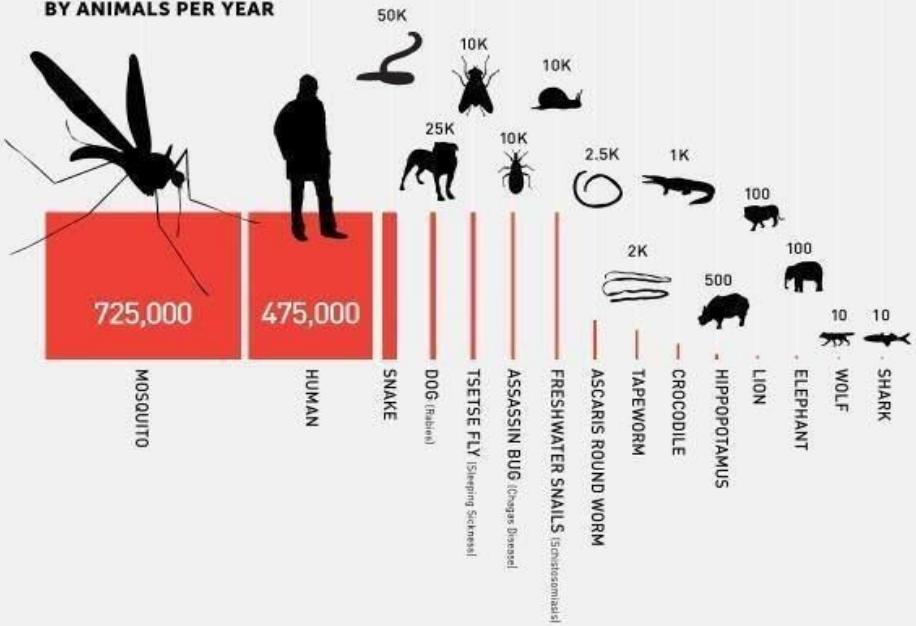


Data Vs Dengue



WORLD'S DEADLIEST ANIMALS

NUMBER OF PEOPLE KILLED BY ANIMALS PER YEAR



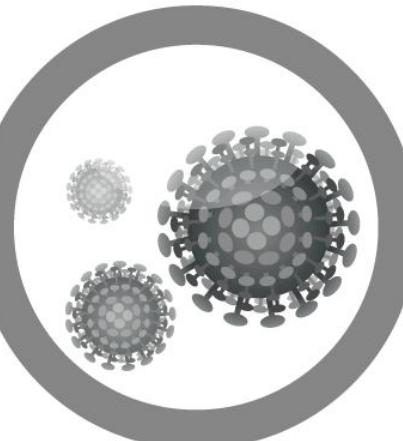
MOSQUITOWEEK

on gatesnotes.com

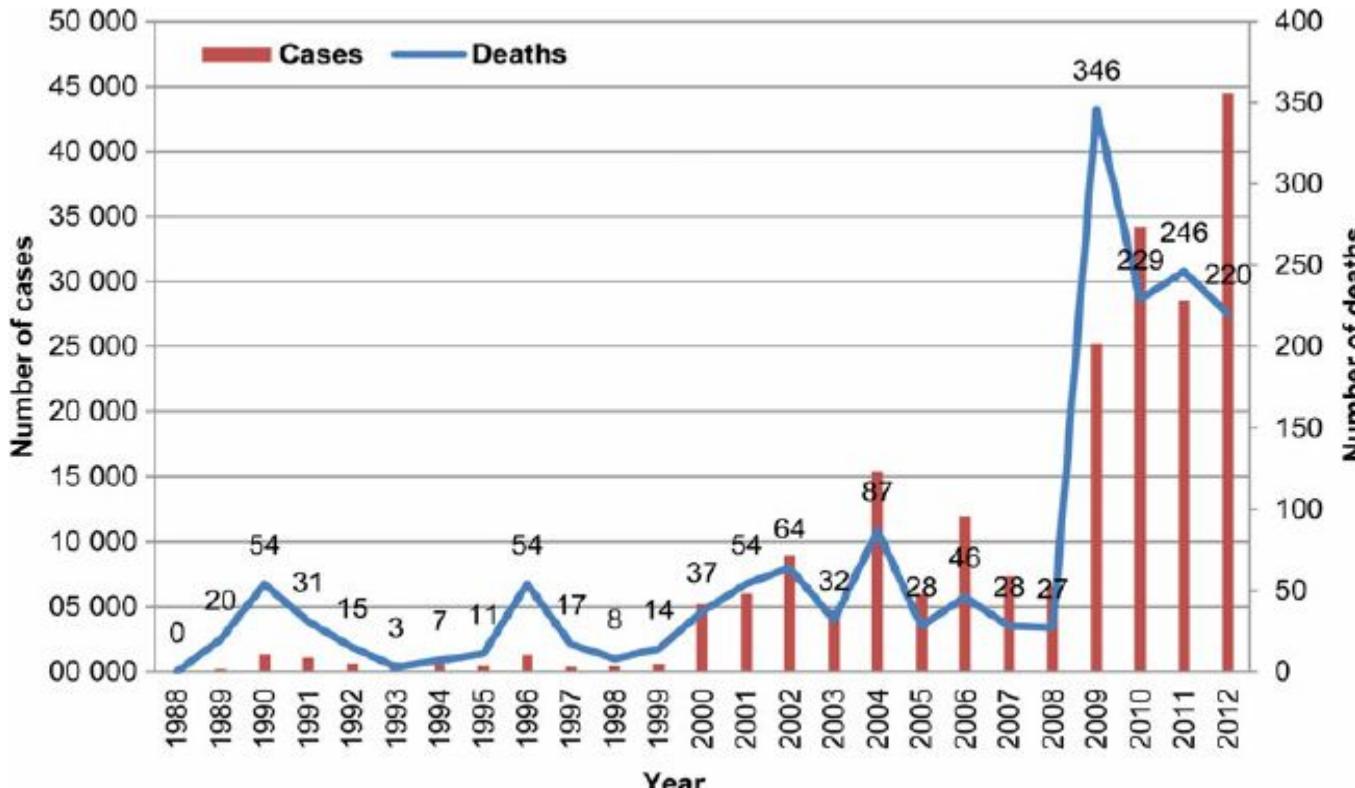
DENGUE



ZIKA VIRUS



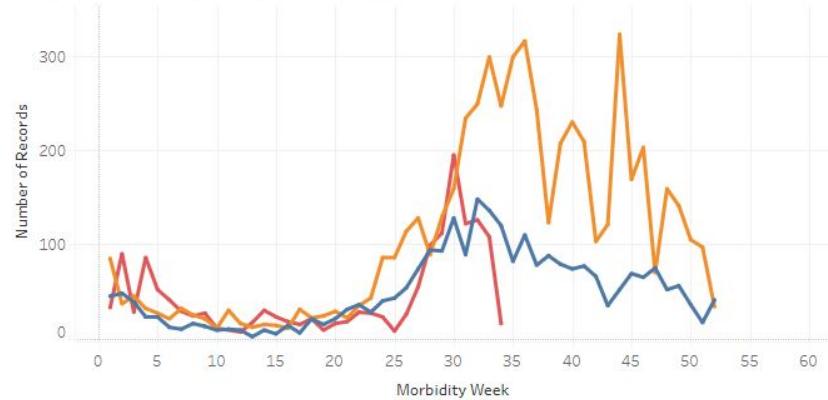
<Insert LGUname> Dengue Statistics





<Insert LGU>
Dengue Visual Dashboard

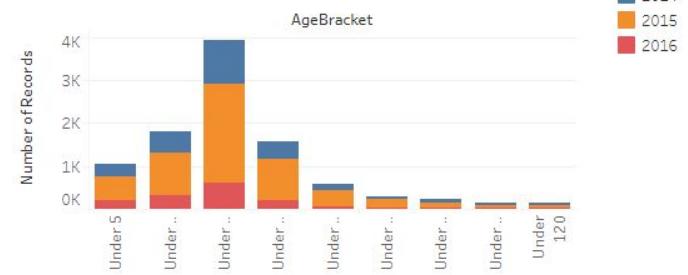
Pangasinan Dengue by Morbidity Week



Select a Barangay or Sort by Year

Barangay	Year		
	2014	2015	2016
BONUAN GUESET	34	87	32
CALMAY	4	13	31
PUGARO SUIT		4	24
PANTAL	24	33	16
CARANGLAAN	14	29	15
BONUAN BOQUIG	14	33	14
BONUAN BINLOC	5	26	11
CARAEL	4	4	8
MANGIN	4	4	8
LUAO	16	28	6
TEBENG	3	26	6
TAPUAC	9	22	5
BACAYAO NORTE	17	7	4
BACAYAO SUR	5	5	4
Null	24		3
MAYOMBO	7	16	3
POBLACION OESTE	6	46	3
SALAPINGAO	4	5	3
BARANGAY II (NUEVA)	2	4	2
BARANGAY IV (ZAMORA)		1	2
HERRERO	3	7	2
MALUED	32	43	2
BOLOSAN	1	5	1
LASIP CHICO	15	4	1
LASIP GRANDE	5	8	1
LOMBOY	1	2	1
MAMALINGLING	1	6	1
POGO CHICO	2	8	1
POGO GRANDE	2	4	1
SALISAY		2	1
BACAYAO	1		
BARANGAY I (T. BUGALLO..)		7	

