



# Weekly Report on JU-DNCC Mosquitoes Surveillance Program

Week 088 (January 23-27, 2026)

## Submitted To

Chief Health officer  
Dhaka North City Corporation  
Dhaka, Bangladesh

## Submitted By

IRES  
Department of Zoology  
Jahangirnagar University



## IRES

## JU-DNCC Collaboration Center

Department of Zoology  
Jahangirnagar University  
Email: [ires@juniv.edu](mailto:ires@juniv.edu)  
Phone: +8801903307125

## Weekly Report on Mosquitoes Surveillance Program at DNCC

### Methods:

In the DNCC (Dhaka North City Corporation) area, mosquito surveillance is conducted across 5 zones. Adult mosquito surveillance involves setting up three types of traps in each zone to capture adult mosquitoes. Simultaneously, larval surveillance entails surveying an area within a 0.5-kilometer radius around traps location to inspect and collect mosquitoes' larvae from potential breeding sites.

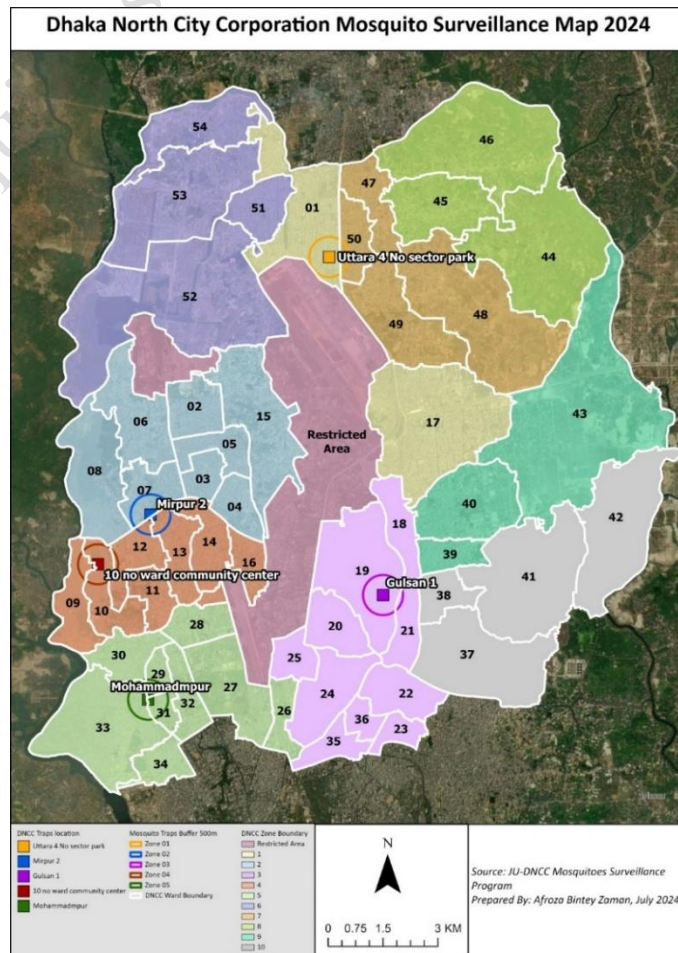
Zone	Traps Location	GPS Location
01	Uttara-4 No sector park	23.8613672,90.4035528
02	Mirpur-2, Vander office, DNCC	23.8036248,90.3601995
03	Gulsan 1, Purantan Vander office	23.7860557,90.4164024
04	10 No ward community center, Mirpur-1	23.7922967,90.3467992
05	Mohammadpur regional office of DNCC	23.7618721,90.3590884

For the Adult mosquito collection

1. Light trap
2. Gravid trap

For the mosquito larvae collection

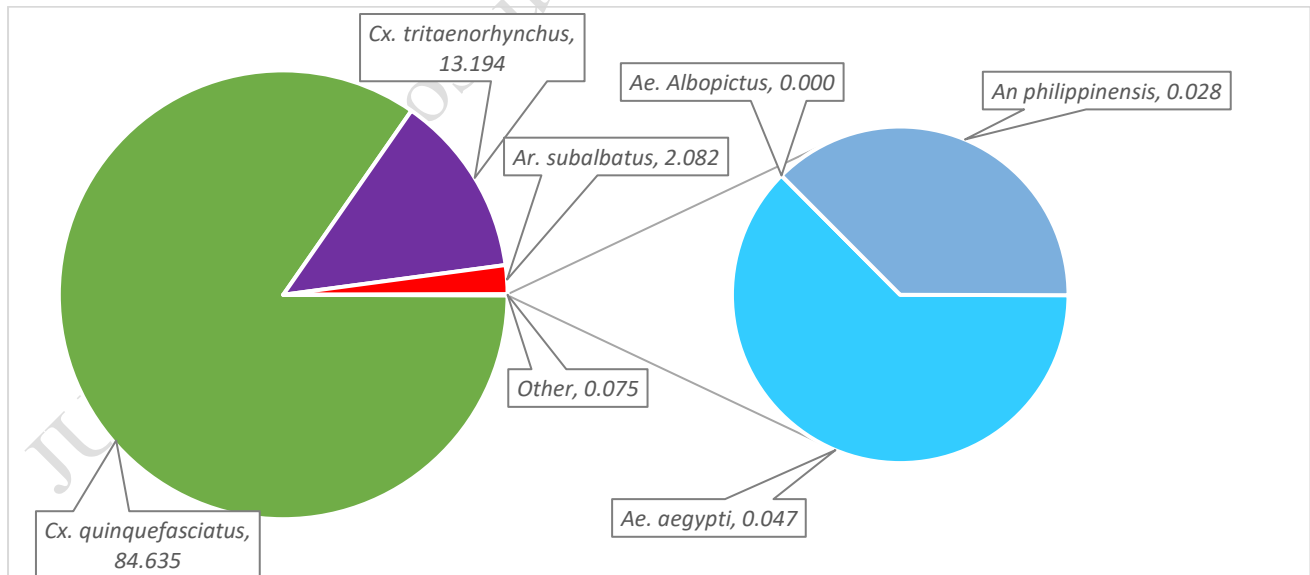
1. Aedes X smart trap
2. Directly collection larvae from field.



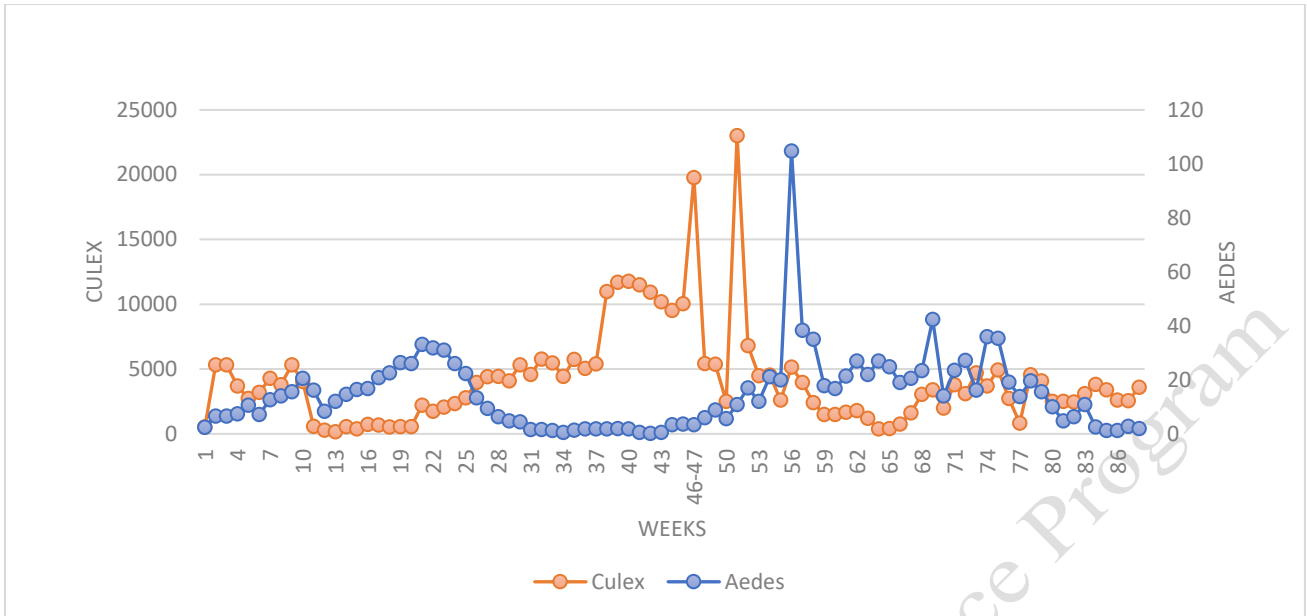
## Results:

**Table 1. Collected Adult Mosquitoes from Moshar Machine (CO<sub>2</sub>) traps in Weeks 88 (January 23-27, 2026)**

Zone	N	<i>Ae. aegypti</i>	<i>Cx. quinquefasciatus</i>	<i>Cx. tritaeniorhynchus</i>	<i>Ar. subalbatus</i>	<i>Mn. uniformis</i>	<i>An. philippinensis</i>
1	6659	2	6079	529	47	0	2
2	3918	3	3153	471	287	0	4
3	6859	2	6056	748	53	0	0
4	1505	1	1201	270	33	0	0
5	2341	2	1523	790	23	3	0
<b>Total</b>	21282	10.00	18012.00	2808.00	443.00	3.00	6.00
<b>%</b>	100.00	0.05	84.63	13.19	2.08	0.01	0.03



