



Weekly Report on JU-DNCC Mosquitoes Surveillance Program

Week 091 (February 13-17, 2026)

Submitted To

Chief Health officer
Dhaka North City Corporation
Dhaka, Bangladesh

Submitted By

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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.

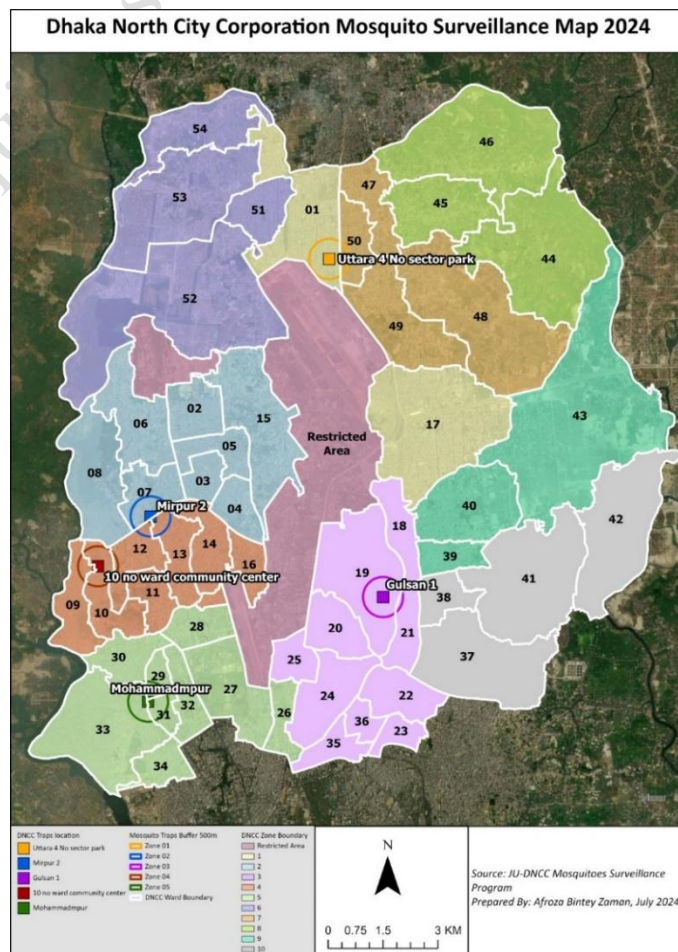
Zone	Traps Location	GPS Location
01	Uttara-4 No sector park	23.8613672,90.4035528
02	Mirpur-2, Vander office, DNCC	23.8036248,90.3601995
03	Gulsan 1, Purantan Vander office	23.7860557,90.4164024
04	10 No ward community center, Mirpur-1	23.7922967,90.3467992
05	Mohammadpur regional office of DNCC	23.7618721,90.3590884

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 (CO₂) traps in Weeks 91 (February 13-17, 2026)

Zone	N	<i>Ae. aegypti</i>	<i>Ae. Albopictus</i>	<i>Cx. quinquefasciatus</i>	<i>Cx. tritaeniorhynchus</i>	<i>Ar. subalbatus</i>	<i>An. subpictus</i>	<i>An. philippinensis</i>
1	13789	0	1	11250	2459	76	1	2
2	8188	3	0	6017	1599	561	0	8
3	5798	7	0	4627	1085	79	0	0
4	2322	2	0	1709	561	49	1	0
5	1633	6	0	1288	264	73	1	1
Total	31730	18	1	24891	5968	838	3	11
%	100.00	0.06	0.00	78.45	18.81	2.64	0.01	0.03

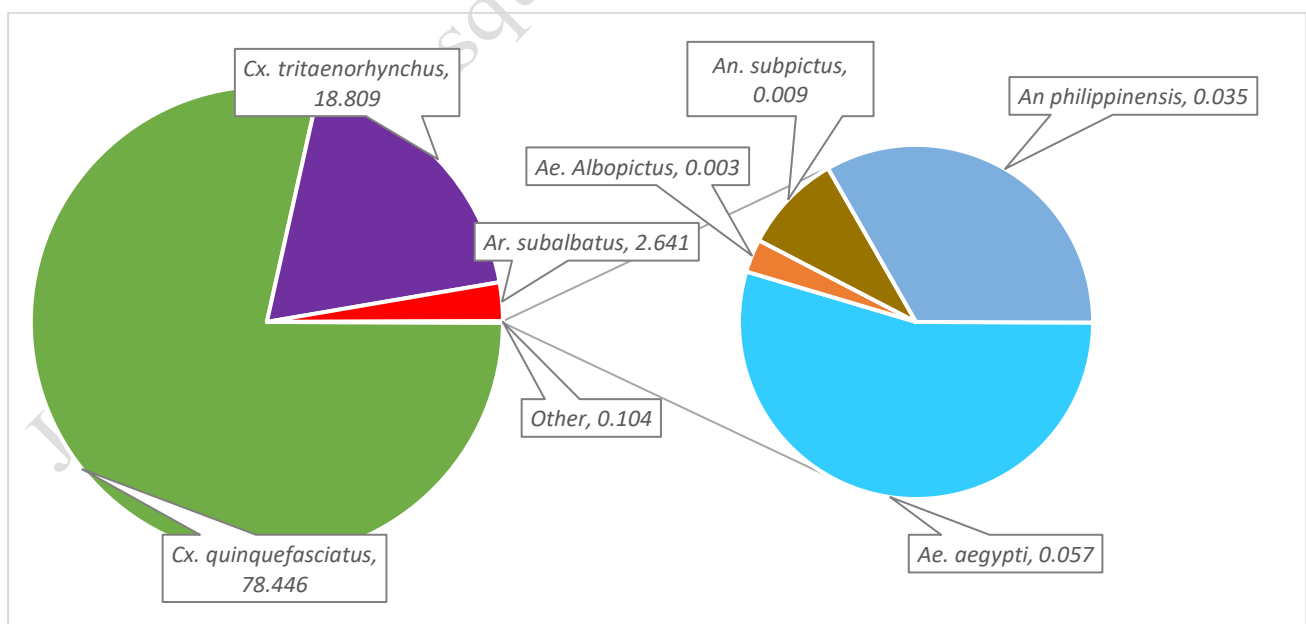


Fig. 1: Percentage of Adult Mosquitoes Collected by Moshar Machine (CO₂) traps in Weeks 91 (February 13-17, 2026)