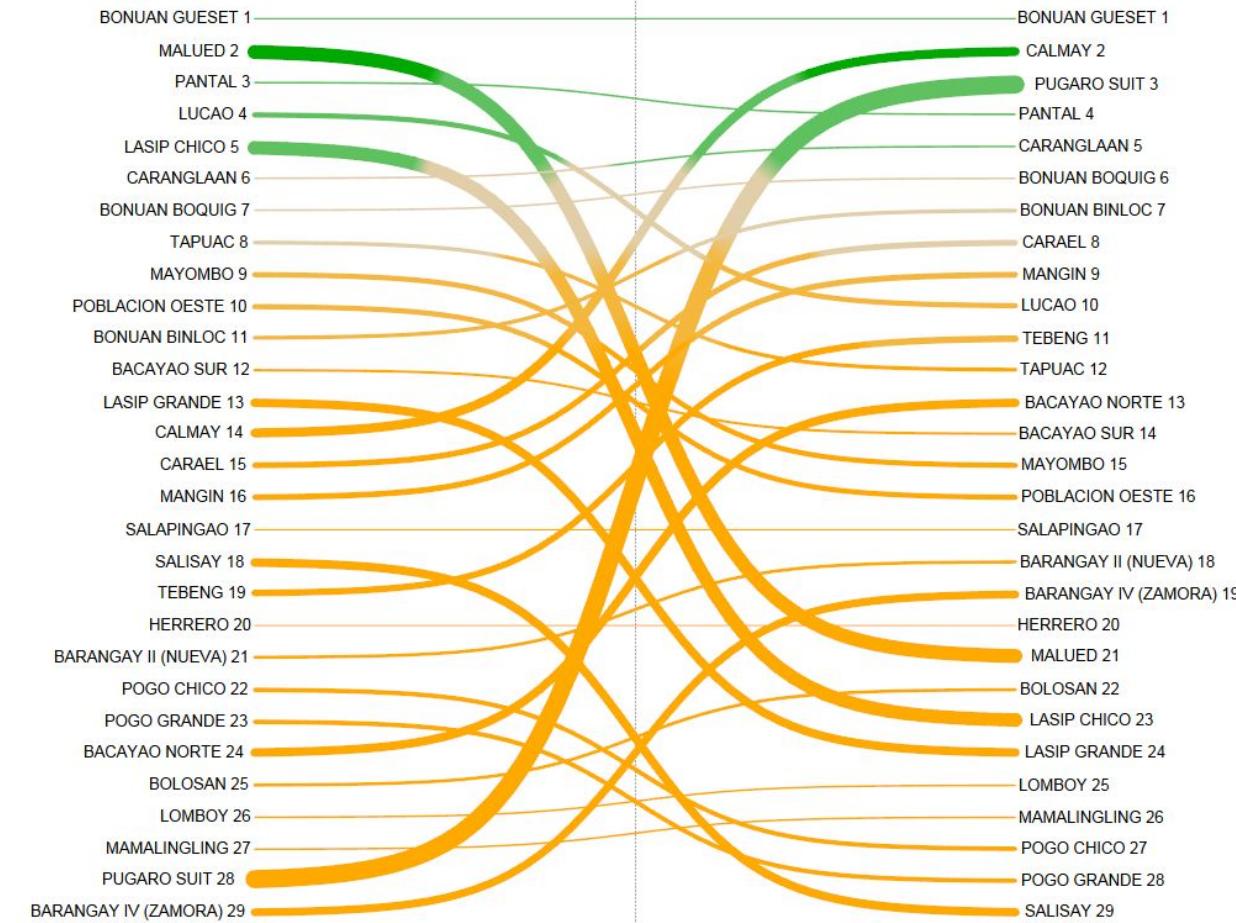
Cases by Age Bracket



Muncity

- (All)
- AGNO
- AGUILAR
- ALAMINOS CITY
- ALCALA
- ANDA
- ASINGAN
- BAGUIO CITY
- BALUNGAO
- BANI
- BASISTA
- BAUTISTA
- BAYAMBANG
- BINALONAN
- BINMALEY
- BOLINAO
- BUGALLON
- BURGOS
- CALASIAO
- CUYAPO
- DAGUPAN CITY
- DASOL
- INFANTA
- LABRADOR
- LAOAC
- LINGAYEN
- LUPAO
- MABINI
- MALASQUI
- MANAOAG
- MANGALDAN
- MANGATAREM
- MAPANDAN
- NATIVIDAD
- POZORRUBIO
- ROSALES
- SAN CARLOS CITY
- SAN FABIAN
- SAN JACINTO
- SAN MANUEL
- SAN NICOLAS

Dengue Rankings 2014 vs 2016



Find mosquito breeding hotspots : Using Satellites Infrared Data



Predict Locations with Stagnant water: NDWI and FAPAR



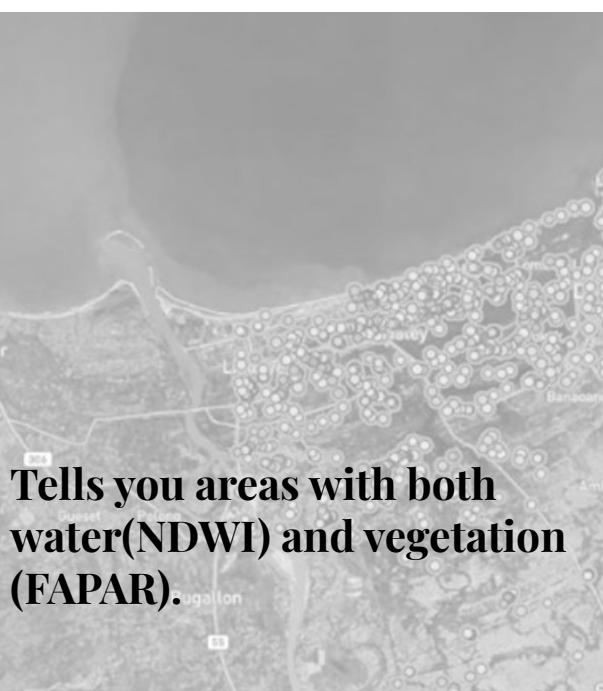
$$\text{NDWI} = \frac{(X_{nir} - X_{swir})}{(X_{nir} + X_{swir})}$$

$$\text{fAPAR} = \frac{\text{APAR}}{\text{PAR}} = \frac{I_0 - T_c - R_{cs} + R_s}{I_0}$$

dc.