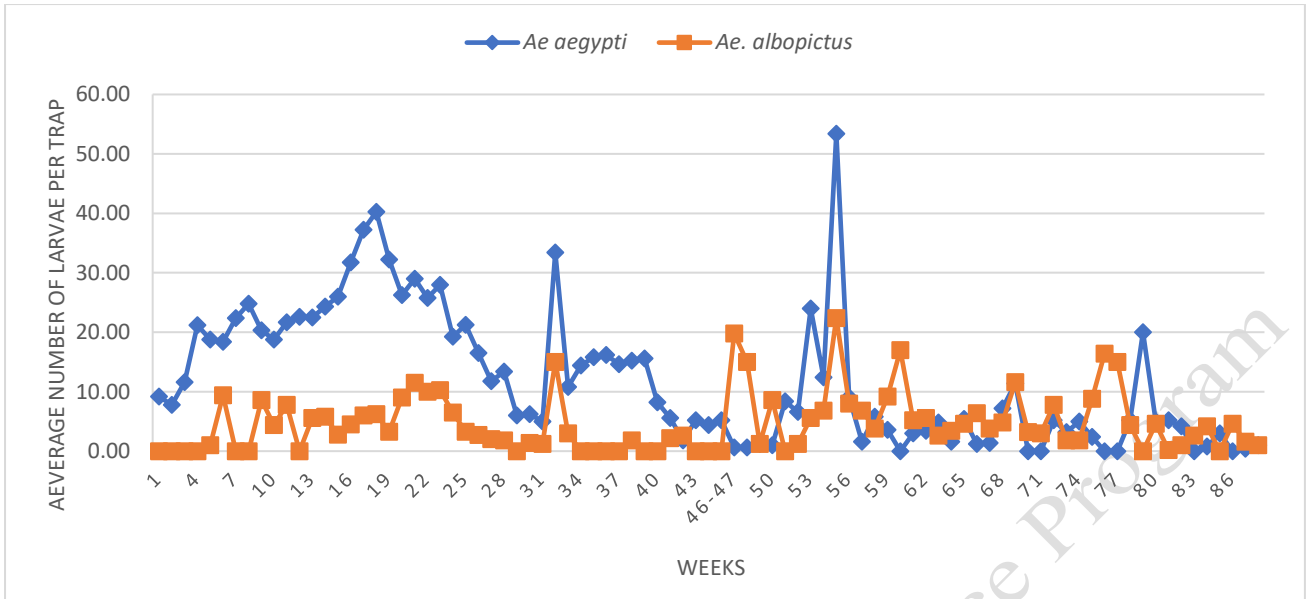
**Fig. 1: Percentage of Adult Mosquitoes Collected by Moshar Machine (CO<sub>2</sub>) traps in Weeks 88 (January 23-27, 2026)**



**Fig 2: Average number of mosquitoes per Moshar Machine (CO<sub>2</sub>) traps from Week 1 to Week 88 (May 2, 2024 - January 27, 2026)**

**Table 2. Collected Mosquito Larvae from *Aedes* X smart Traps in Weeks 88 (January 23-27, 2026)**

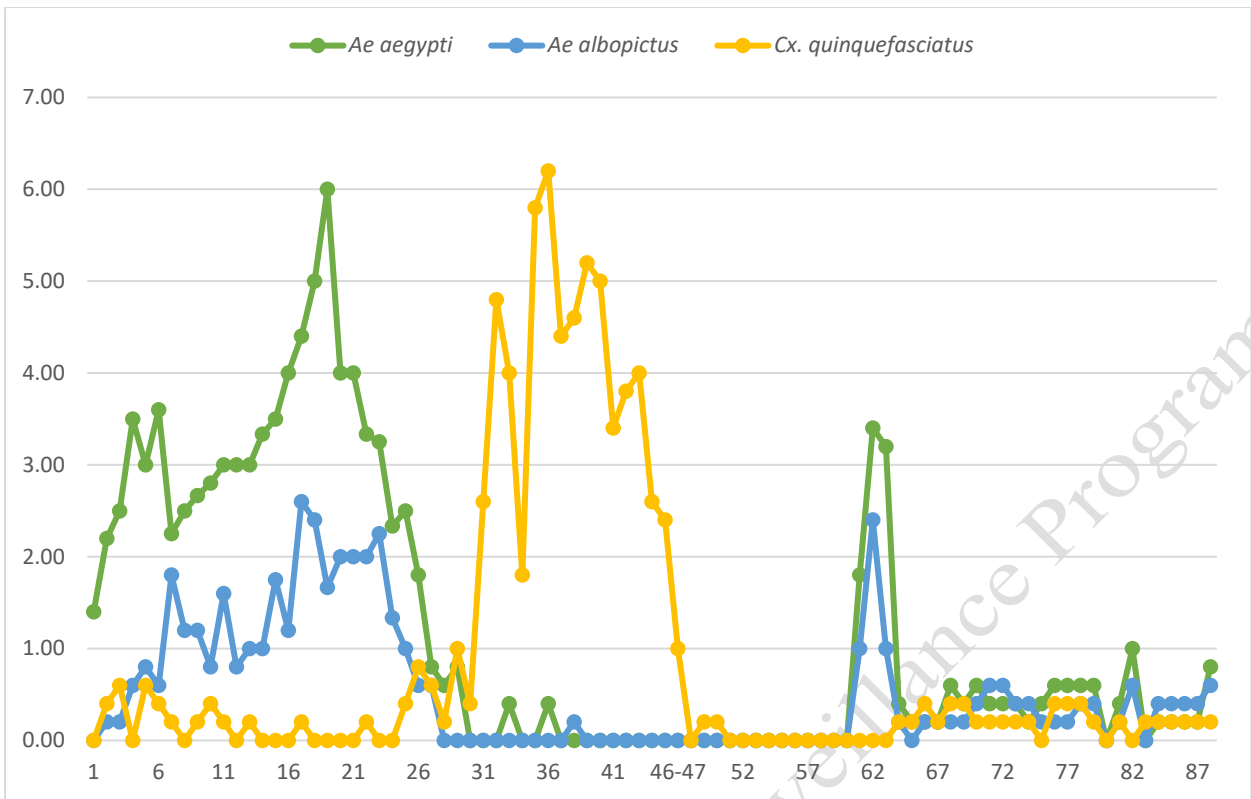
Zone	N	<i>Ae. aegypti</i>	<i>Ae. albopictus</i>
1	5	0	5
2	0	0	0
3	5	5	0
4	0	0	0
5	0	0	0
<b>Total</b>	10	5	5
<b>(%)</b>	100	50.00	50.00



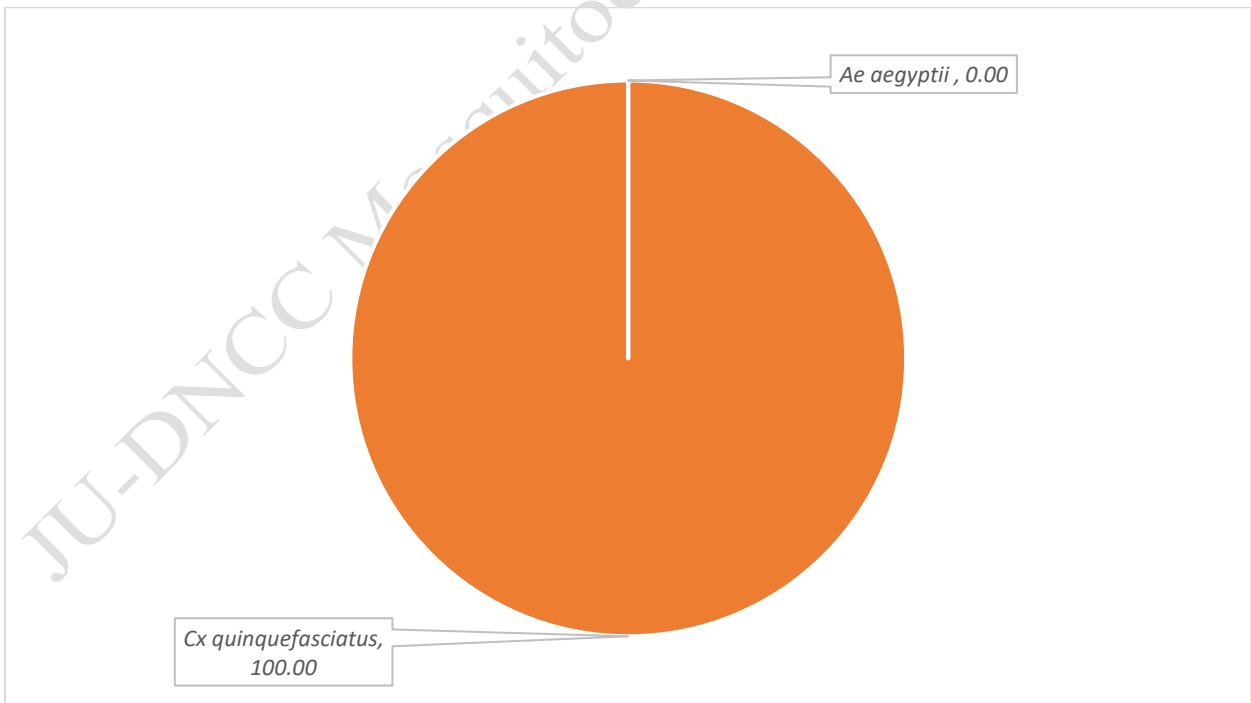
**Fig 3: Average Number of Aedes Larvae per Aedes X Smart Trap in Zones 1-5 from Week 1 to Week 88 (May 2, 2024 - January 27, 2026)**