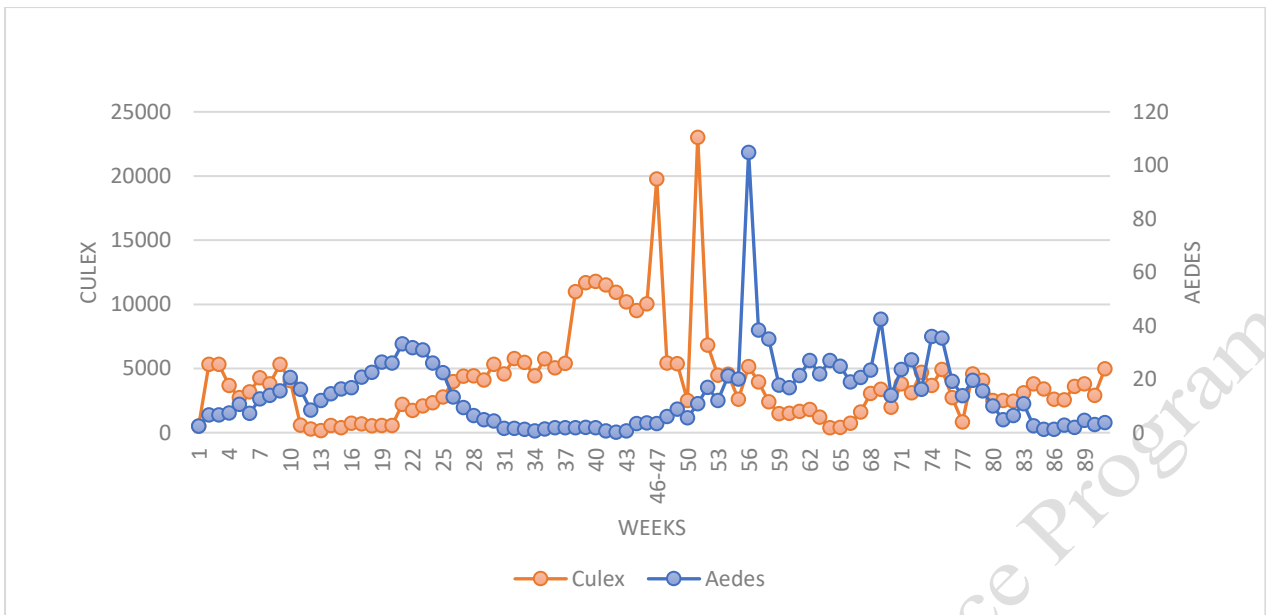


Fig 2: Average number of mosquitoes per Moshar Machine (CO₂) traps from Week 1 to Week 91 (May 2, 2024 - February 17, 2026)

Table 2. Collected Mosquito Larvae from *Aedes* X smart Traps in Weeks 91 (February 13-17, 2026)

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

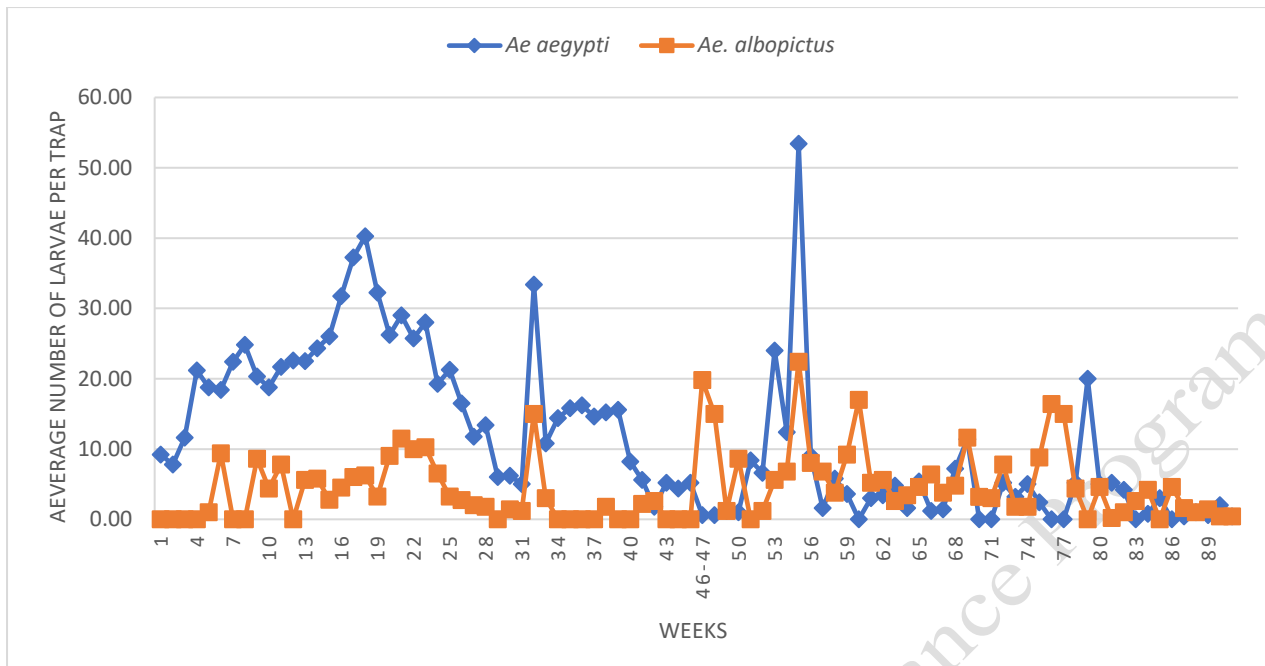


Fig 3: Average Number of Aedes Larvae per Aedes X Smart Trap in Zones 1-5 from Week 1 to Week 91 (May 2, 2024 - February 17, 2026)

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	1	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	1	1	0	0
Total	2	2	0	0
(%)	100	100.00	0.00	0.00