Data to Enforce Policy

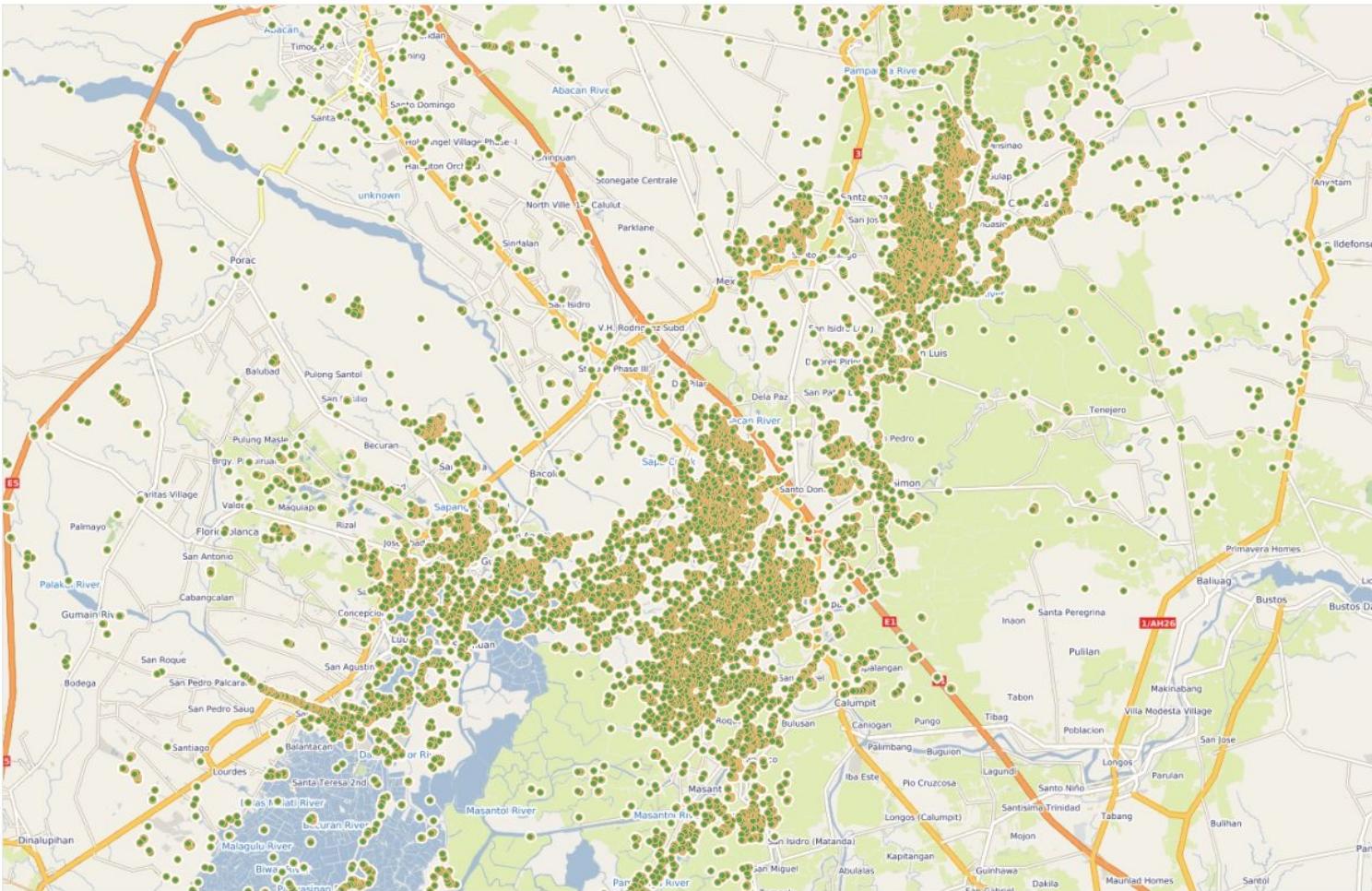
Circles denote areas with predicted stagnant waters.