**Table 3. Collected Adult Mosquitoes from Gravid Trap in Weeks 83 (December 5-9, 2025)**

Zone	Number of Mosquitoes	<i>Ae. aegypti</i>	<i>Ae. albopictus</i>	<i>Cx. quinquefasciatus</i>
1	1	0	1	0
2	2	0	2	0
3	2	2	0	0
4	2	2	0	0
5	1	0	0	1
<b>Total</b>	8	4	3	1
<b>(%)</b>	100	50.00	37.50	12.50



**Fig 4: Average number of adult mosquitoes per Gravid trap in zones 1-5 from Week 1 to Week 88 (May 2, 2024 - January 27, 2026)**

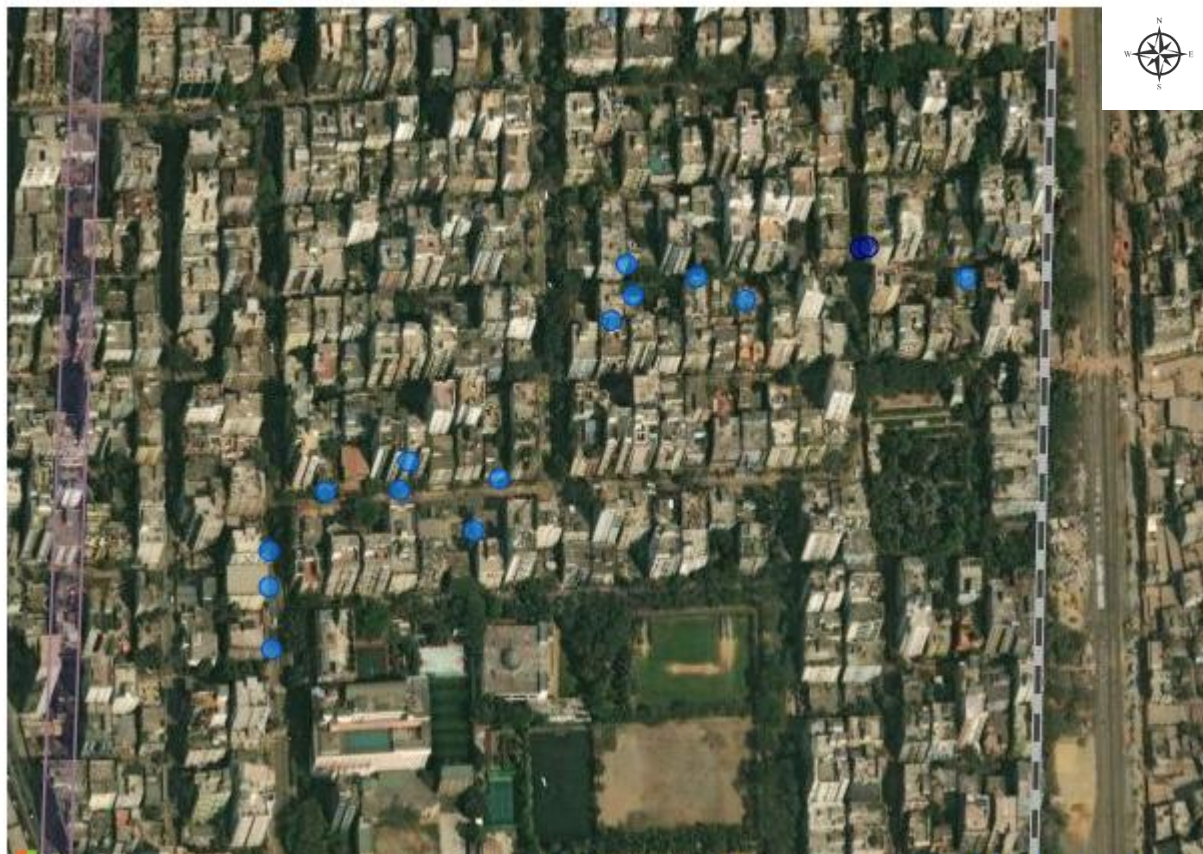


**Fig. 5: Percentage of Mosquito Larvae from Zones (1-5) in Weeks 88 (January 23-27, 2026)**

**Table 4. Positive Larval Spots in Different Zones (1-5) with Estimated Number of Larvae in Weeks 88 (January 23-27, 2026)**

Zone	GPS Location	<i>Ae. aegypti</i>	<i>Ae. albopictus</i>	<i>Cx. quinquefasciatus</i>	<i>Ar. subalbatus</i>	Source
1	23.8637606 90.4048292	0	0	5584	0	Drain
	23.8637689 90.4048724	0	0	58796	0	Drain
	<b>Sub-Total</b>	0	0	64380	0	
3	23.7820346 90.4186595	0	0	58876	0	Lake
	<b>Sub-Total</b>	0	0	58876	0	
<b>Grand Total</b>		0	0	117672	0	