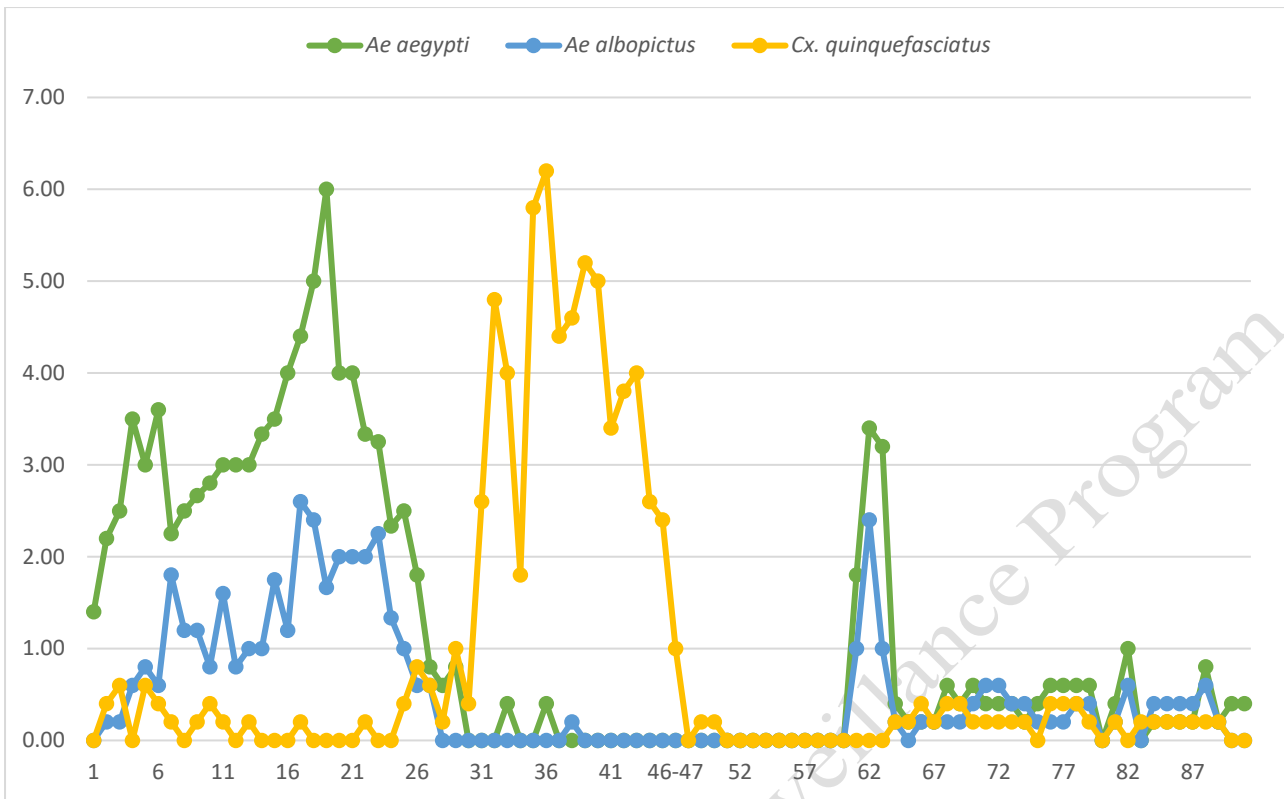


Fig 4: Average number of adult mosquitoes per Gravid trap in zones 1-5 from Week 1 to Week 91 (May 2, 2024 - February 17, 2026)

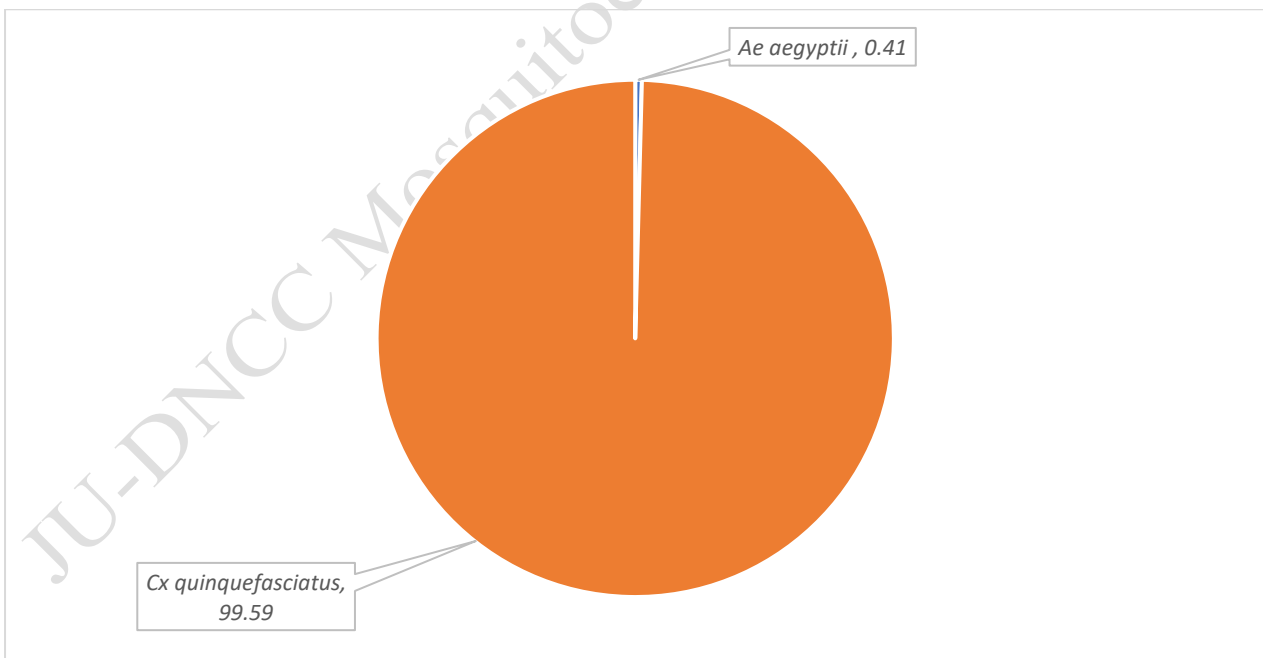


Fig. 5: Percentage of Mosquito Larvae from Zones (1-5) in Weeks 91 (February 13-17, 2026)

Table 4. Positive Larval Spots in Different Zones (1-5) with Estimated Number of Larvae in Weeks 91 (February 13-17, 2026)

Zone	GPS Location	<i>Ae. aegypti</i>	<i>Ae. albopictus</i>	<i>Cx. quinquefasciatus</i>	<i>Ar. subalbatus</i>	Source
1	23.8617353 90.4051448	0	0	52	0	Other
	23.8616553 90.4058182	0	0	21	0	Other
	23.8616847 90.4058916	0	0	5896	0	Drain
	23.8616747 90.4058556	21	0	0	0	Plastic drum (Sealable)
	Sub Total	21	0	5969	0	
2	23.8016681 90.3564864	0	0	5876	0	Drain
	23.800283 90.3570518	0	0	5869	0	Drain
	Sub Total	0	0	11745	0	
3	23.785052 90.4192848	21	0	0	0	Other
	23.7851336 90.4198288	0	0	6855	0	Lake
	23.7843421 90.4190873	0	0	59	0	Basement/Parking
	Sub Total	21	0	6914	0	
5	23.7618266 90.3583133	0	0	21	0	Other
	23.7616621 90.3575905	51	0	0	0	Hole of water meter
	23.7616503 90.3572216	9	0	0	0	Hole of water meter
	Sub Total	60	0	21	0	
Grand Total		102	0	24649	0	102

Household Positive ● Negative ● Positive



Map 1: Positive and Negative House of Uttara 4 No. Sector at Weeks 91

Household Positive ● Negative ● Positive



Map 2: Positive and Negative House of Mirpur 2 at Weeks 91

Household Positive ● Negative ● Positive



Map 3: Positive and Negative House of Gulsan 1 at Weeks 91

Household Positive ● Negative ● Positive



Map 4: Positive and Negative House of Mirpur 1 at Weeks 91

Household Positive ● Negative ● Positive



Map 5: Positive and Negative House of Mohammadpur at Weeks 91

Table 5: Positive House, Wet Container, BI, CI and HI in Zones (1-5) in Weeks 91 (February 13-17, 2026)

Zone	Total House	Positive House	Total Wet container	Positive Wet Container	BI	CI	HI
1	15	4	35	5	33.33	14.29	26.67
2	15	3	27	3	20.00	11.11	20.00
3	15	2	24	2	13.33	8.33	13.33
4	15	0	21	0	0.00	0.00	0.00
5	15	3	27	3	20.00	11.11	20.00