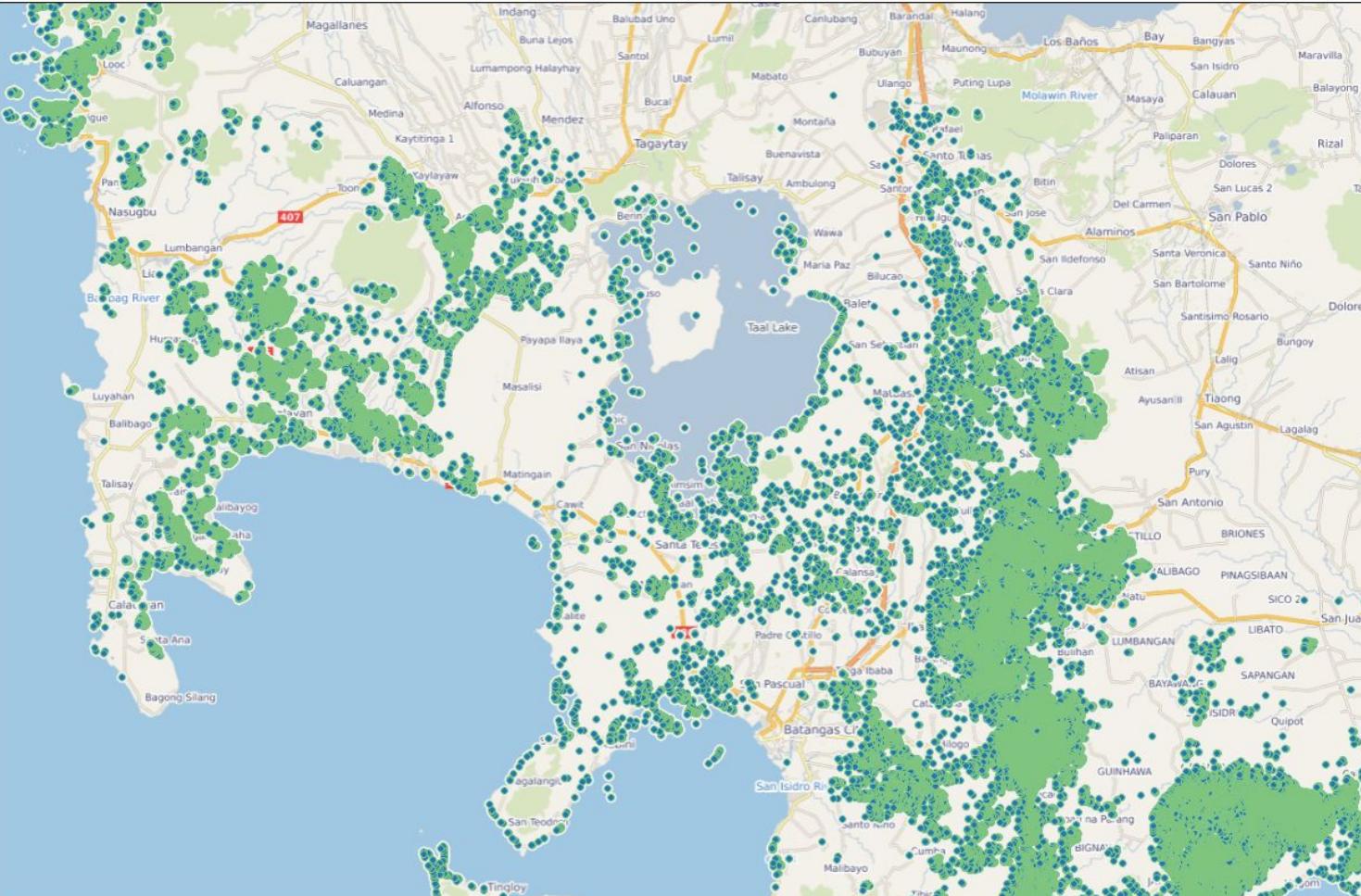


On ground validation/confirmation of predicted stagnant water.