Household Positive ● Negative ● Positive

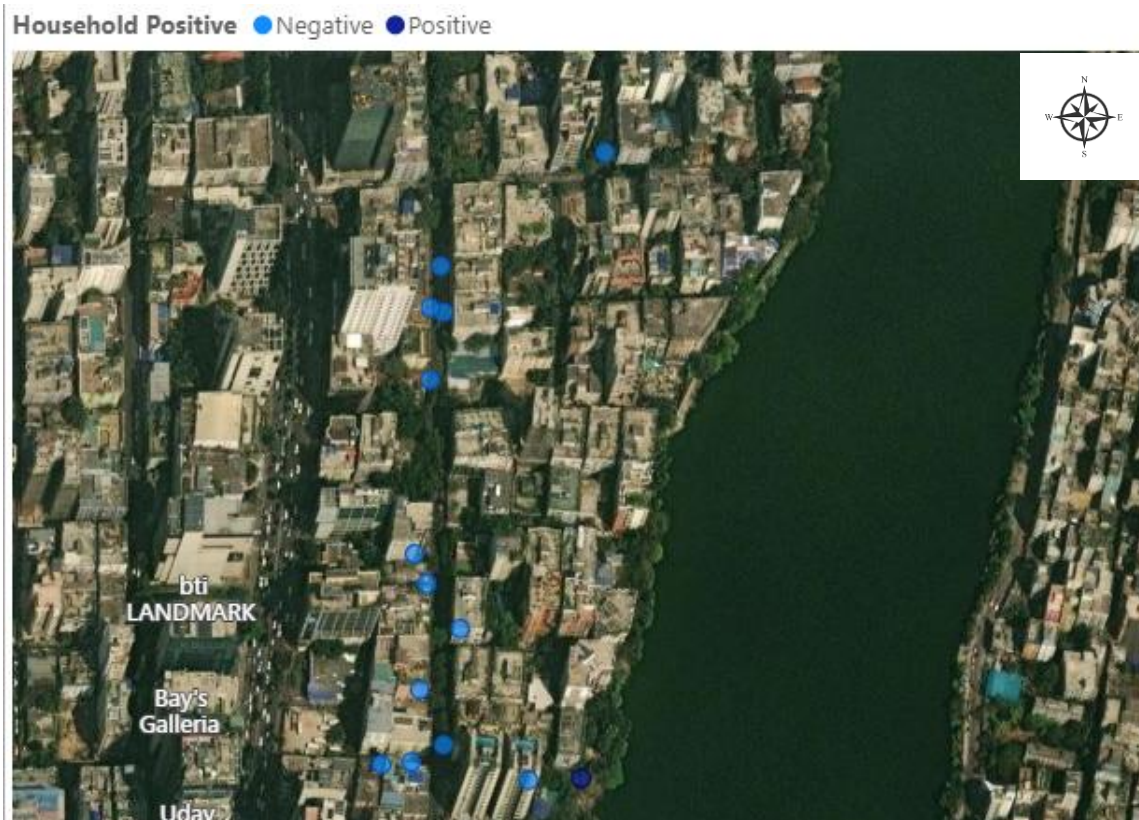


Map 1: Positive and Negative House of Uttara 4 No. Sector at Weeks 88

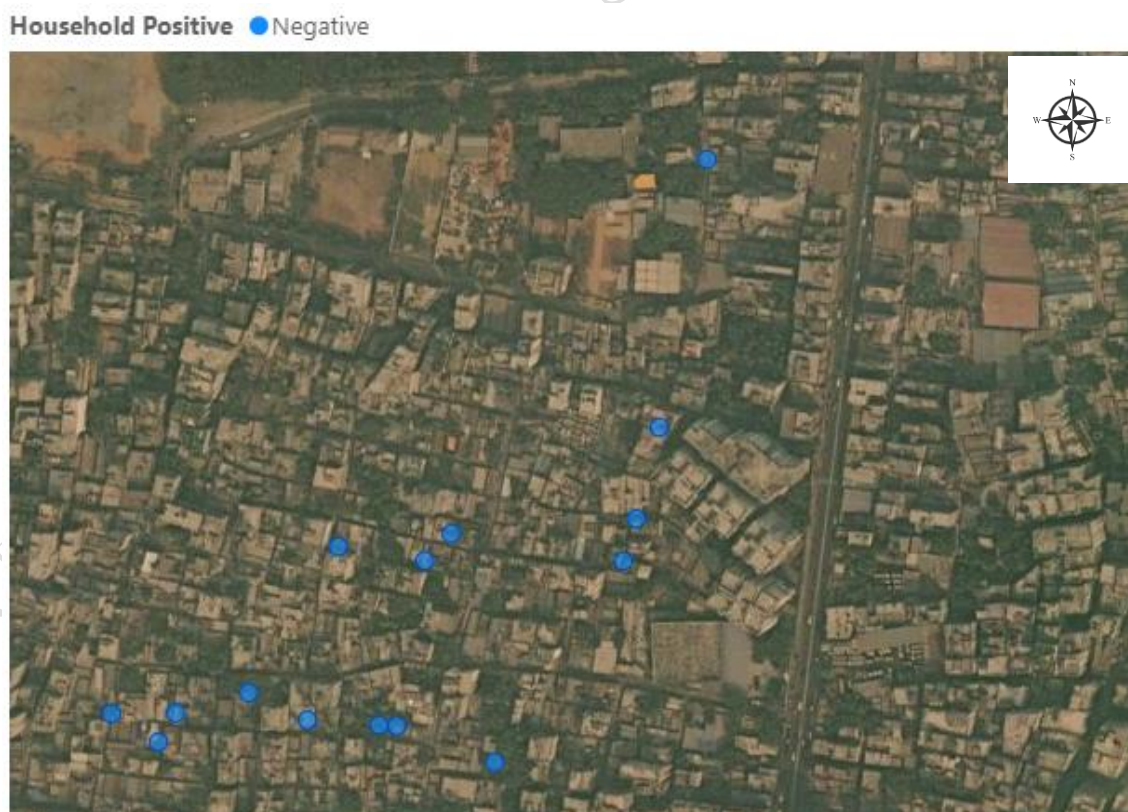
Household Positive ● Negative



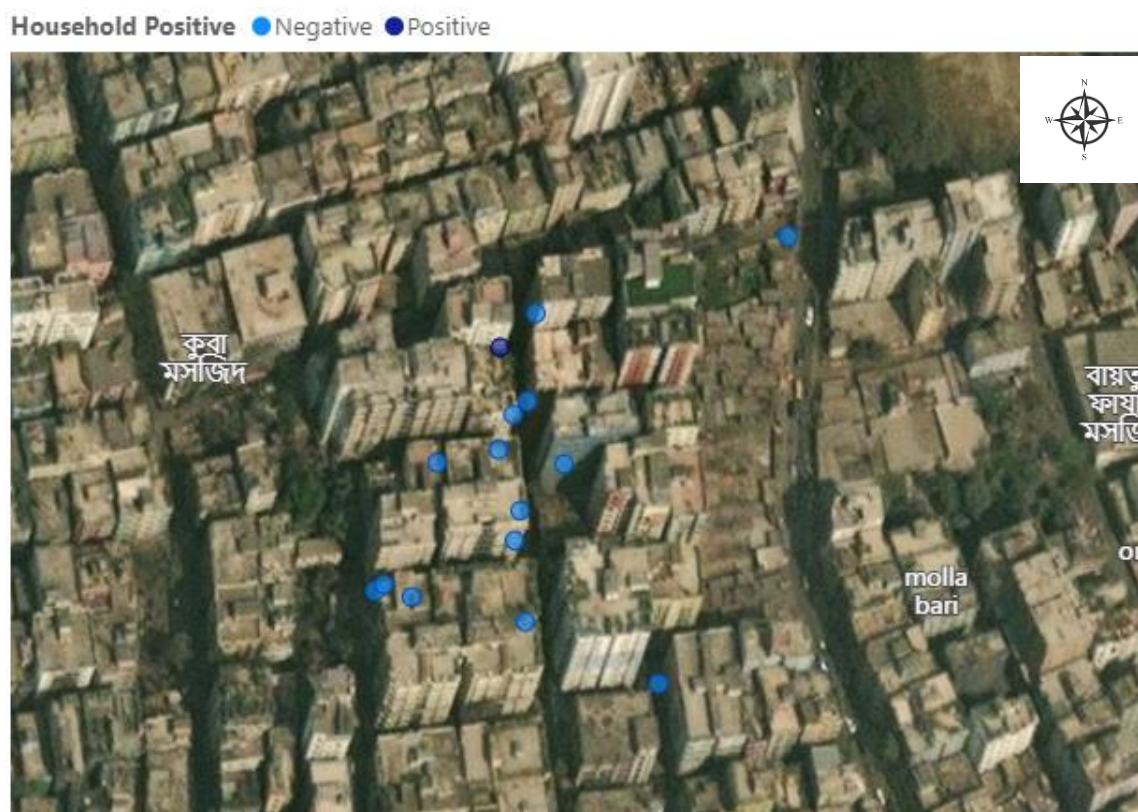
Map 2: Positive and Negative House of Mirpur 2 at Weeks 88



**Map 3: Positive and Negative House of Gulsan 1 at Weeks 88**



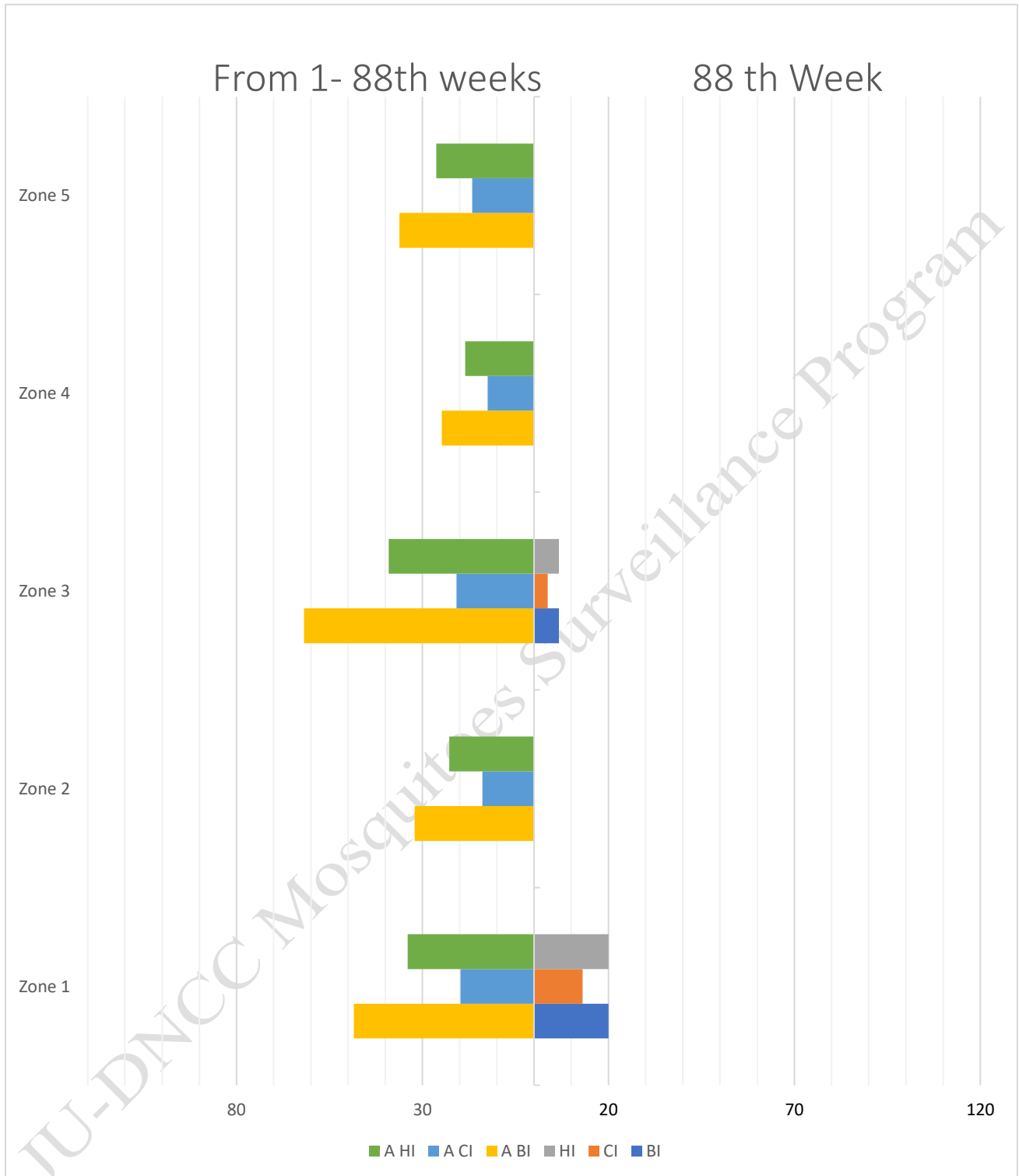
**Map 4: Positive and Negative House of Mirpur 1 at Weeks 88**



