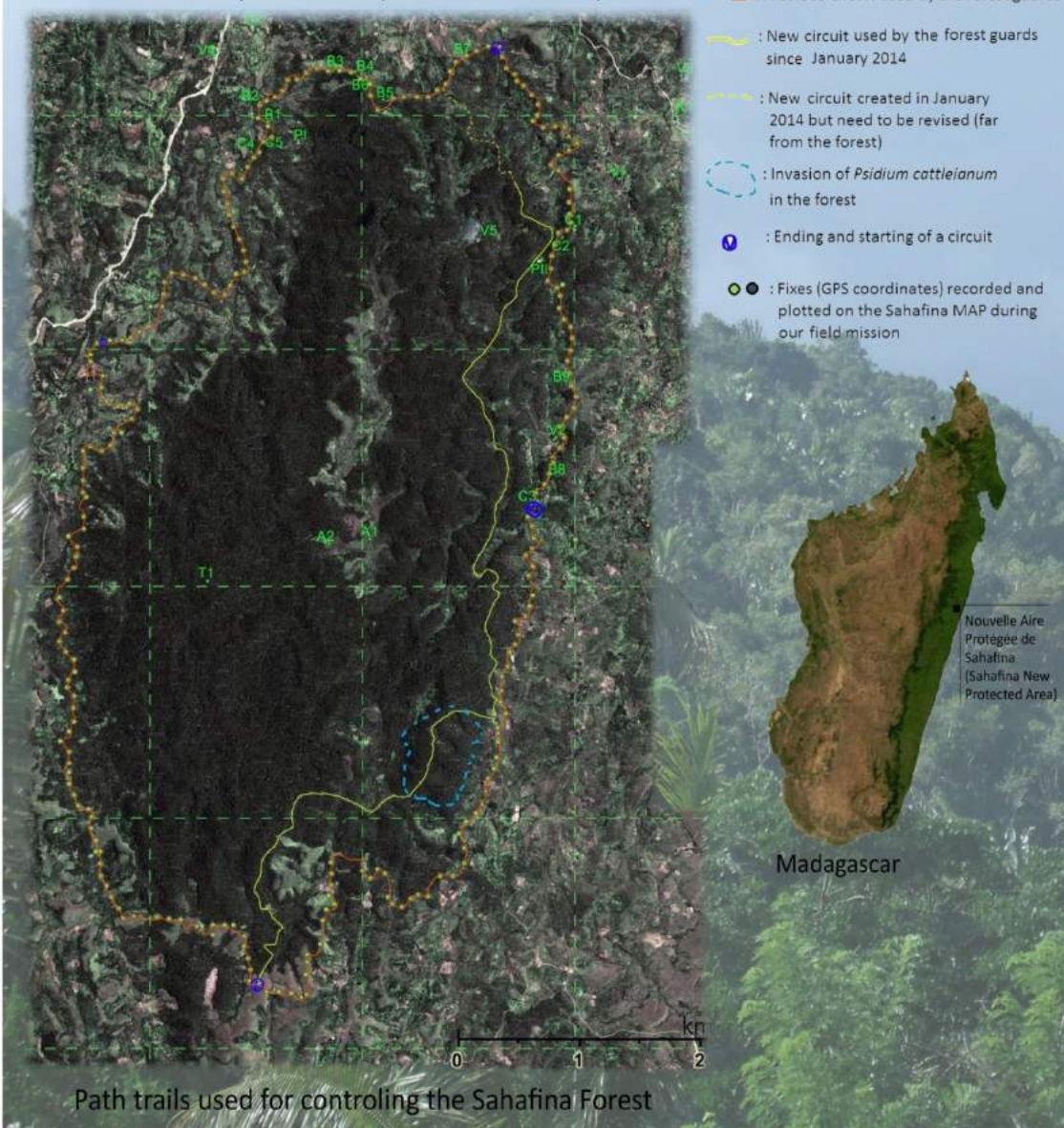
Dr Radosoa A. ANDRIANAIVOARIVELO
Zo N. M. ANDRIANAVONJIHASINA
Tovoniraina Z. ANDRIANTSALAMA