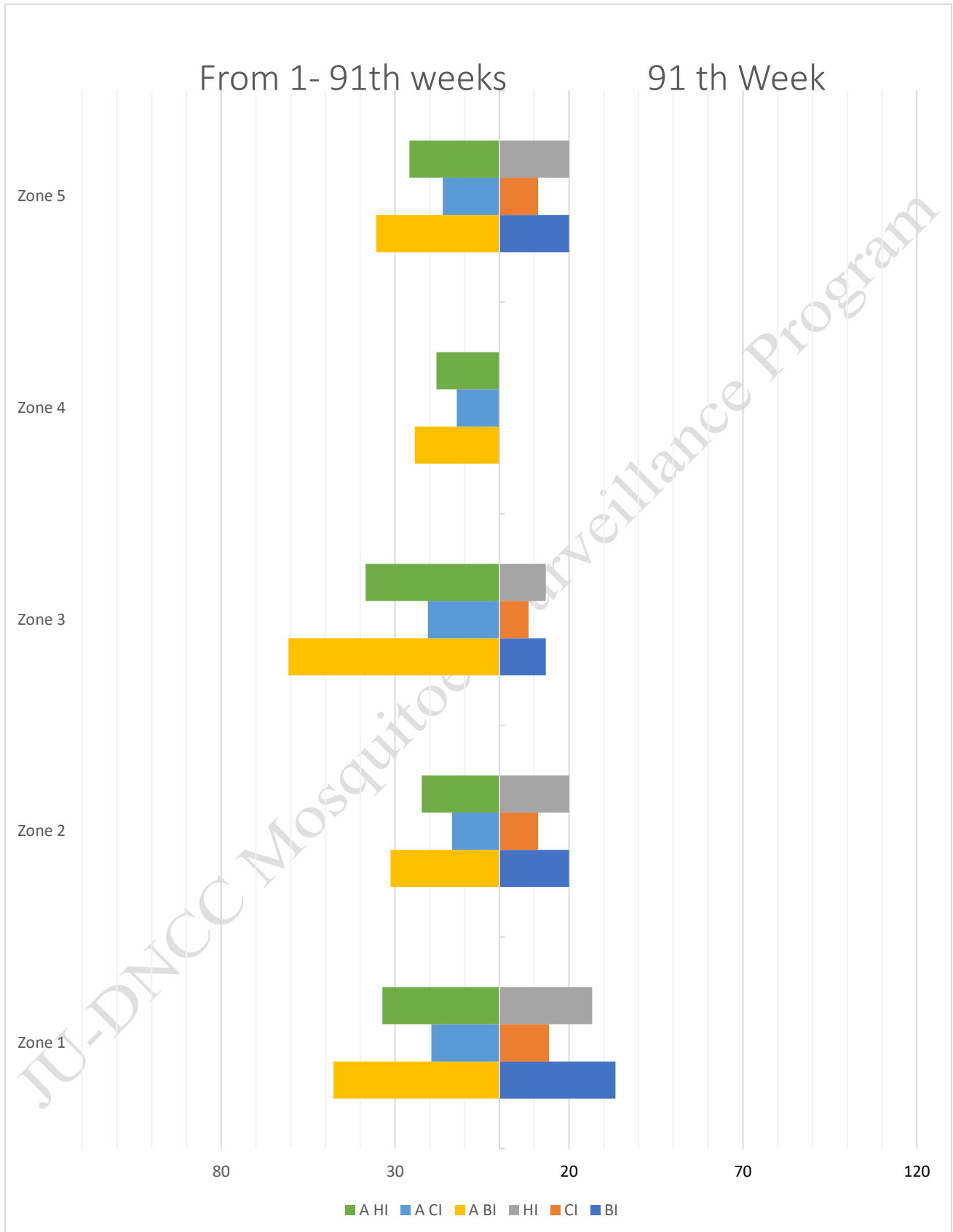


Fig. 6: BI, CI and HI in Different Zones (1-5) of Dhaka north City Corporation

***NB: “A” stands for Average from 1st week.**

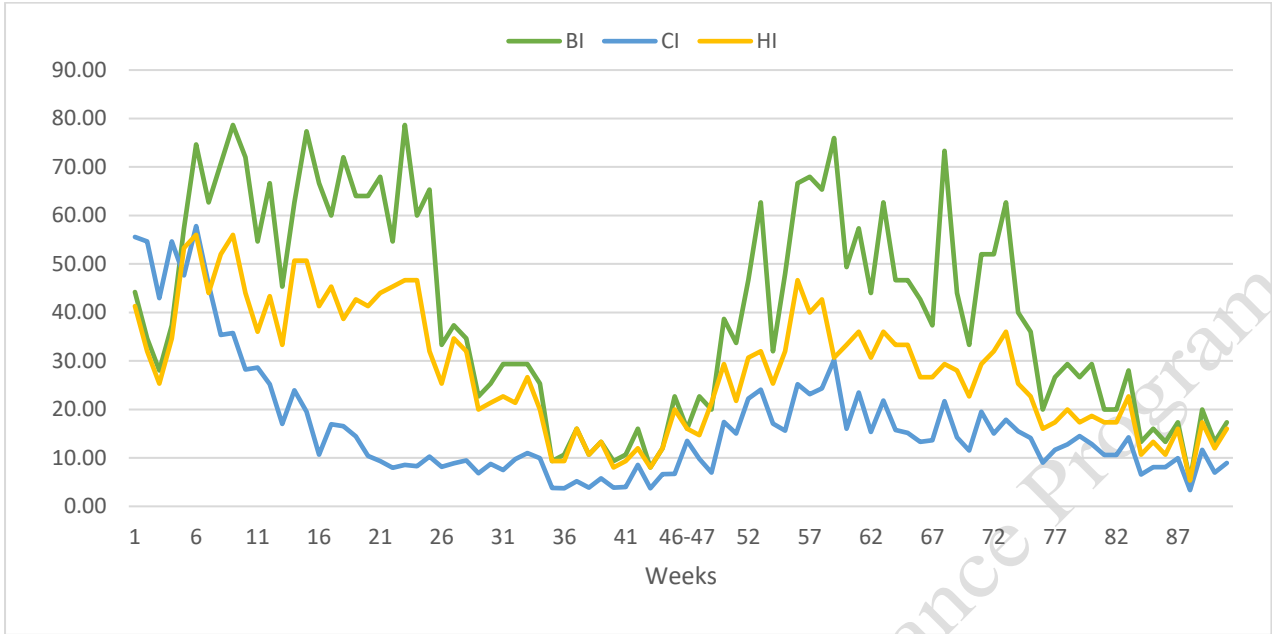


Fig 7: Mosquitoes population fluctuation (BI, CI, HI) from Week 1 to Week 91 (May 2, 2024 - February 17, 2026)