Map 5: Positive and Negative House of Mohammadpur at Weeks 88

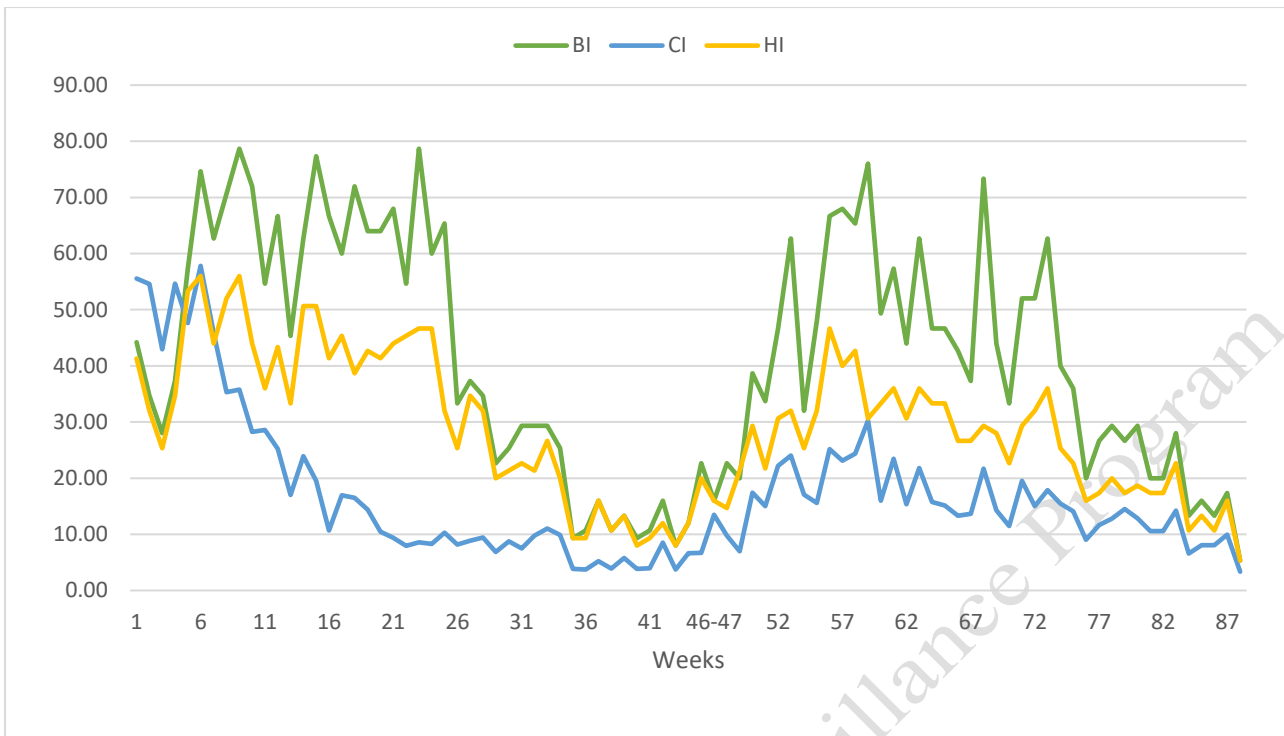
Table 5: Positive House, Wet Container, BI, CI and HI in Zones (1-5) in Weeks 88 (January 23-27, 2026)

Zone	Total House	Positive House	Total Wet container	Positive Wet Container	BI	CI	HI
1	15	3	23	3	20.00	13.04	20.00
2	15	0	25	0	0.00	0.00	0.00
3	15	1	27	1	6.67	3.70	6.67
4	15	0	20	0	0.00	0.00	0.00
5	15	0	26	0	0.00	0.00	0.00

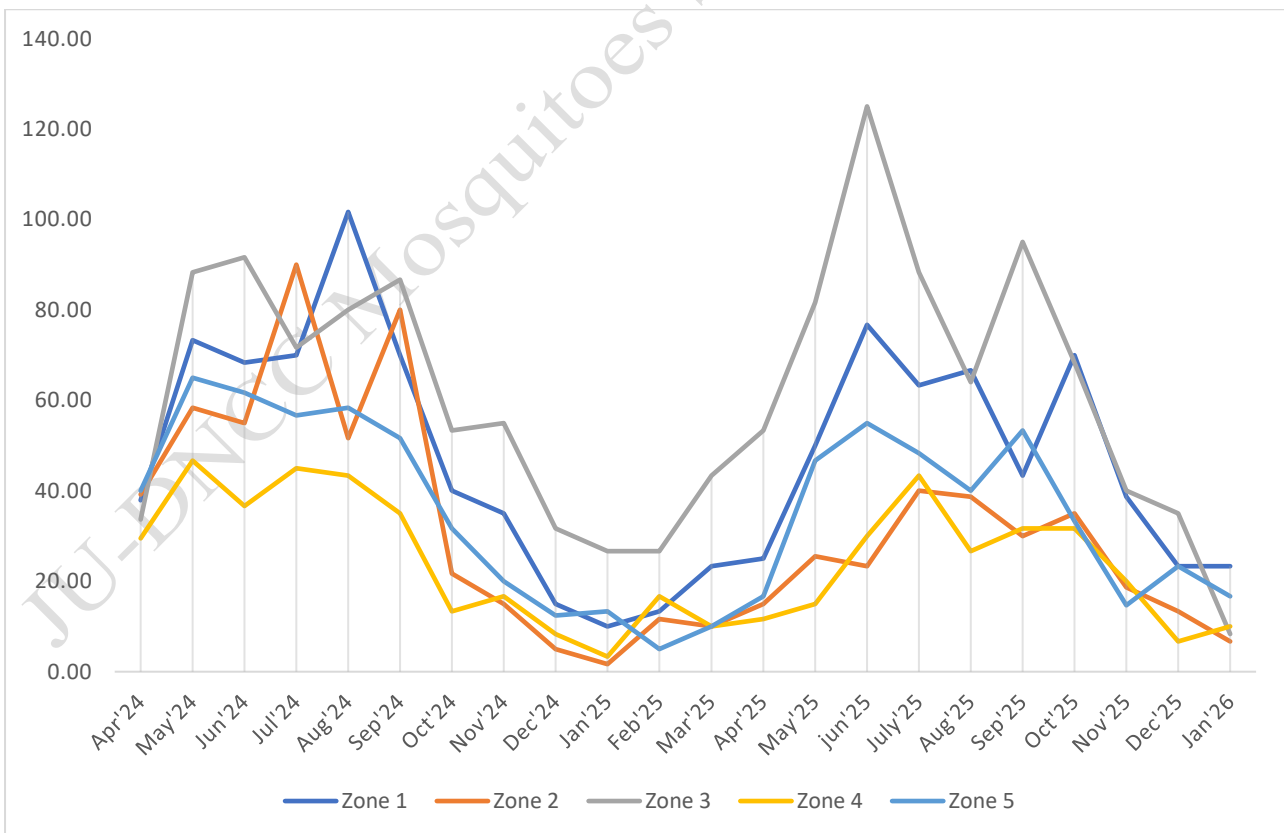


**Fig. 6: BI, CI and HI in Different Zones (1-5) of Dhaka north City Corporation**

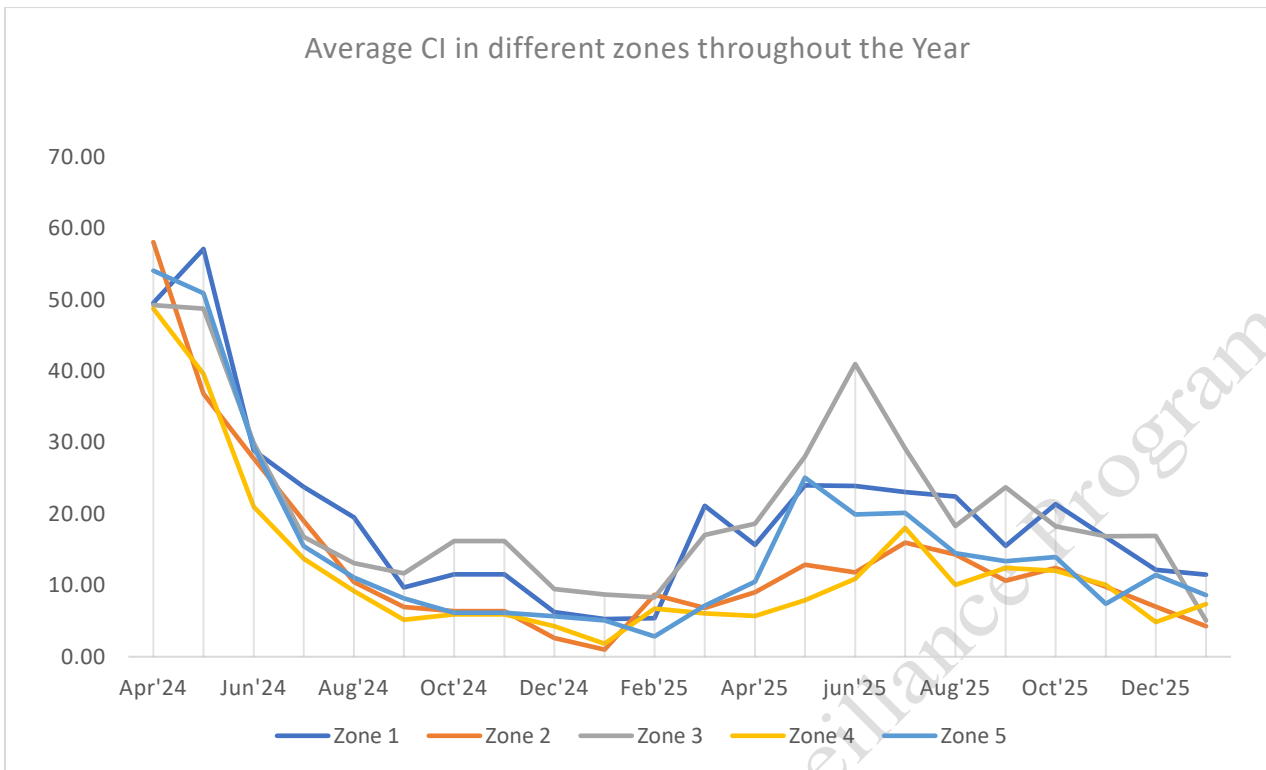
\*NB: “A” stands for Average from 1<sup>st</sup> week.