Biodiversity Conservation Madagascar



BIO CULTURE
CAREING FOR LIFE

Satellite map of Sahafina (District of Brickville)



Sahafina New Protected Area: 2400Ha;
 Managed by BCM,
 2003 - Present



Local Manager: Venance Razafintsihoarana (2003-2007)
 then ZO N. M. Andrianavonjhasina (2007-present)

Funded by Bioculture Ltd. (Mauritius)



Staff in Sahafina



**1 Regional
Manager,**

**16 forest patrol
officers,**

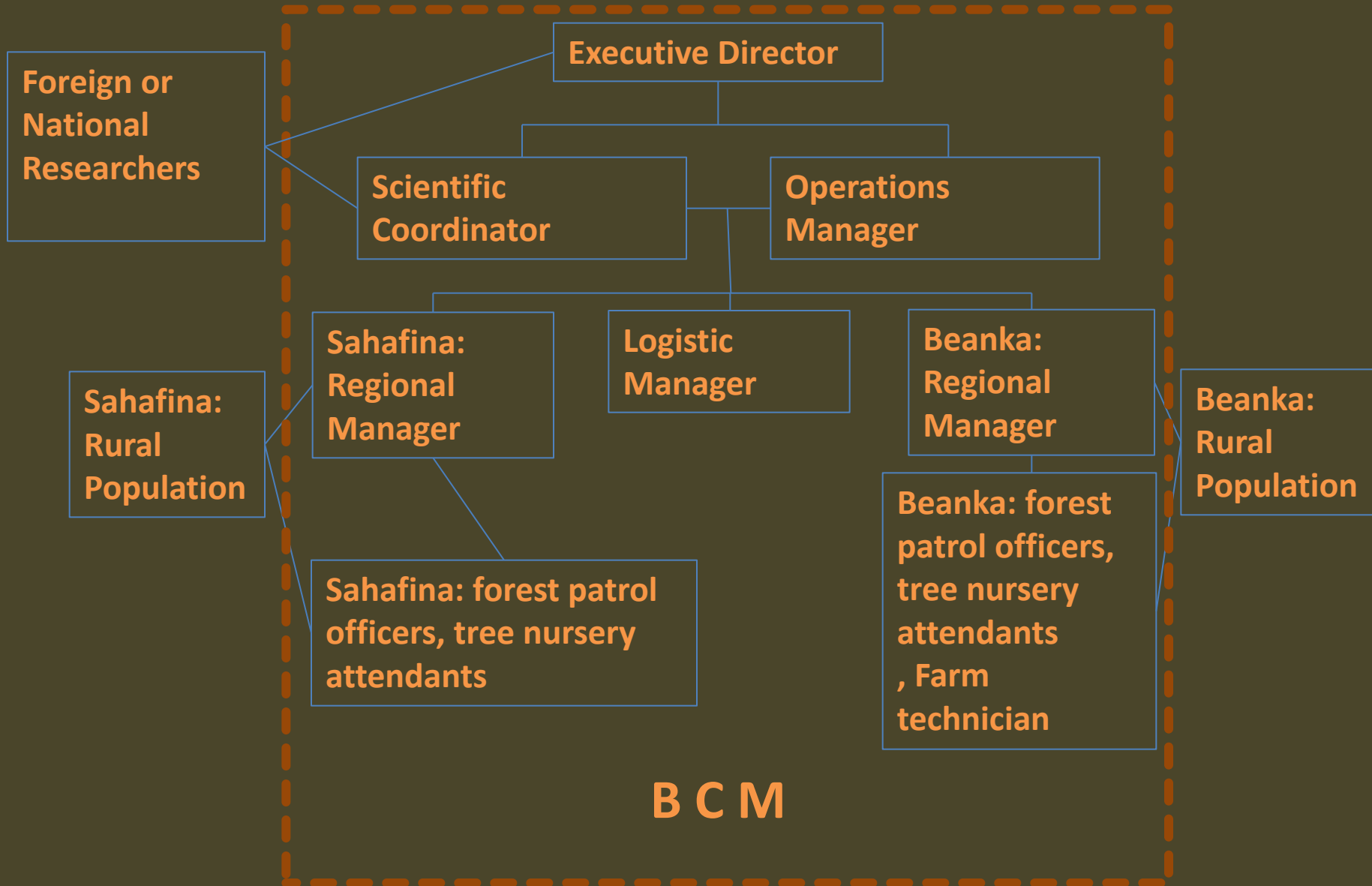
**4 tree nursery
attendants**

**Concerned
Municipalities**

**- Anivorano Est
(4 villages);**

**- Mahatsara
(3 villages);**

Organigramme



Definitive Protection Status

Definitifs : Decree 2015-728

- Vth category according to the IUCN: Harmonious Protected Landscape;
- Protected area managed primarily for the purpose of ensuring the conservation of landscapes, seascapes and for recreation, and the Harmonious Man / Nature interactions help maintaining biodiversity.

Biological interest of Sahafina

- **Primary forest: 65%**
- **Secondary forest: 35%**
- **5 plant species endemic to the region**
 - Physena madagascariensis* (Physenaceae)
 - Schizolaena cauliflora* (Sarcolaenaceae)
 - Schizolaena sp* (Sarcolaenaceae)
 - Sarcolaena multiflora* (Sarcolaenaceae)
 - Rhodolaena altivola* (Sarcolaenaceae)
- **One lemur species endemic to Sahafina**
 - Microcebus gerpi* (Tsidika ou Kely be bonga)

New species

Sahafina:

- *Microcebus gerpi* (Radespiel *et al.*, 2011),
- 1 new Genus of Rubiaceae, (MBG, 2006)
- 1 new Genus of Clerodendron, 1 new Genus of Celastraceae; (MBG , 2006)
- 31 endemic plant to the region; (MBG , 2006)