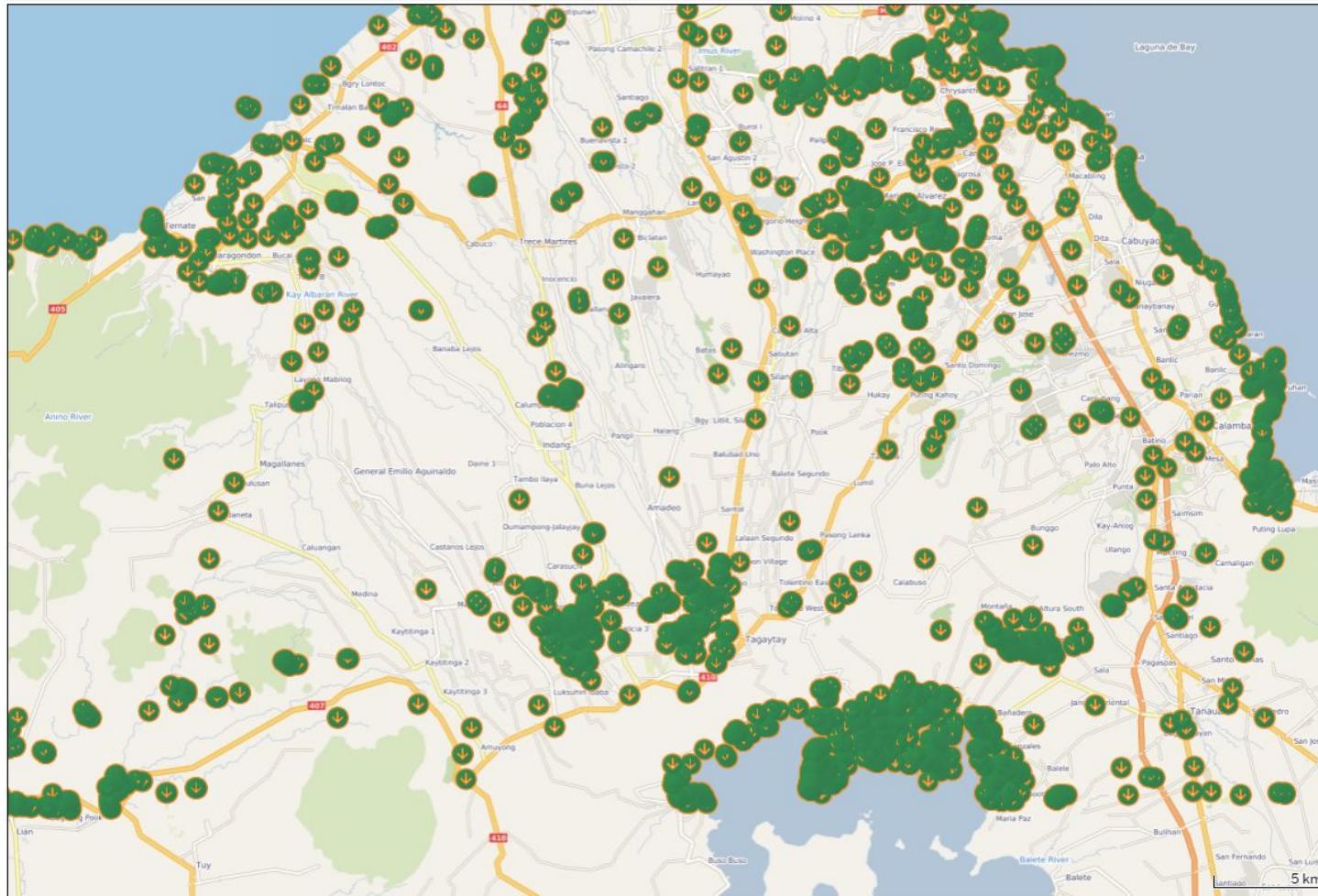
Pampanga Stagnant Water Prediction



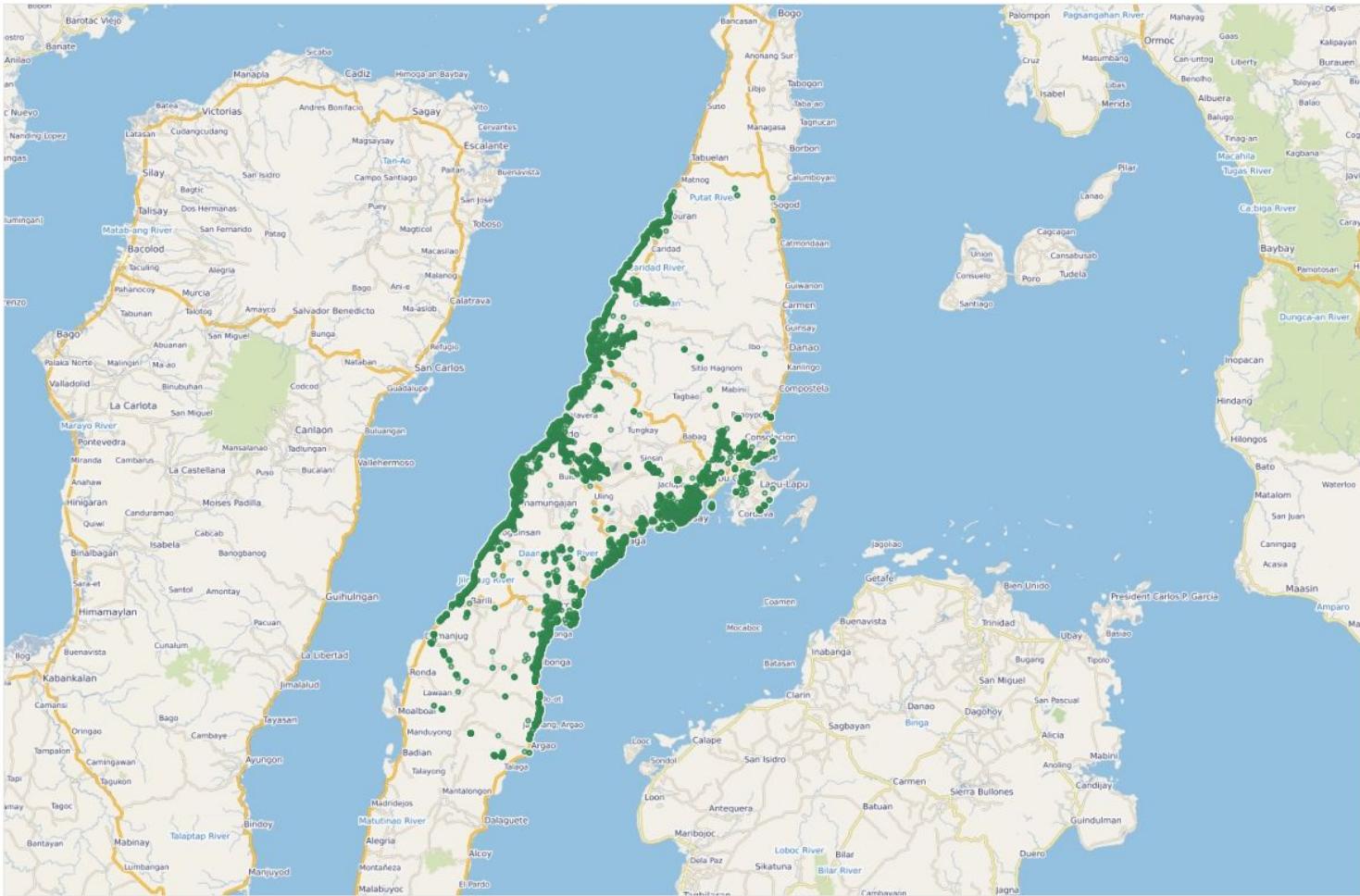
Stagnant Water Prediction for Batangas 2018-July