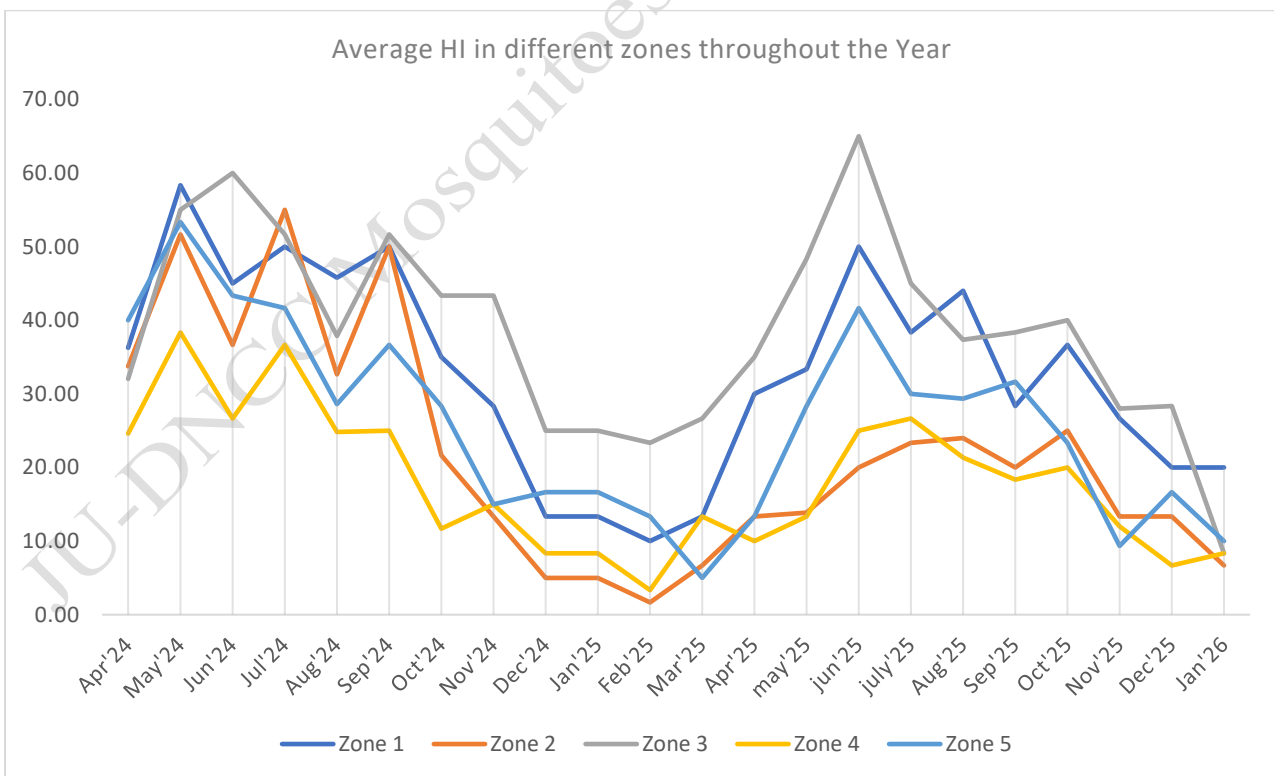
**Fig 7: Mosquitoes population fluctuation (BI, CI, HI) from Week 1 to Week 88 (May 2, 2024 - January 27, 2026)**



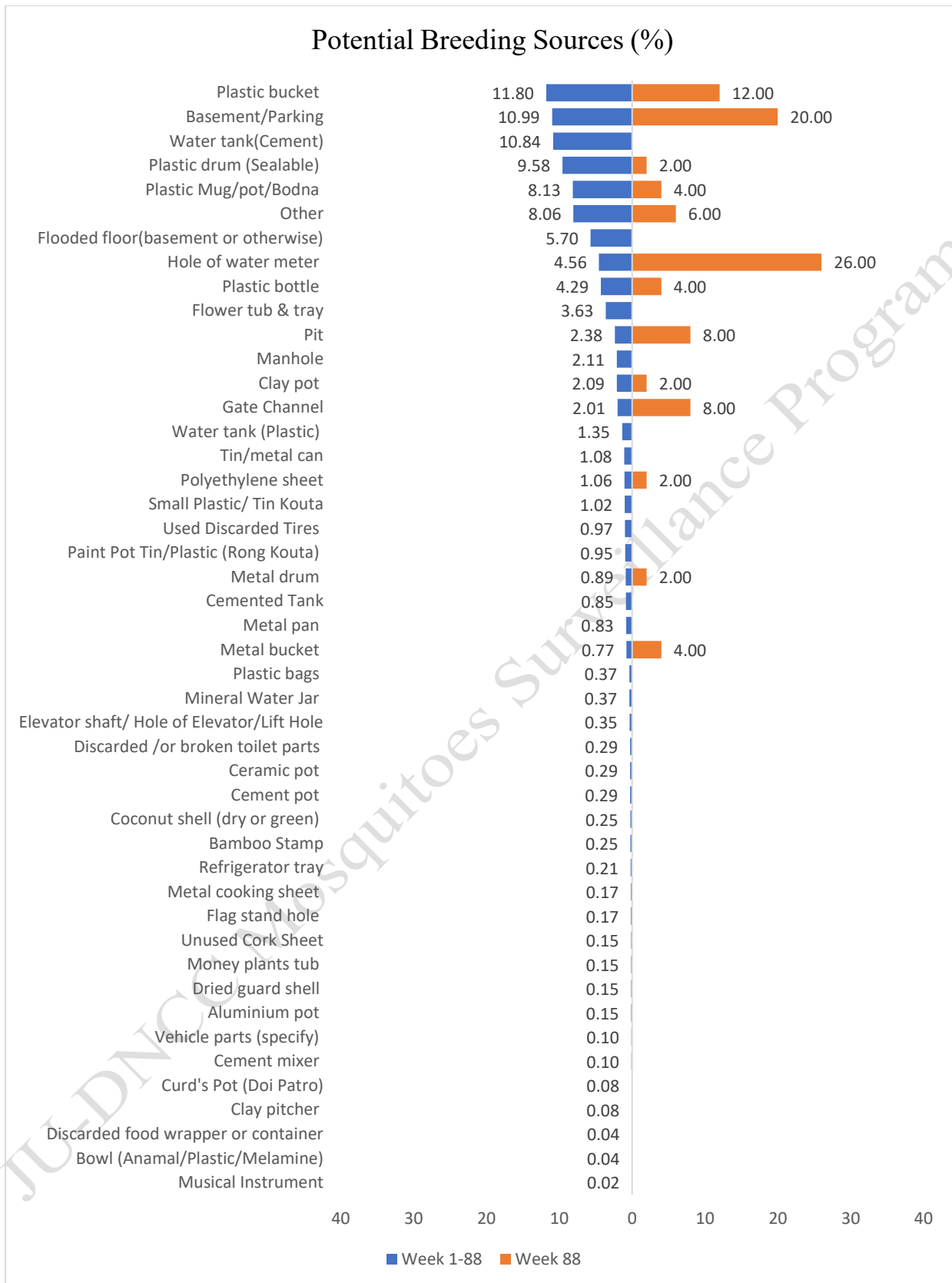
**Fig. 8: Breteau Index (BI) in Different Zones from Week 1 to Week 88 (May 2, 2024 - January 27, 2026)**