New Lemur species in Sahafina



Microcebus gerpi

CONSERVATION AND THREATS





Illicit production of coals: Native woods cut for making coals

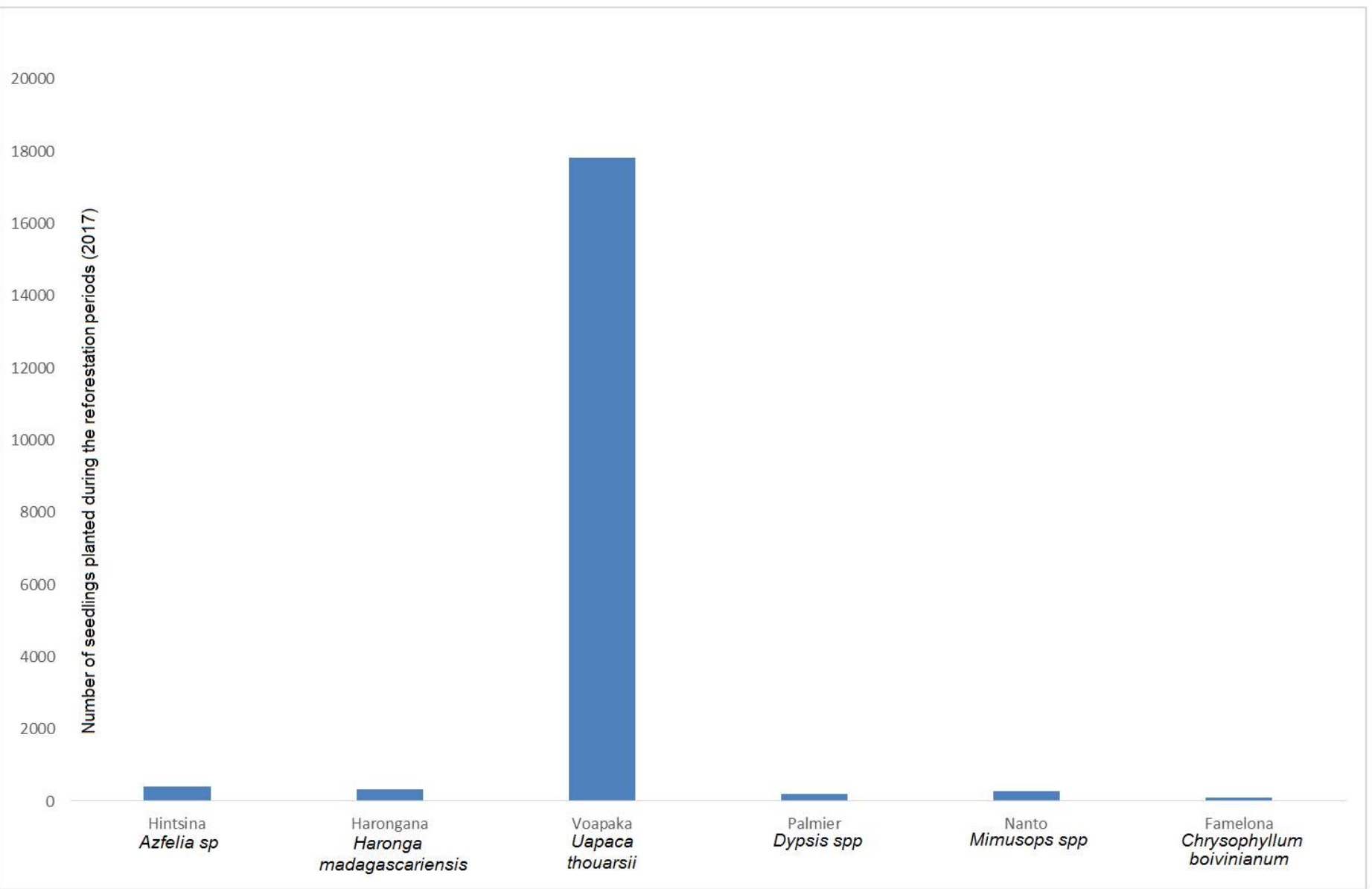


Traditional pit for coal production found in the south-eastern part of Sahafina

ECOLOGICAL RESTAURATION



The seedlings produced in the three tree nurseries



Planted seedlines

- Planted trees: 19 083 (95,40% of our Goal)
- Reforested Surface : 3,4 ha,
- The most planted species : 17 813 (Voapaka, 93,34%)
reason: diet of lemurs
- Contribution of 16 Forest patrol officers , 4 tree nursery attendants, 30 community members (from three vilages): April to mid-July,
- Contribution of 3 school institutions, during the Environment Day, involving 110 children: 1500 trees planted, (June 2017),