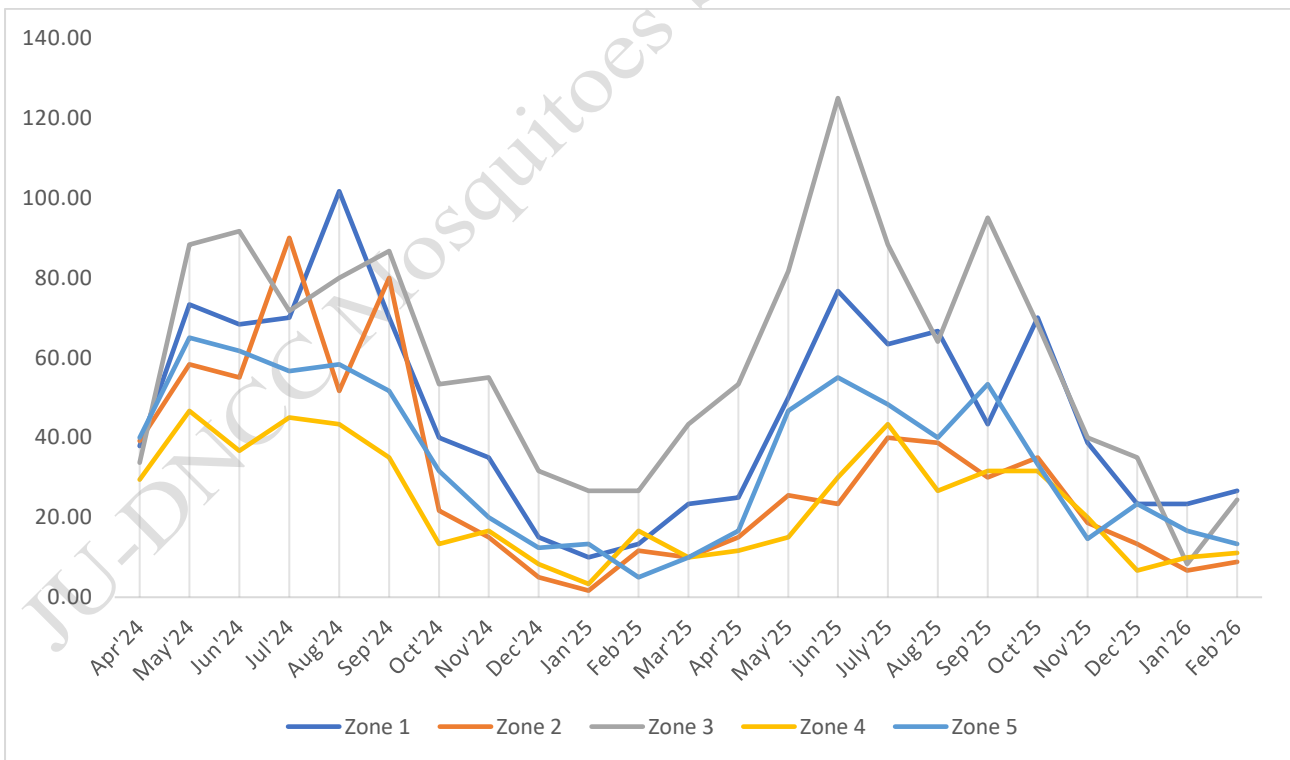


Fig. 8: Breteau Index (BI) in Different Zones from Week 1 to Week 91 (May 2, 2024 - February 17, 2026)

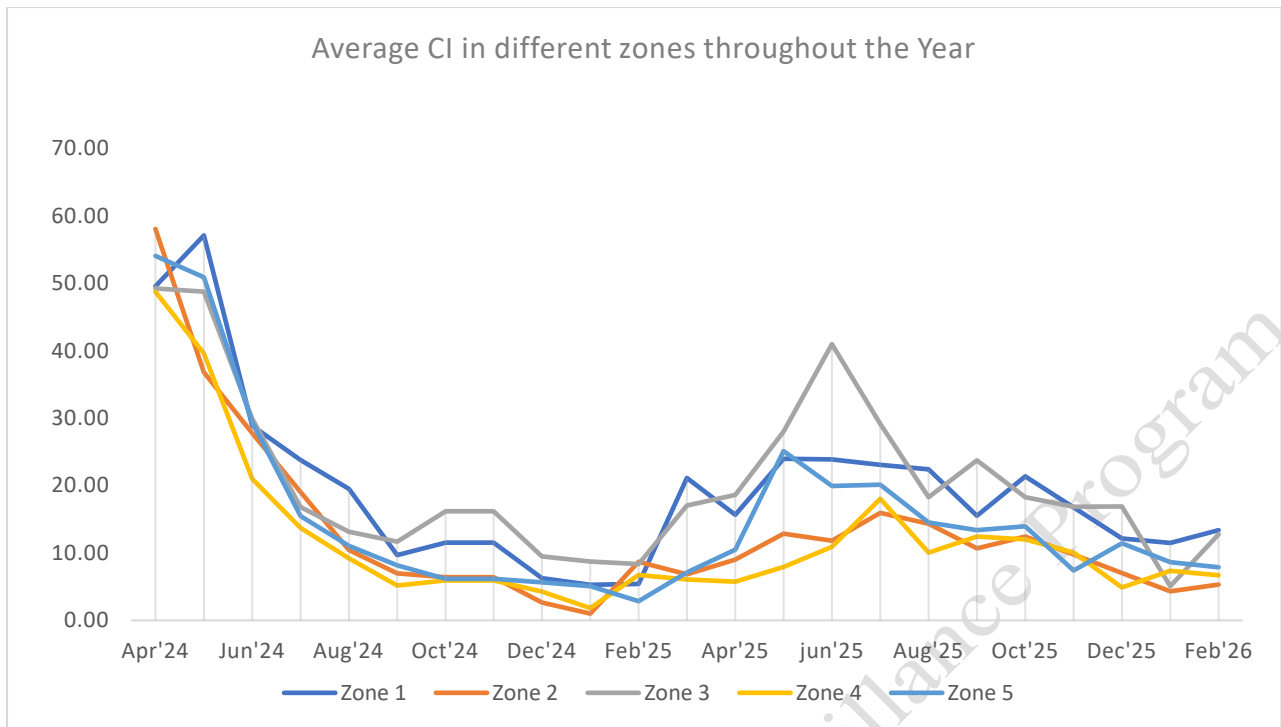


Fig. 9: Container Index (CI) in Different Zones from Week 1 to Week 91 (May 2, 2024 - February 17, 2026)

