The Madagascar Water Project
Phase IX Program
August 2021

The Madagascar Water Project currently has 109 producing wells providing clean water to 75,000 people living along a 200 mile stretch of the east coast of Madagascar. The MWP is now expanding into the Mananjary area, while also improving well density and providing well maintenance support in our core areas to the north. The Project used the 2020 slowdown to strengthen relationships with Regional and National Government Officials, improve our supply chain, and empower the Malagasy workforce towards more autonomy. We also evaluated well requests and developed an exceptionally long list of new opportunities.

If we reach funding goals, the 2021 Program will consist of 25 – 30 new wells, the maintenance of all existing wells and the upgrade of several dozen pumps where wooden tables will be replaced with cast iron pedestals. The MWP has committed to the Ministry of WASH to drill a minimum of 10 new wells in the Region of Antsinanana.

The Program is divided into several parts, which are listed below and summarized in this document.

1. Well Maintenance and redrills of failed wells. Maintenance is a year-round operation, but wells are drilled only during the dry season. (3 wells)
2. Drill wells in new villages north of our core area from Vavony to Toamasina. (6 wells)
3. Drill wells in new villages near Masomeloka. (up to 6 wells)
4. Drill wells in new villages in the Nosy Varika area, which were identified in 2019 and will require the use of deeper drilling and completion technology. (3 wells)
5. New wells south of Ambahy / Nosy Varika, which have been assessed by aerial photos and not easily accessible from Mananjary. (3 wells)
6. New wells in the Mananjary area. (7+ wells)

The MWP is also evaluating requests from the Ministry and other NGOs and may act on those if possible

1-Well Maintenance and Re-drills:

Wells fail for a number of different reasons, three of which are represented in the wells below.

1) MWP48 Manonilaza (broken)
2) MWP69 Salehy (screen plugged)
3) MWP54 Masomeloka (burned)

The Madagascar Water Project distinguishes itself from other water NGOs by maintaining a relationship with the villages in which we work. While most charities leave when the drilling is finished, the MWP provides technical support, spare parts, periodic checks & maintenance, and well replacement if needed. Of the 129 wells drilled during the last six years, 85% are still working today.

2-New Wells from Vavony north to Toamasina:

This area is a northerly extension of our core work area. The villages are located between the Pangalana Channel and the coast of the Indian Ocean. They are largely inaccessible, with access to all but one limited to the Pangalana Channel.

Our assessment is based on Google Earth images and interviews with residents. Their current water supplies have not been assessed, but the need for clean water can be assumed with some confidence.

The targeted villages are shown in Figure 1 below:

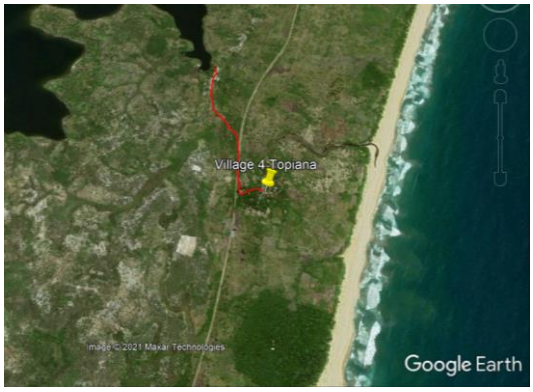
	Estimated		Location	
Village	**Houses**	**Population**	**Lat.**	**Long.**
Ampatomizina	50	300	18°41'45.47"S	49°12'25.29"E
Andranokoditra	100	600	18°35'50.21"S	49°14'52.37"E
Tampina	50	300	18°31'14.36"S	49°16'49.62"E
Topiana	25	150	18°28'19.71"S	49°17'42.30"E
Nosy Vila	35	210	18°24'17.67"S	49°19'19.62"E
Village by Melville	200	1200	18°16'13.21"S	49°20'31.10"E