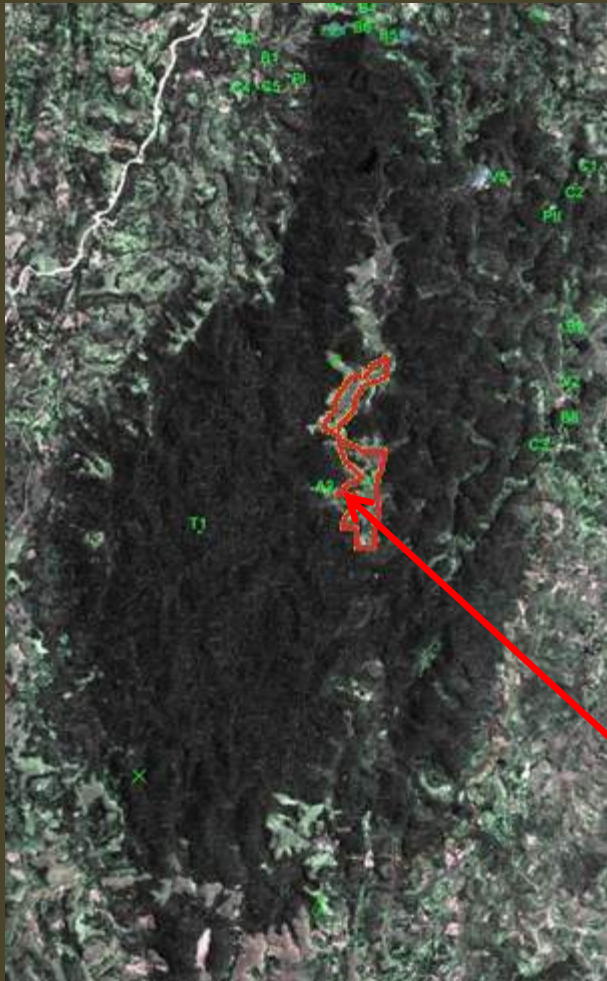




CONTROLLING THE INVASIVE PLANTS



Control and eradication of *Niaouli* in Ampasimposty



Site with *Niaouli* in Ampasimpotsy

Psidium cattleianum

- This plant is such an invasive and found in all habitats;
- Guava trees pose a threat to all components of Sahafina;
- Capable of compromising the spatial distribution of biodiversity and changing the structure of plant and animal communities;
- Occupied area estimated between 40 to 60 ha;
- Dissemination by potamchers (lambo) and other frugivorous animals



Improving biodiversity knowledge