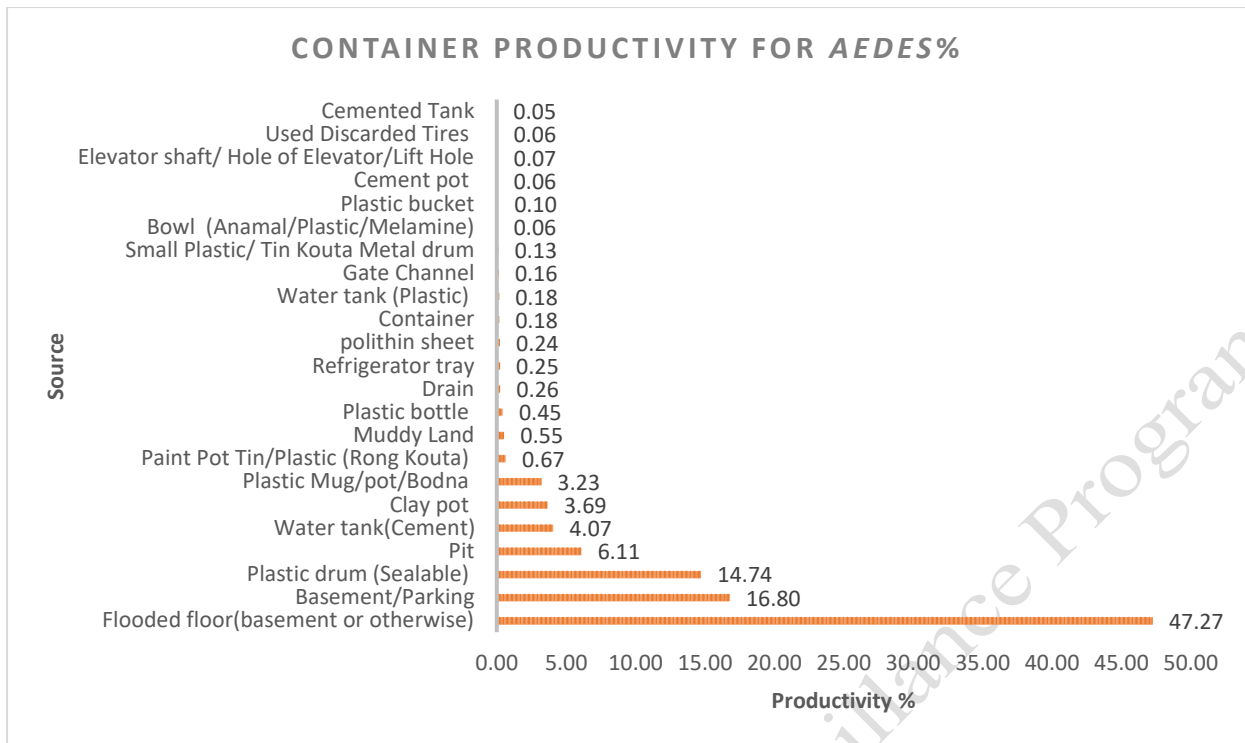
**Fig. 9: Container Index (CI) in Different Zones from Week 1 to Week 88 (May 2, 2024 - January 27, 2026)**



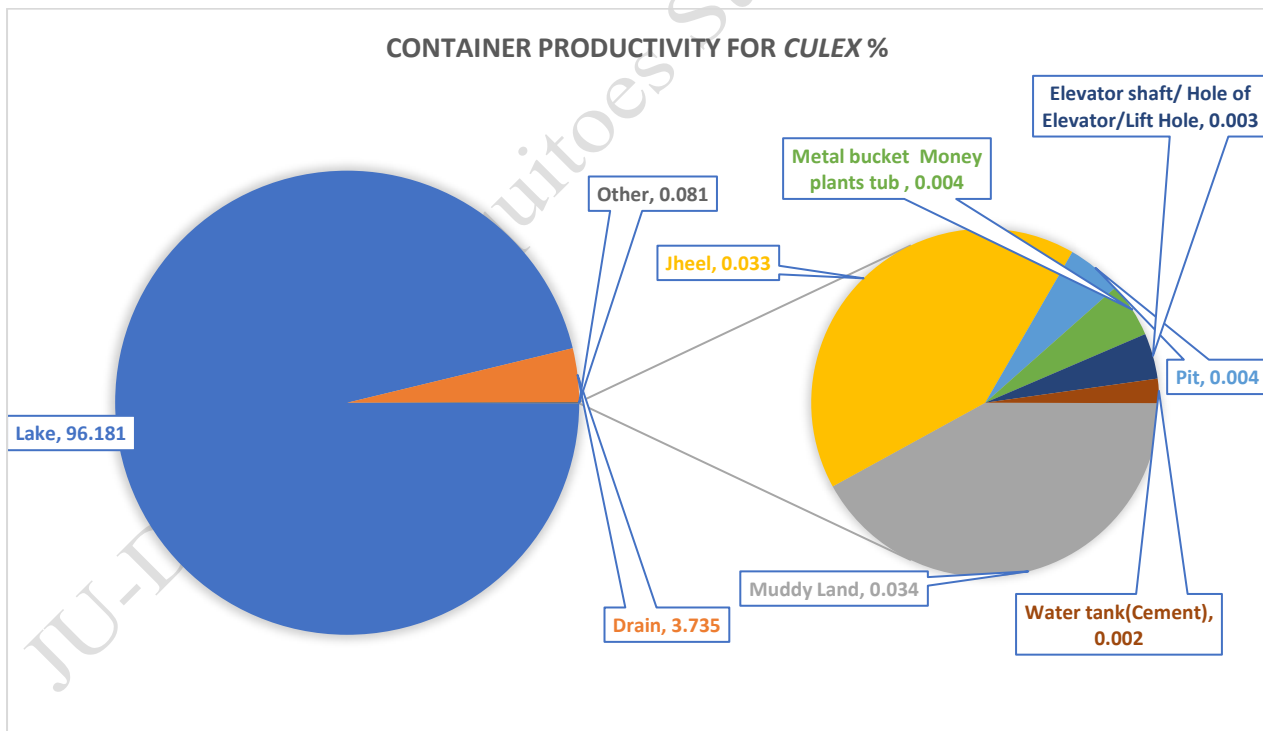
**Fig. 10: House Index (HI) in Different Zones from Week 1 to Week 88 (May 2, 2024 - January 27, 2026)**



**Fig. 11: Container Frequency for *Aedes* mosquitoes in Zones (1-5)**



**Fig. 12: Container Productivity of *Aedes* mosquito in DNCC from Week 1 to Week 88 (May 2, 2024 - January 27, 2026)**



**Fig. 13: Container Productivity of *Culex* mosquito in DNCC, from Week 1 to Week 88 (May 2, 2024 - January 27, 2026)**

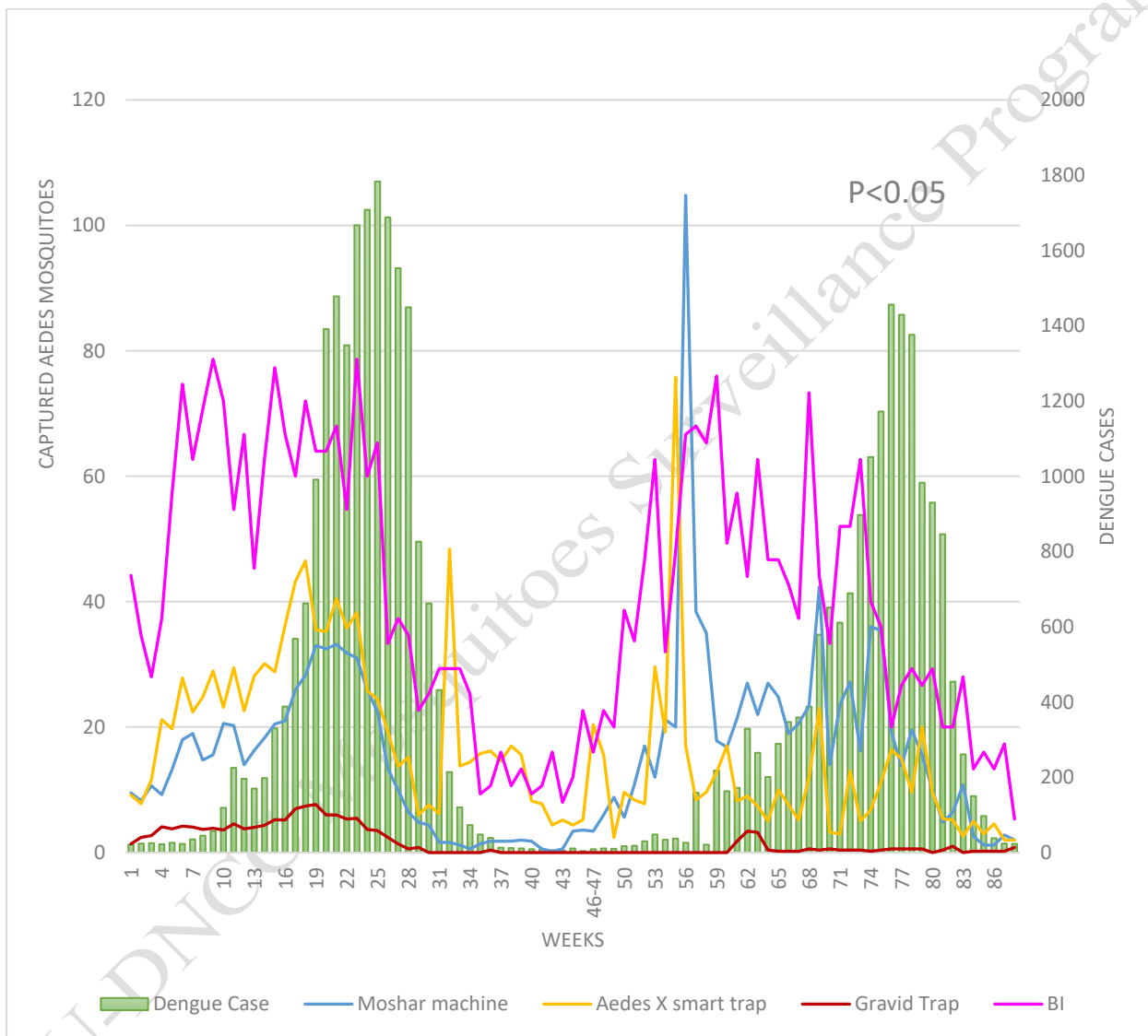
**Table 6: Container Frequency & Probable potential Wet Container in zones (1-5) from Week 1 to Week 88 (May 2, 2024 - January 27, 2026)**