Ampatomizina

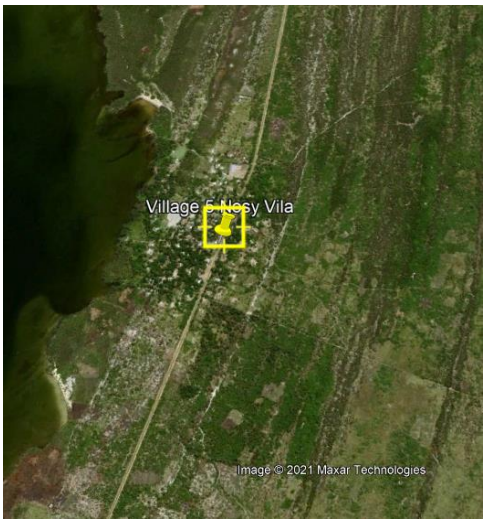
Andranokoditra

Tampina

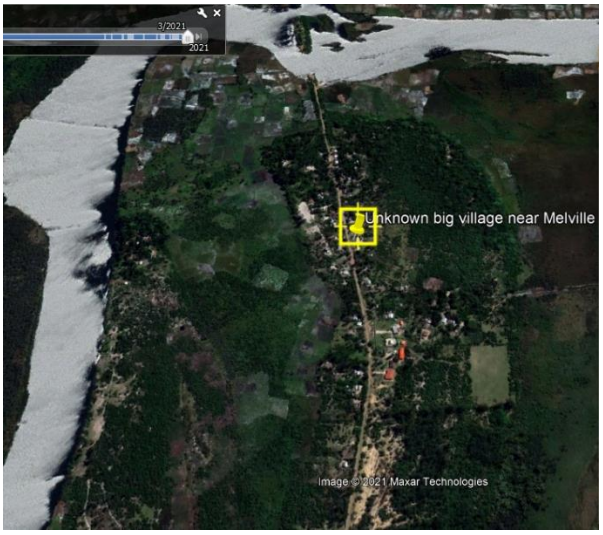
Topiana



Nosy Vila



Village Near Melville



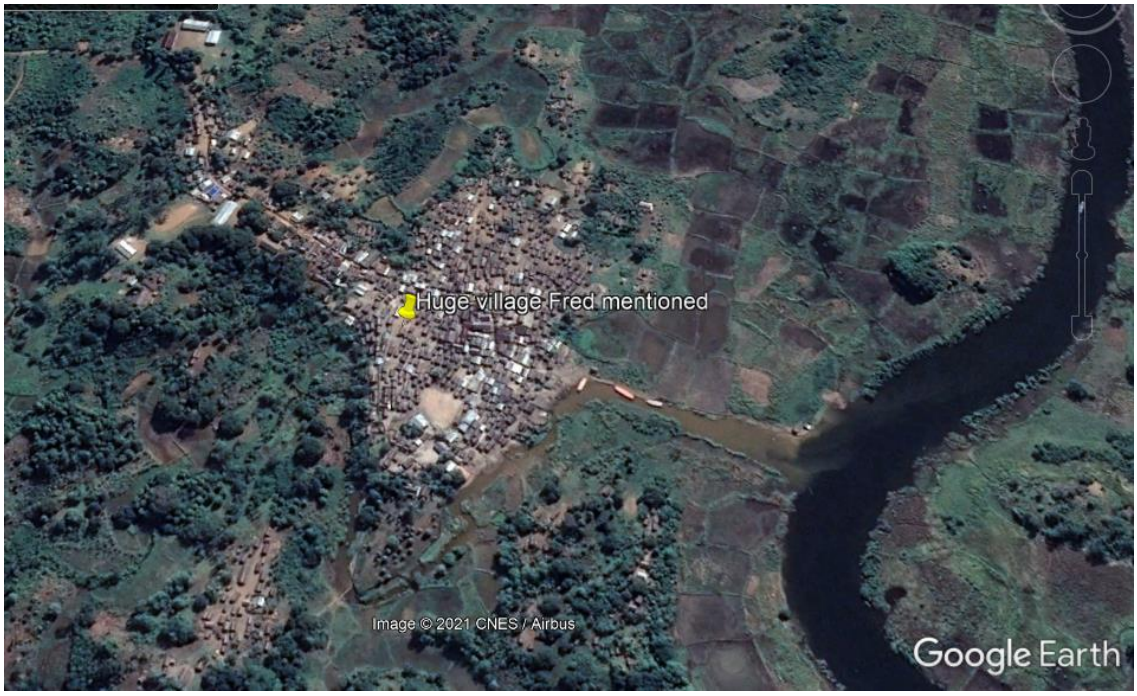
3-New Wells in Villages Near Masomeloka

We came across several villages in need of clean water while working in the Masomeloka area. All are located inland to the Pangalana Channel and have higher geologic risks than areas adjacent to the coast. They lie on basement or thin layers of sedimentary rock which may not provide a producible aquifer. Water can be produced from a number of different geologic features, including fractures, so we will give it our best shot.

The large village will be a primary target and the smaller villages west of Masomeloka will be assessed on a case-by-case basis.

	Estimated		Location	
Village	**Houses**	**Population**	**Lat.**	**Long.**