By Madagascar Biodiversity Partnership

- use of mitochondrial and nuclear DNA sequence data combined with Geographic Information Systems (GIS);
- Target species: *Cherogaleus*, *Allocebus*, *Avahi*, *Daubentonia*



Developing Local Communities' Income Generating Activities



2012-10-19

Target communities and promoter



Families in Ambalatenina receiving vegetable seeds (left) and BCM employees monitoring the farmland of BCM's local partners



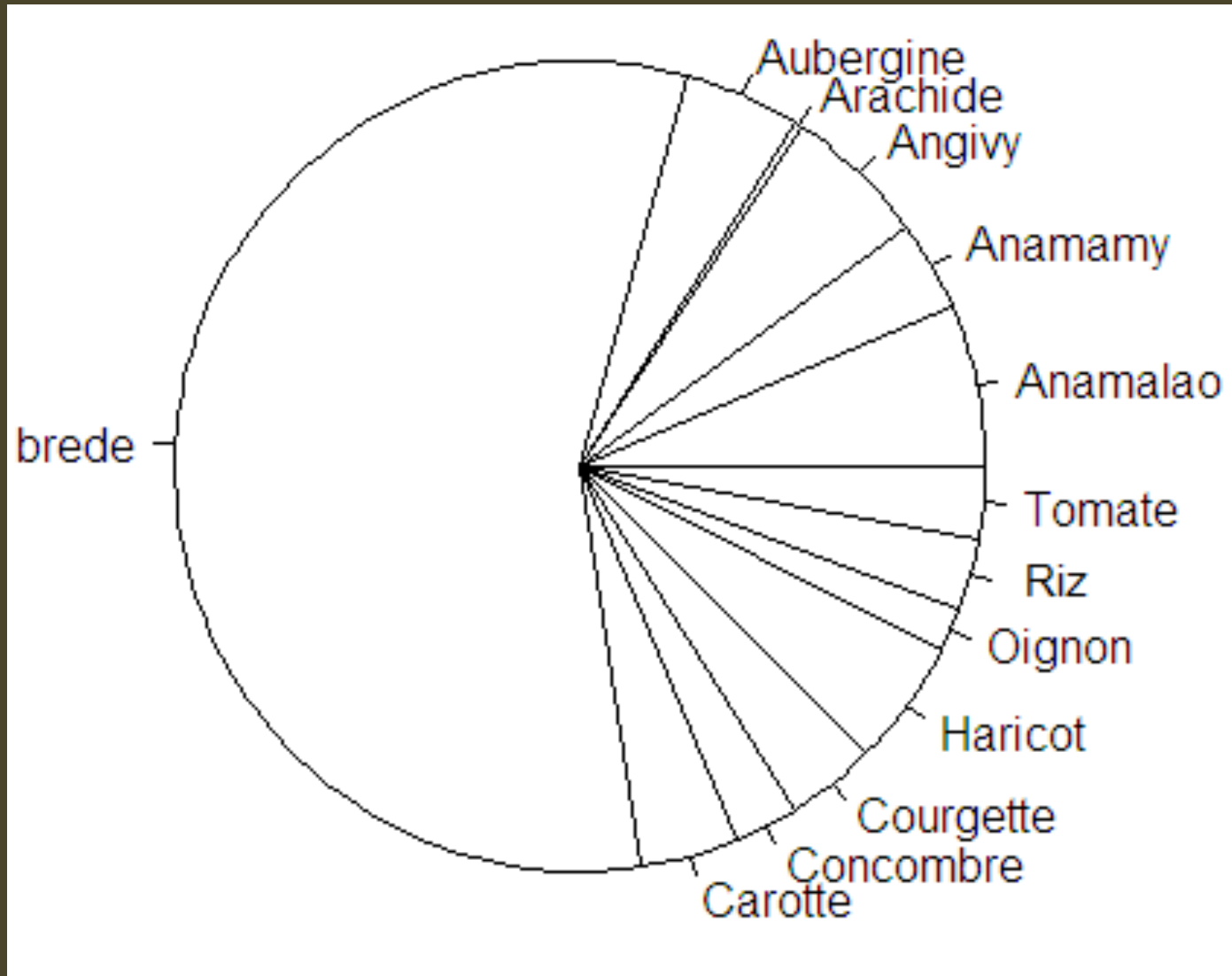
Agricultural technician employed by BCM (Tovoniaina Z. Andriatsalama)