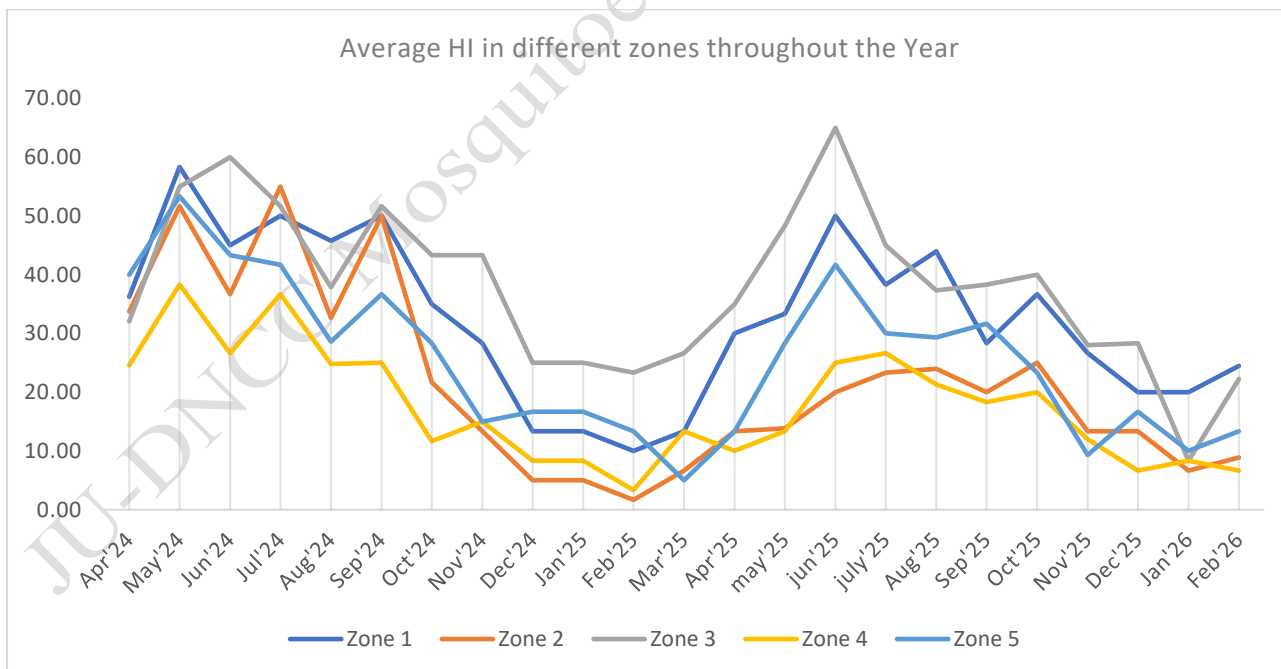


Fig. 10: House Index (HI) in Different Zones from Week 1 to Week 91 (May 2, 2024 - February 17, 2026)

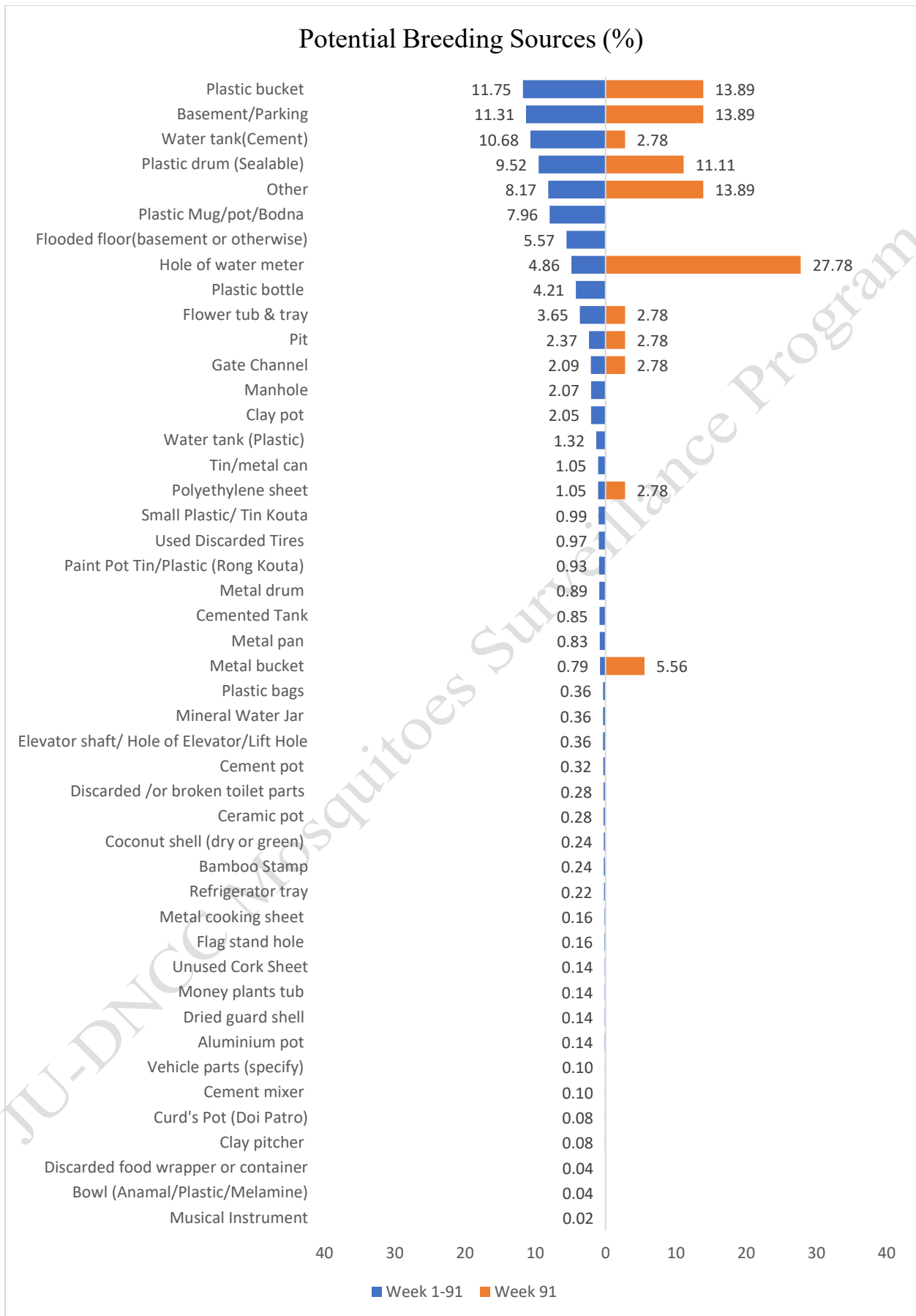


Fig. 11: Container Frequency for *Aedes* mosquitoes in Zones (1-5)