Large Village	250	1500	18°41'45.47"S	49°12'25.29"E
Village 1	25	150	20°15'44.87"S	48°35'33.44"E
Village 2	25	150	20°15'33.39"S	48°35'0.30"E
Village 3	25	150	20°15'7.66"S	48°34'19.54"E
Village 4	25	150	20°14'43.11"S	48°33'58.35"E
Village 5	25	150	20°14'6.21"S	48°31'41.64"E

Large Village Near Ampanalana



This is a high-risk / high reward objective. The village has no wells, probably for good reasons. Finding an aquifer will be a big challenge.

Small Unnamed Villages Up-River of Masomeloka

Village 1

Village 2

Village 3

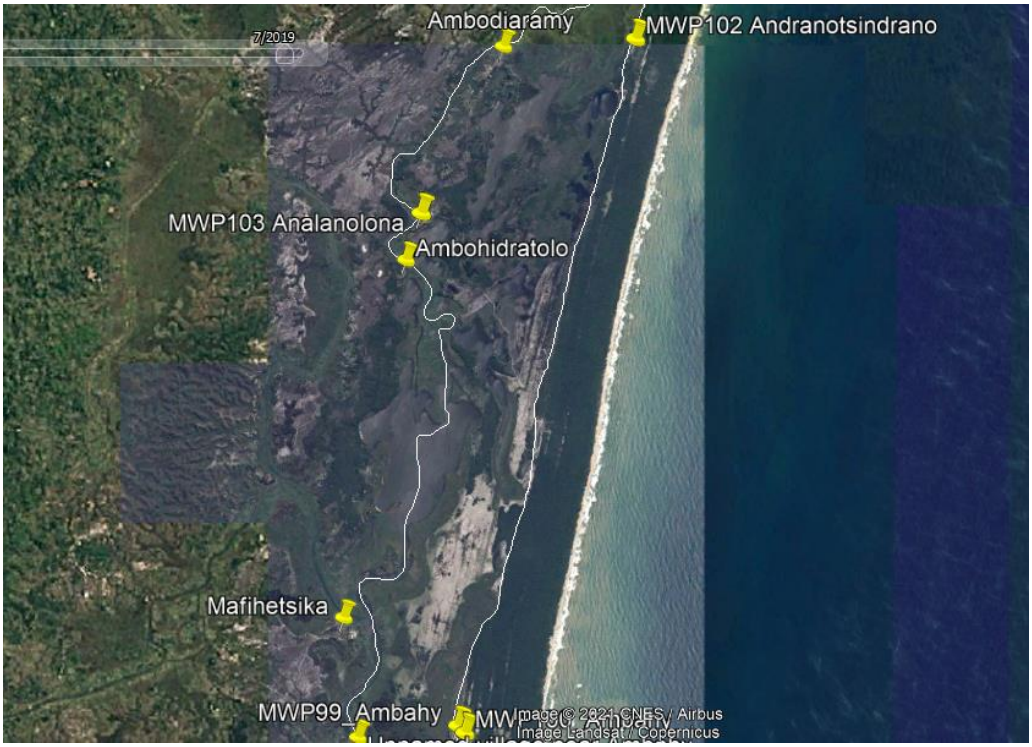
Village 4

4-Deeper Wells Near Nosy Varika

This part of the program is a continuation of our work in the area started in 2019. We came across several villages that had no year-round sources of clean water. The water table was deep and the rare private wells that existed went dry seasonally. The few bucket wells that existed were in low spots outside of town.