Sources	+House	-WC	+WC	Total WC	% WC	% PWC
Plastic bucket	192	261	308	569	11.80	6.38
Basement/Parking	201	40	490	530	10.99	10.16
Water tank(Cement)	162	252	271	523	10.84	5.62
Plastic drum (Sealable)	221	78	384	462	9.58	7.96
Plastic Mug/pot/Bodna	164	82	310	392	8.13	6.43
Other	187	128	261	389	8.06	5.41
Flooded floor(basement or otherwise)	128	138	137	275	5.70	2.84
Hole of water meter	44	4	216	220	4.56	4.48
Plastic bottle	79	63	144	207	4.29	2.99
Flower tub & tray	65	25	150	175	3.63	3.11
Pit	59	22	93	115	2.38	1.93
Manhole	55	29	73	102	2.11	1.51
Clay pot	83	11	90	101	2.09	1.87
Gate Channel	31	33	64	97	2.01	1.33
Water tank (Plastic)	20	28	37	65	1.35	0.77
Tin/metal can	30	0	52	52	1.08	1.08
Polyethylene sheet	33	3	48	51	1.06	1.00
Small Plastic/ Tin Kouta	24	9	40	49	1.02	0.83
Used Discarded Tires	28	16	31	47	0.97	0.64
Paint Pot Tin/Plastic (Rong Kouta)	30	5	41	46	0.95	0.85
Metal drum	17	7	36	43	0.89	0.75
Cemented Tank	22	13	28	41	0.85	0.58
Metal pan	17	3	37	40	0.83	0.77
Metal bucket	20	5	32	37	0.77	0.66
Mineral Water Jar	6	4	14	18	0.37	0.29
Plastic bags	8	1	17	18	0.37	0.35
Elevator shaft/ Hole of Elevator/Lift Hole	6	4	13	17	0.35	0.27
Cement pot	11	0	14	14	0.29	0.29
Ceramic pot	13	0	14	14	0.29	0.29
Discarded /or broken toilet parts	11	2	12	14	0.29	0.25
Bamboo Stamp	9	0	12	12	0.25	0.25
Coconut shell (dry or green)	4	0	12	12	0.25	0.25
Refrigerator tray	8	0	10	10	0.21	0.21
Flag stand hole	4	1	7	8	0.17	0.15
Metal cooking sheet	2	0	8	8	0.17	0.17
Aluminium pot	4	0	7	7	0.15	0.15
Dried guard shell	4	0	7	7	0.15	0.15
Money plants tub	5	0	7	7	0.15	0.15
Unused Cork Sheet	5	1	6	7	0.15	0.12
Cement mixer	2	0	5	5	0.10	0.10
Vehicle parts (specify)	3	1	4	5	0.10	0.08
Clay pitcher	3	1	3	4	0.08	0.06
Curd's Pot (Doi Patro)	3	0	4	4	0.08	0.08
Bowl (Anamal/Plastic/Melamine)	2	0	2	2	0.04	0.04
Discarded food wrapper or container	1	0	2	2	0.04	0.04
Musical Instrument	1	0	1	1	0.02	0.02

**Table 7: Percentage of breeding sources in different zone from Week 1 to Week 88 (May 2, 2024 - January 27, 2026)**

Containers	Percentage of Breeding Sources				
	Zone 01	Zone 02	Zone 03	Zone 04	Zone 05
Plastic bucket	2.05	2.09	2.32	2.92	2.40
Basement/Parking	2.82	1.58	2.90	1.12	2.57
Water tank(Cement)	1.37	1.74	1.45	3.21	3.07
Plastic drum (Sealable)	1.41	2.30	1.64	2.22	2.01
Plastic Mug/pot/Bodna	1.45	1.43	1.58	2.32	1.35
Other	2.65	1.41	2.14	0.73	1.14
Flooded floor(basement or otherwise)	1.47	1.26	0.95	0.62	1.39
Hole of water meter	0.60	0.95	0.21	1.33	1.47
Plastic bottle	0.56	1.00	0.62	1.12	1.00
Flower tub & tray	1.12	0.62	1.10	0.48	0.31
Pit	0.66	0.27	0.81	0.33	0.31
Manhole	0.87	0.25	0.66	0.23	0.10
Clay pot	0.25	0.44	0.64	0.25	0.52
Gate Channel	0.73	0.21	0.56	0.08	0.44
Water tank (Plastic)	0.00	0.85	0.19	0.17	0.15
Tin/metal can	0.31	0.29	0.21	0.21	0.06
Polyethylene sheet	0.29	0.29	0.21	0.19	0.08
Small Plastic/ Tin Kouta	0.27	0.19	0.29	0.12	0.15
Used Discarded Tires	0.37	0.27	0.19	0.08	0.06
Paint Pot Tin/Plastic (Rong Kouta)	0.23	0.10	0.29	0.21	0.12
Metal drum	0.17	0.10	0.23	0.29	0.10
Cemented Tank	0.17	0.12	0.21	0.25	0.10
Metal pan	0.19	0.15	0.27	0.08	0.15
Metal bucket	0.12	0.08	0.23	0.17	0.17
Mineral Water Jar	0.04	0.02	0.06	0.17	0.08
Plastic bags	0.04	0.02	0.08	0.12	0.10
Elevator shaft/ Hole of Elevator/Lift Hole	0.15	0.08	0.06	0.00	0.06
Cement pot	0.04	0.00	0.12	0.02	0.10
Ceramic pot	0.06	0.02	0.06	0.02	0.12

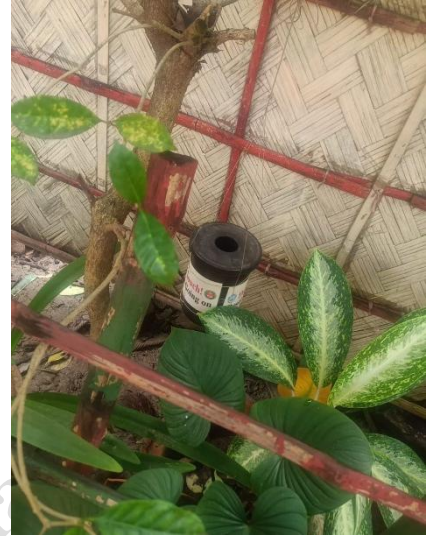




**Fig. 14: Correlation between Dengue Cases and *Aedes* Mosquitoes Captured by per Moshar Machine CO<sub>2</sub> traps, Aedes X smart traps, and Gravid traps**

**NB: DNCC dengue cases only**

### Photographs of Mosquitoes Surveillance



### Samples Collection from Field



### Samples Processing and Identification



**Comments:**

Overall mosquito density is rising but the dengue cases now declining rapidly. Furthermore, the Breteau Index (BI) is has gone down. It is high time for taking precaution and preparation for future. Moreover, this highlights the importance of continued surveillance to uncover hidden risks and to guide timely interventions.

**For Aedes Mosquito Control**

- Aedes mosquito density varies across locations, with notable breeding found in plastic drums, buckets, flooded basements, and water tanks, as seen in larval and trap data.
- Continuous surveillance is essential to monitor trends and target control interventions effectively.
- Frequent cleaning and management of water-holding containers (e.g., pots, bottles, plastic drums, and construction site debris) are vital.
- Permanent breeding habitats should be managed with larvicides or Insect Growth Regulators (IGRs) for sustained control.
- Construction sites must be regularly inspected and treated due to their high potential for breeding.

**For Other Mosquito Control**

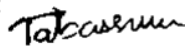
- Drainage systems should be kept flowing to prevent stagnant water accumulation.
- Canals, ponds, lakes, and muddy lowlands should be cleaned of waste, weeds, and organic matter.
- Septic tanks must be covered and regularly maintained.
- Emphasis should be placed on slum areas and waterlogged urban zones, which are significant breeding grounds for Culex mosquitoes.

**Public Awareness and Community Involvement**

- Launch targeted awareness campaigns, especially in vulnerable and high-risk areas.
- Encourage communities to eliminate standing water regularly.
- Promote participatory surveillance and control efforts, including homeowner engagement in larval source reduction.

**Copy sent for your information and further action (FYI/FA):**

1. CHO, Health Department, Dhaka North City Corporation
2. Secretary, Dhaka North City Corporation
3. PS to Administrator, Dhaka North City Corporation
4. Staff Officer of CEO, Dhaka North City Corporation
5. Office Copy



**(Tabassum Mostofa Mim)**  
**Entomologist**  
**IRES**  
**JU-DNCC Collaboration Center**



**(Prof. Dr. Kabirul Bashar)**  
**Focal person**  
**IRES**  
**JU-DNCC Collaboration Center**