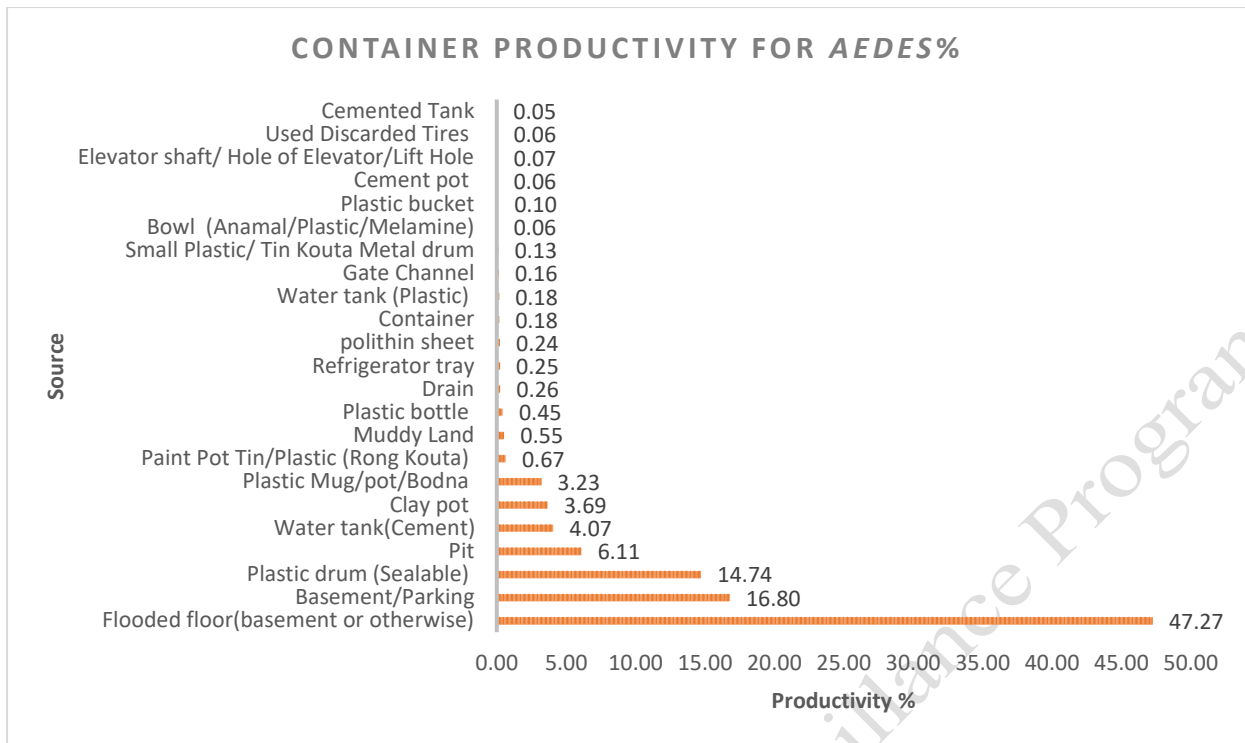


Fig. 12: Container Productivity of *Aedes* mosquito in DNCC from Week 1 to Week 91 (May 2, 2024 - February 17, 2026)

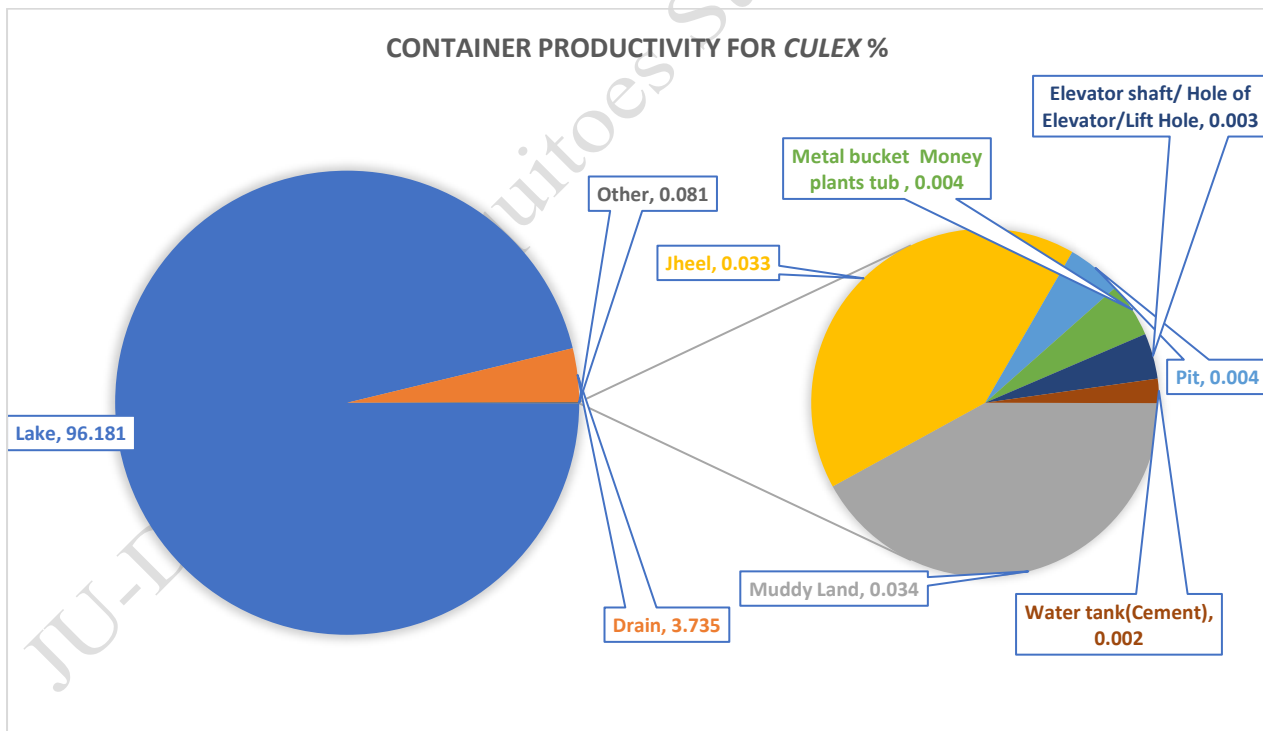


Fig. 13: Container Productivity of *Culex* mosquito in DNCC, from Week 1 to Week 91 (May 2, 2024 - February 17, 2026)

Table 6: Container Frequency & Probable potential Wet Container in zones (1-5) from Week 1 to Week 91 (May 2, 2024 - February 17, 2026)

Sources	+House	-WC	+WC	Total WC	% WC	% PWC
Plastic bucket	194	261	319	580	11.75	6.46
Basement/Parking	206	40	518	558	11.31	10.50
Water tank(Cement)	163	252	275	527	10.68	5.57
Plastic drum (Sealable)	224	78	392	470	9.52	7.94
Other	195	128	275	403	8.17	5.57
Plastic Mug/pot/Bodna	164	82	311	393	7.96	6.30
Flooded floor(basement or otherwise)	128	138	137	275	5.57	2.78
Hole of water meter	49	4	236	240	4.86	4.78
Plastic bottle	79	63	145	208	4.21	2.94
Flower tub & tray	65	25	155	180	3.65	3.14
Pit	60	22	95	117	2.37	1.93
Gate Channel	31	33	70	103	2.09	1.42
Manhole	55	29	73	102	2.07	1.48
Clay pot	83	11	90	101	2.05	1.82
Water tank (Plastic)	20	28	37	65	1.32	0.75
Polyethylene sheet	33	3	49	52	1.05	0.99
Tin/metal can	30	0	52	52	1.05	1.05
Small Plastic/ Tin Kouta	24	9	40	49	0.99	0.81
Used Discarded Tires	28	16	32	48	0.97	0.65
Paint Pot Tin/Plastic (Rong Kouta)	30	5	41	46	0.93	0.83
Metal drum	17	7	37	44	0.89	0.75
Cemented Tank	22	13	29	42	0.85	0.59
Metal pan	17	3	38	41	0.83	0.77
Metal bucket	20	5	34	39	0.79	0.69
Elevator shaft/ Hole of Elevator/Lift Hole	7	4	14	18	0.36	0.28
Mineral Water Jar	6	4	14	18	0.36	0.28
Plastic bags	8	1	17	18	0.36	0.34
Cement pot	11	1	15	16	0.32	0.30
Ceramic pot	13	0	14	14	0.28	0.28
Discarded /or broken toilet parts	11	2	12	14	0.28	0.24
Bamboo Stamp	9	0	12	12	0.24	0.24
Coconut shell (dry or green)	4	0	12	12	0.24	0.24
Refrigerator tray	8	0	11	11	0.22	0.22
Flag stand hole	4	1	7	8	0.16	0.14
Metal cooking sheet	2	0	8	8	0.16	0.16
Aluminium pot	4	0	7	7	0.14	0.14
Dried guard shell	4	0	7	7	0.14	0.14
Money plants tub	5	0	7	7	0.14	0.14
Unused Cork Sheet	5	1	6	7	0.14	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 91 (May 2, 2024 - February 17, 2026)