Seeds distributed to households with whom BCM has worked since 2013

Variété de plantes	Plant Variety	Unity	2013-2015		Total distributed (N of Households)		
			Seed quantity	N Households involved	2013	2014	2015
Anamalao	paracress	g	180	18	20 (2)	(-)	160 (16)
Anamamy	black nightshade	N graines	36000	10	(-)	(-)	3600 (10)
Angivy	small eggplant	g	190	16	80 (5)	(-)	110 (11)
Arachide	peanut	kg	1	1	(-)	1 (1)	(-)
Aubergine	eggplant	g	980	13	380 (3)	60 (1)	540 (9)
brede	green leafy vegetable	paquet (2500 graines ou 16 g)	580	158	96 (34)	78 (28)	406 (96)
Carotte	carrot	Pack (4000 seeds)	13	11	(-)	6 (4)	7 (7)
Concombre	cucumber	Pack (50 seeds)	7	7	3 (3)	3 (3)	1 (1)
Courgette	squash	Pack (60 seeds)	10	10	3 (3)	1 (1)	6 (6)
Haricot	bean	kg	49	14	49 (14)	(-)	(-)
Oignon	onion	Pack	5	5	3 (3)	2 (2)	(-)
Rice	rice	kg	21.4	8	8.7 (5)	13 (3)	(-)
Tomate	tomatoes	Pack (2 g)	14	8	1 (1)	1 (1)	12 (6)