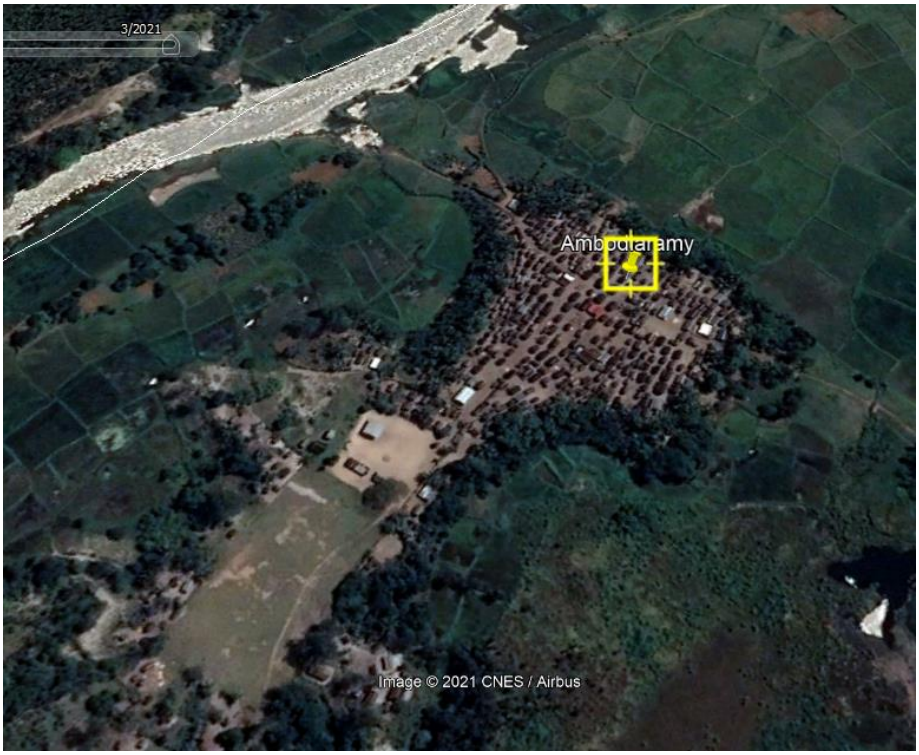
We plan to drill deeper wells inside the villages and use solar powered downhole pumps flowing into a container to produce them. This will be a new step for the MWP, using existing technology, which will expand our ability to bring clean water to many new villages. Our assessments of the villages show the people are very worthy beneficiaries and will keep their wells safe and well-maintained for the long-term.

Villages Along River, South of Nosy Varika



	Estimated		Location	
Village	**Houses**	**Population**	**Lat.**	**Long.**
Ambodiaramy	175	1050	20° 40' 42.62"S	48° 29' 1.23"E
Ambohidratolo	75	450	20° 42' 28.59"S	48° 28' 9.49"E
Mafihetsika	200	1200	20° 45' 26.07"S	48° 27' 36.41"E

Ambodiaramy:



Currently has two bucket wells as only source of water

Ambohidratolo

Mafihetsika

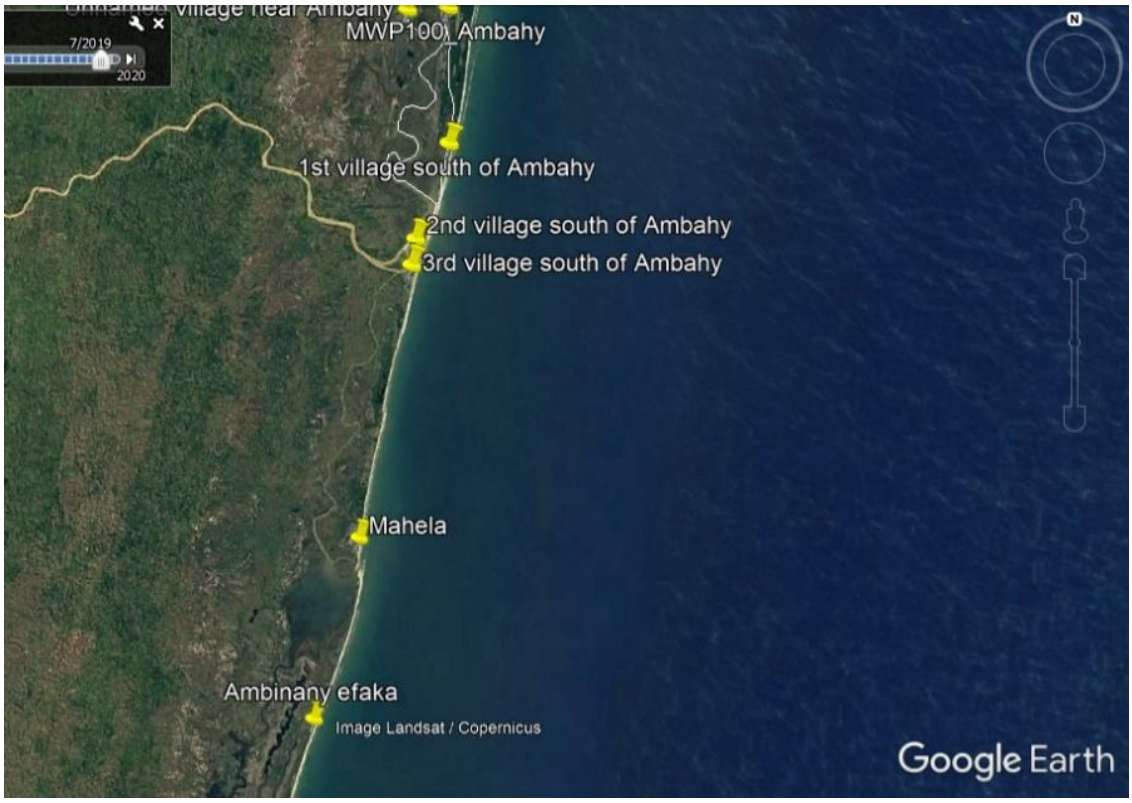
5-New Wells South of Ambahy / Nosy Varika

Last year the Madagascar Water Project extended our work to the south, to the village of Mananjary. The road to Mananjary is through the Madagascar highlands, completely different than the coastal routes we have used in the past. This area is in the gap, nearly a "no man's land", between our work in the north and the areas accessible through Mananjary.

A preliminary assessment was made in part using our regional assessment of the Mananjary area. This area is well-suited for the Madagascar Water Project. The local need for clean water is high and the geology is ideal for the technology we employ.

	Estimated		Location	
Village	**Houses**	**Population**	**Lat.**	**Long.**
First Village	60	360	20° 49' 26.48" S	48° 28' 41.36" E
Second Village	150	900	20° 51' 34.43" S	48° 27' 53.71" E
Third Village	400+	2400+	20° 52' 9.05" S	48° 27' 47.97" E

The villages “South of Ambahy” included in this phase of the Project are shown below:

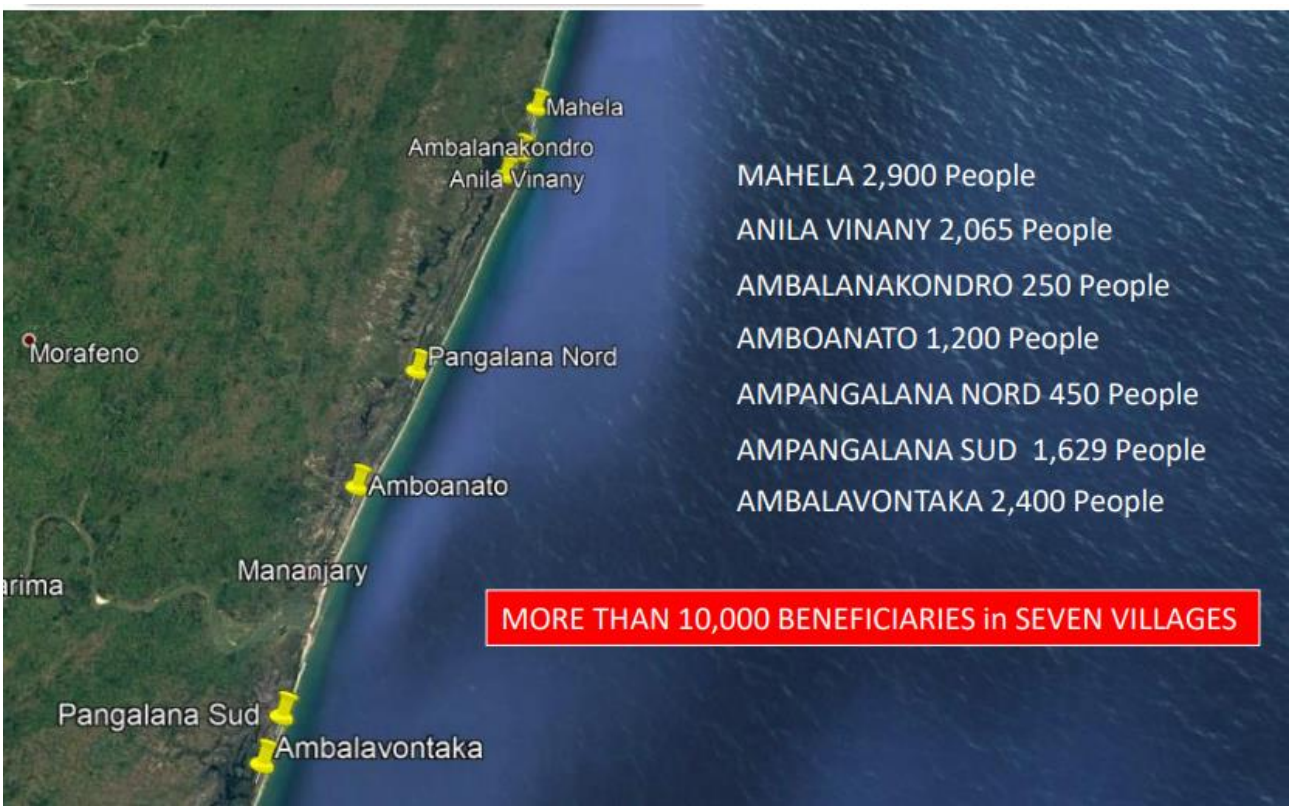


First Village South of Ambahy

Second Village South of Ambahy

Third Village South of Ambahy

5-New Wells in the Mananjary Area



This is part of our expansion into the Mananjary area. Last year wells MWP120 - MWP129 were drilled in this area. It is full of new opportunities with the number of beneficiaries per well being quite high. Most villages have little or no access to clean water. Logistically it is very challenging because some villages are extremely remote and accessible only by foot or by sea.

			Location	
Village	**Houses**	**Population**	**Lat.**	**Long.**
Mahela	587	2900	20° 58' 11.00" S	48° 26' 35.42" E
Anila Vinany	423	2065	20° 59' 6.33" S	48° 26' 36.47" E
Ambalanakondro	28	250	20° 15' 33.39" S	48° 35' 0.30" E
Amboanato	135	1200	21° 07' 57.48"S	48° 23' 06.02" E
Ampangalana Avaratra	90	450	21° 11' 39.09"S	48° 2' 32.32" E
Ampangalana Atsimo	200	1629	21° 18' 15.13"S	48° 20' 1.59" E
Ambalavontaka	270	2400	21° 19' 30.29"S	48° 19' 37.60" E

Mahela

Anila vinany

Analanakondro

Analanakondro close up

Amboanato

Amboanato close up

Ampangalana avaratra

Ampangalana avaratra close up

Ampangalana atsimo

Ambalavontaka

Additional Information can be found on our website:
http://www.TheMadagascarWaterProject.org