Containers	Percentage of Breeding Sources				
	Zone 01	Zone 02	Zone 03	Zone 04	Zone 05
Plastic bucket	2.03	2.09	2.31	2.94	2.39
Basement/Parking	2.84	1.64	2.94	1.16	2.74
Water tank(Cement)	1.38	1.70	1.44	3.14	3.02
Plastic drum (Sealable)	1.42	2.27	1.66	2.19	1.99
Other	2.67	1.38	2.21	0.73	1.18
Plastic Mug/pot/Bodna	1.44	1.40	1.54	2.27	1.32
Flooded floor(basement or otherwise)	1.44	1.24	0.93	0.61	1.36
Hole of water meter	0.65	0.95	0.22	1.48	1.56
Plastic bottle	0.55	0.99	0.61	1.09	0.97
Flower tub & tray	1.11	0.63	1.13	0.47	0.30
Pit	0.65	0.28	0.79	0.32	0.32
Gate Channel	0.77	0.20	0.61	0.08	0.43
Manhole	0.85	0.24	0.65	0.22	0.10
Clay pot	0.24	0.43	0.63	0.24	0.51
Water tank (Plastic)	0.00	0.83	0.18	0.16	0.14
Polyethylene sheet	0.30	0.28	0.20	0.18	0.08
Tin/metal can	0.30	0.28	0.20	0.20	0.06
Small Plastic/ Tin Kouta	0.26	0.18	0.28	0.12	0.14
Used Discarded Tires	0.36	0.26	0.18	0.08	0.08
Paint Pot Tin/Plastic (Rong Kouta)	0.22	0.10	0.28	0.20	0.12
Metal drum	0.16	0.10	0.22	0.30	0.10
Cemented Tank	0.16	0.12	0.20	0.24	0.12
Metal pan	0.18	0.14	0.26	0.10	0.14
Metal bucket	0.12	0.08	0.24	0.18	0.16
Elevator shaft/ Hole of Elevator/Lift Hole	0.14	0.08	0.08	0.00	0.06
Mineral Water Jar	0.04	0.02	0.06	0.16	0.08
Plastic bags	0.04	0.02	0.08	0.12	0.10
Cement pot	0.04	0.00	0.12	0.02	0.14
Ceramic pot	0.06	0.02	0.06	0.02	0.12

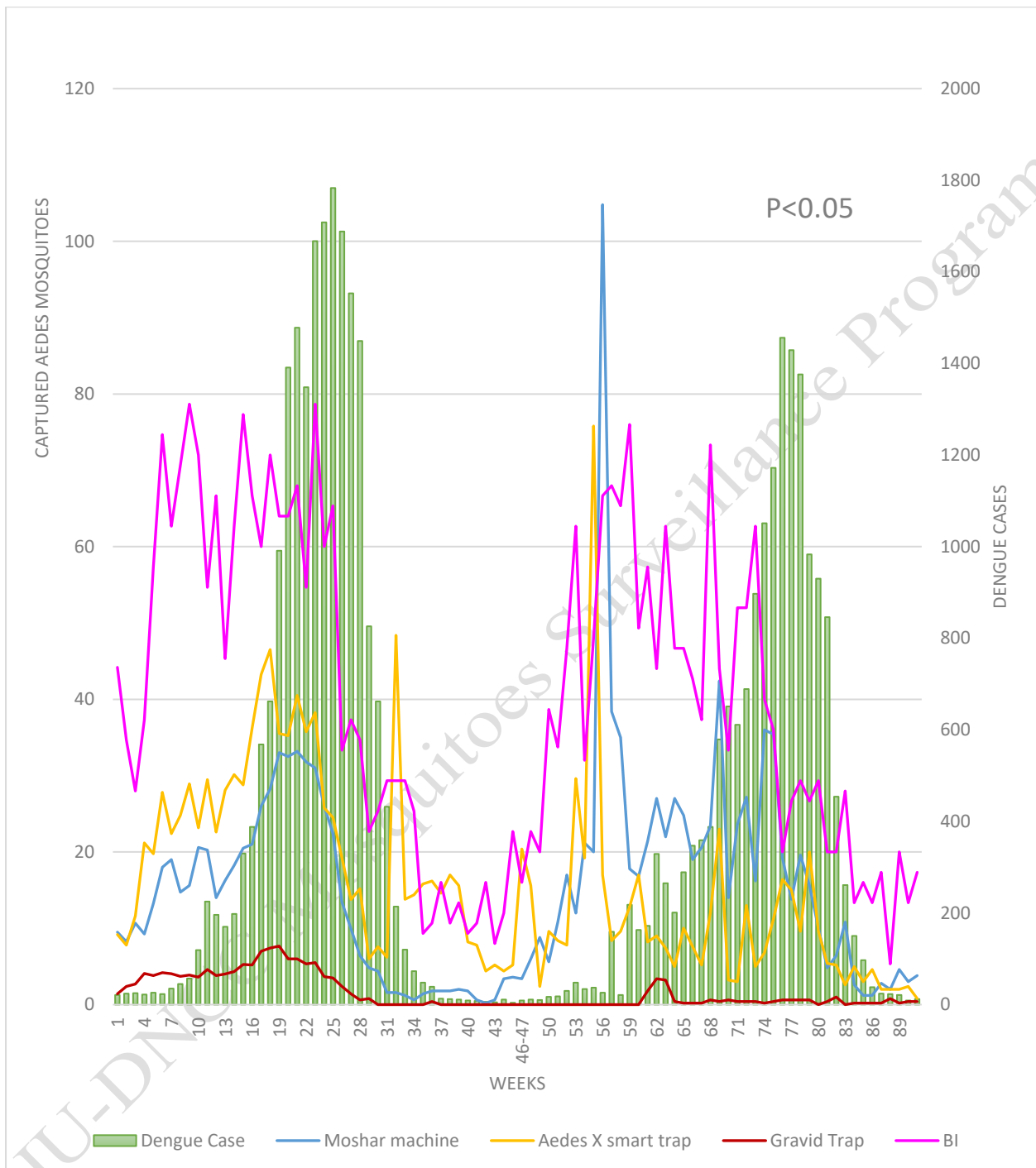


Fig. 14: Correlation between Dengue Cases and *Aedes* Mosquitoes Captured by per Moshar Machine CO₂ traps, Aedes X smart traps, and Gravid traps

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. However, the Breteau Index (BI) is has gone Higher. 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

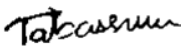
- Drainage systems should be kept flowing to prevent stagnant water accumulation.
- Canals, ponds, lakes, and muddy lowlands should be cleaned of waste, weeds, and organic matter.
- Septic tanks must be covered and regularly maintained.
- Emphasis should be placed on slum areas and waterlogged urban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