in Sahafina from 2013 to 2015

Pie-chart showing the seeds distributed to the community

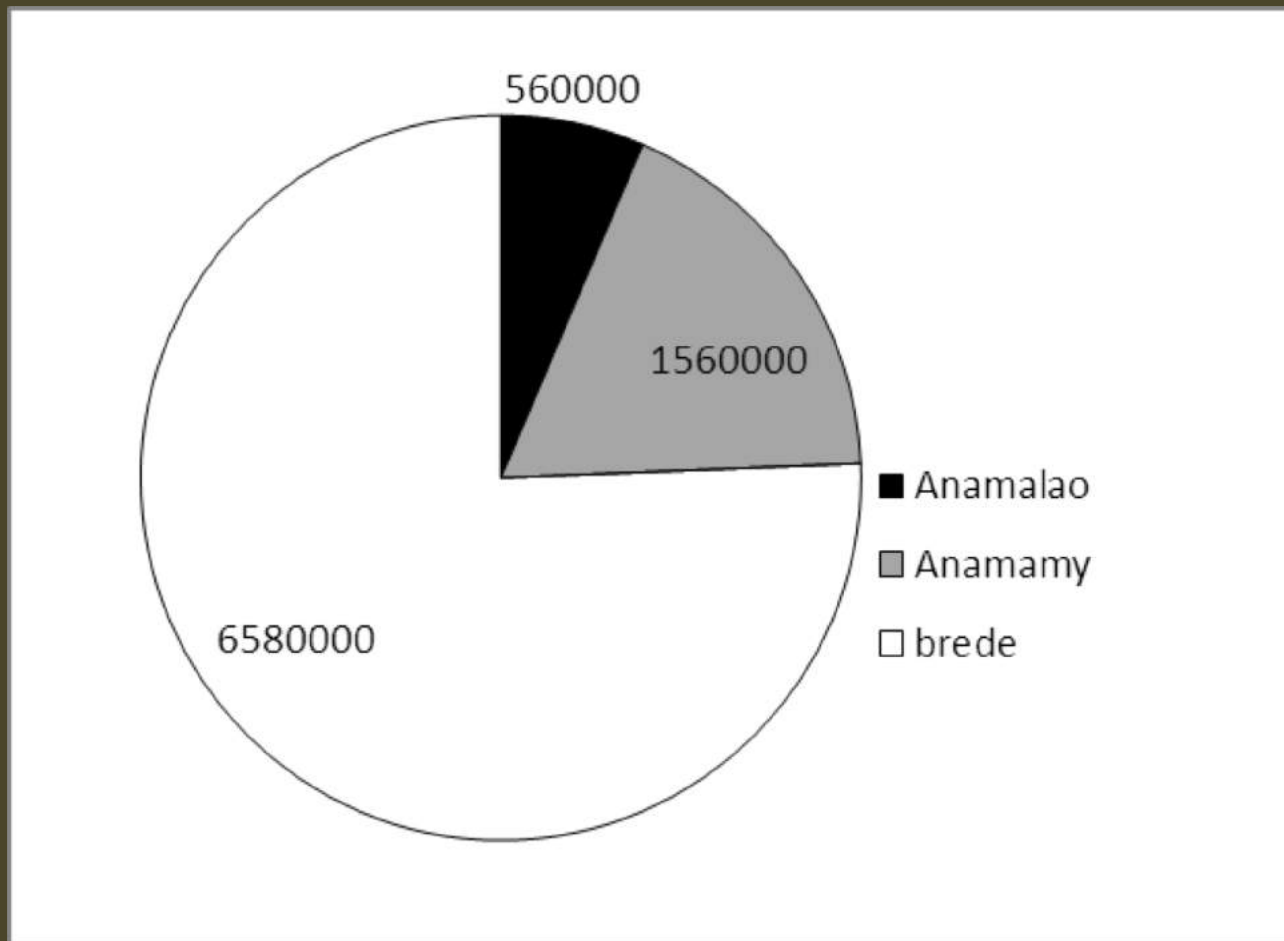


Results on the practice of the improved agricultural system

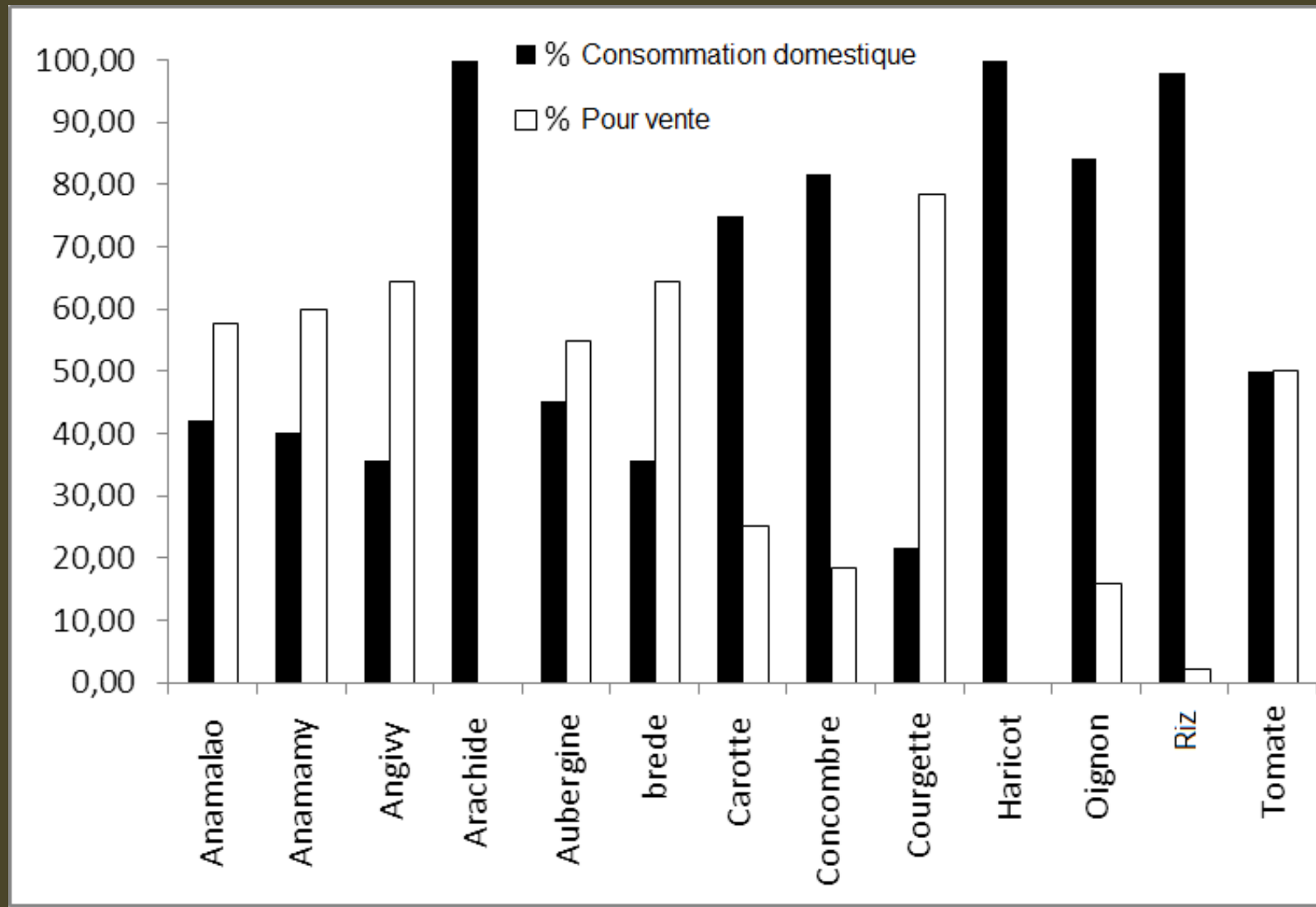
			2013-2015		Total Harvests (N Households involved)		
Variété de plante	Plant Variety	Unity	Total harvest	Households involved	2013	2014	2015
Anamalao	paracress	Straw bale (5-10g)	20040	18	540 (2)	(-)	1900 (16)
Anamamy	black nightshade	Straw bale (250-500g)	13000	10	(-)	(-)	13000 (10)
Angivy	small eggplant	Measuring cup (28 cl)	760	16	250 (5)	(-)	510 (11)
Arachide	peanut	kg	15	1	(-)	15 (1)	(-)
Aubergine	eggplant	kg	115	13	25 (3)	50 (1)	40 (9)
brede	green leafy vegetable	Straw bale	128535	158	35985 (34)	37950 (28)	54600 (96)
Carotte	carrot	kg	80	11	(-)	20 (4)	60 (7)
Concombre	cucumber	kg	218	7	168 (3)	40 (3)	10 (1)
Courgette	squash	kg	65	10	30 (3)	20 (1)	15 (6)
Haricot	bean	kg	52	14	52 (14)	(-)	(-)
Oignon	onion	kg	19	5	11 (3)	8 (2)	(-)
Riz	rice	kg	3690	8	2140 (5)	1550 (3)	(-)
Tomate	tomatoes	kg	18	8	3 (1)	0 (1)	15 (6)

Annual crop summary for each type of vegetable

Estimates of the minimum income generated (Ariary) through the three most important potages in terms of income in 2015 for 28 households surveyed



Volume in% of crops for domestic consumption and sales from 2013 to 2015.



Sahafina