Cavite-2018-06 Stagnant Water Prediction Map

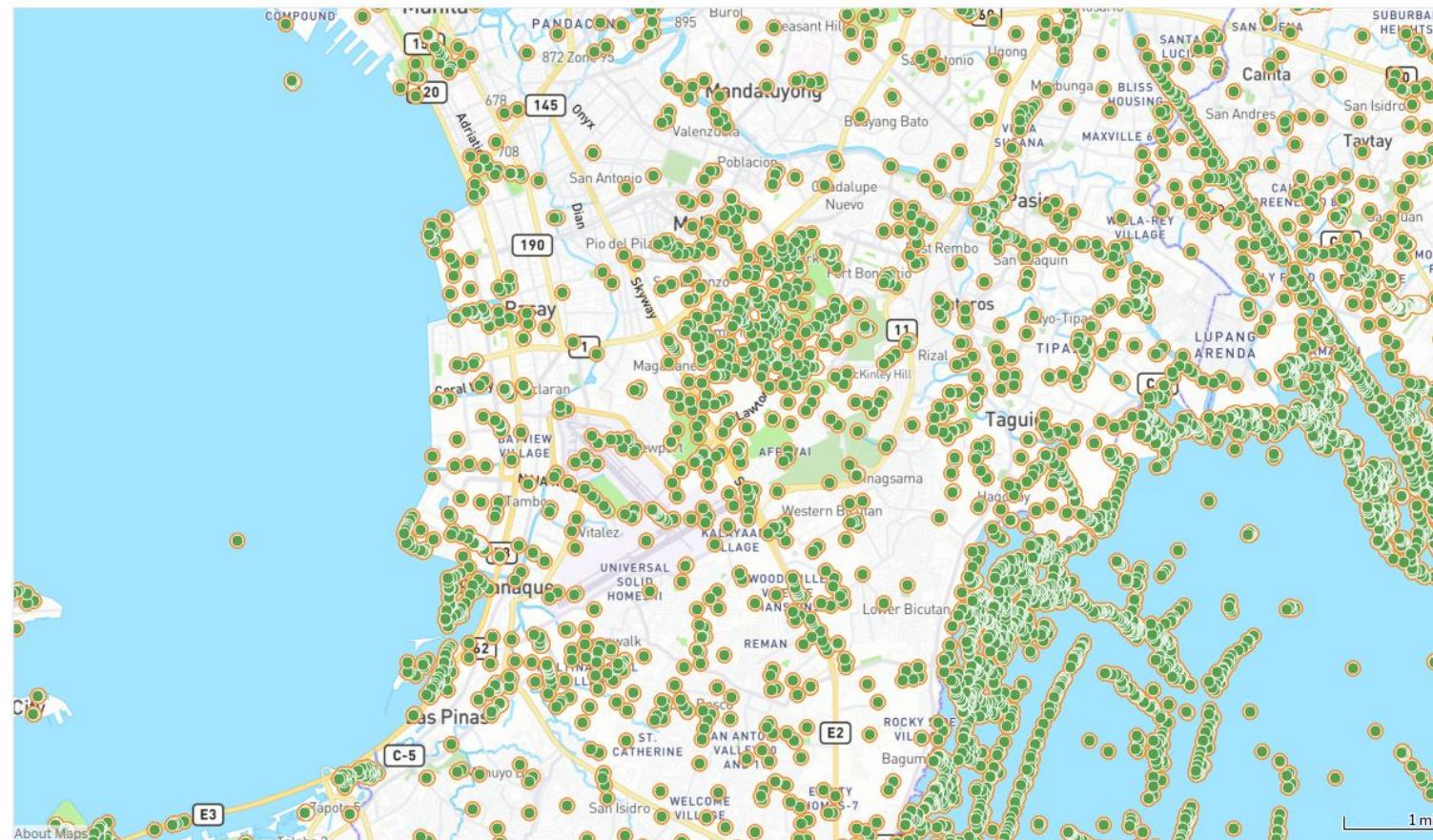


Cebu Stagnant Water Prediction 2018



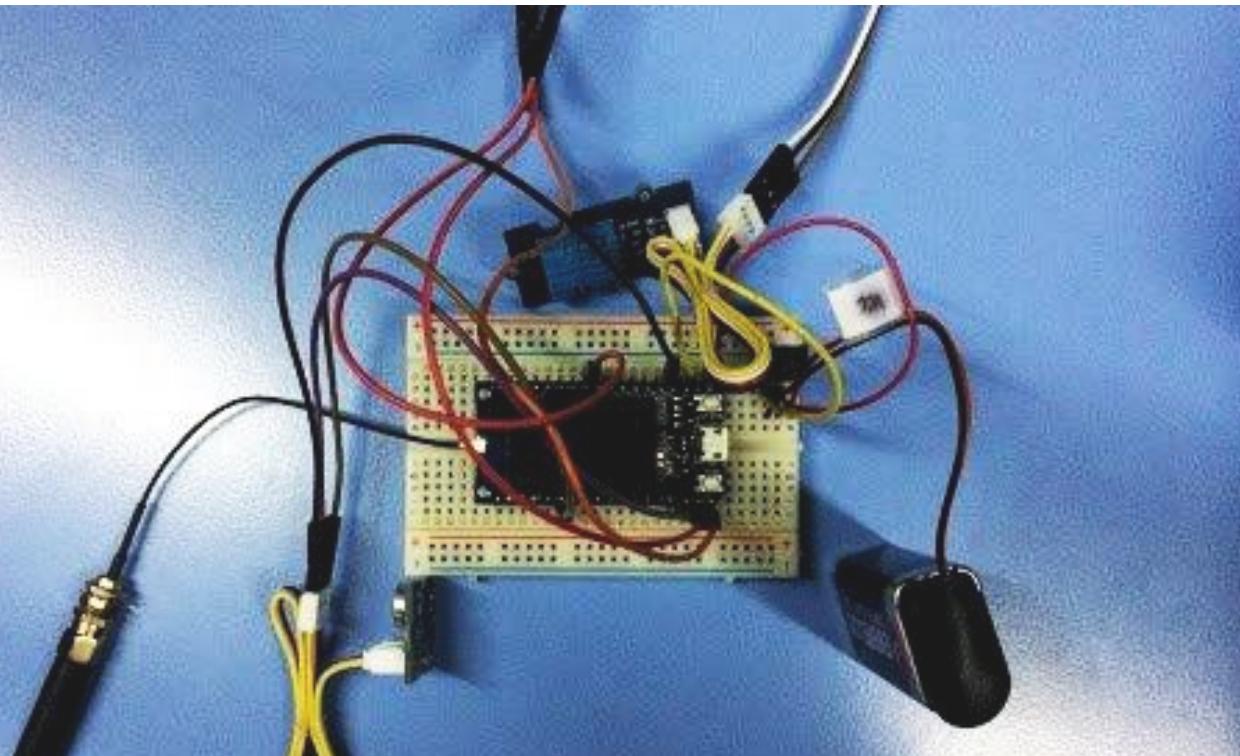
Metro Manila Stagnant Water Prediction

Hover over any green dot to see the values. You can click on it to popup a google map at that location. Change the Slider Values for NDWI and FAPAR to set sensitivity.



Idea #3

Ovi Traps Enhanced with IoT Data Sensor





“BTI: Mosquito Killer”

Bacillus Thuringiensis Israeleensis

Coconut Innovation Combats Disease-Causing Mosquitoes in Peru



Blog by Alexandra Page

As insects and other pests are causing prevailing issues in rural populations, scientists and citizens alike are working diligently on innovations designed to combat them. Vector-borne illnesses are among the most daunting problems caused by insects and other pests, and experts have spent years researching safe and effective solutions to the expansion of consistently threatening populations such as mosquitoes.

In 1995, microbiologist Dr. Palmira Ventosilla developed a relatively simple but innovative method for controlling the mosquito larva population in Peru. By inoculating homegrown coconuts with the bacteria *Bacillus thuringiensis israelensis*, or Bti, and allowing the bacteria to multiply before cracking and dropping the coconuts into bodies of water, these dangerous animals were decimated at rapid rates. Dr. Ventosilla's small kit, containing a cotton swab seeded with Bti spores, another swab with sodium glutamate, a small piece of cotton, and instructions on how to inoculate the coconut, allows anyone access to this simple and cost effective solution.

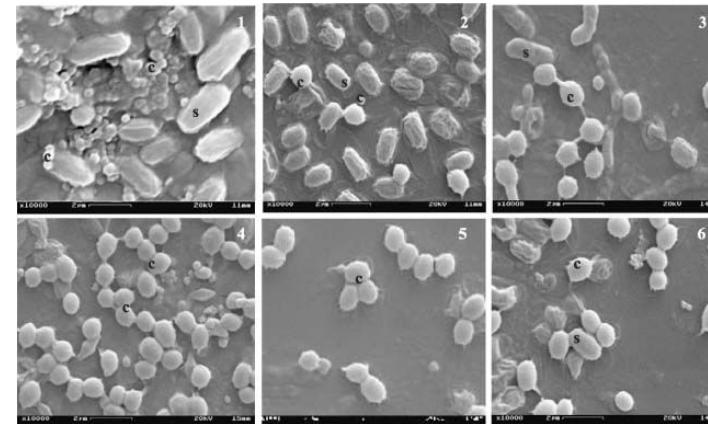


Figure 2. Scanning electron microscopy of spore (s) and crystals (c) of strains S285 (1); S447 (2); S479 (3); S550 (4); S1255 (5); and Bti (6).





Manila Bulletin News

@manilabulletin

Following

LOOK: School children of Malued Elementary School with their parents make OV traps and a coconut bomb with Bacillus thuringiensis israelensis or "BTI" coconut bombs to combat dengue at Bgy. Malued in Dagupan City. | @jojorinoza



Wipe Out Mosquitoes using low cost Coconuts & BTI

FB Page:<https://www.facebook.com/groups/1805237739779109/>

Collaboration Partners





<https://www.facebook.com/groups/1805237739779109/>