

Vector Control Initiatives across Canals of New Town



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The New Town Kolkata Development Authority (NKDA) has taken strong and effective steps to control the spread of disease-carrying vectors. In a city enclosed by a network of canals, stagnant water bodies often become prime breeding grounds for mosquitoes, making targeted canal-centric interventions essential. Addressing these water-linked challenges is key to preventing outbreaks of vector-borne diseases and ensuring a healthier urban environment. NKDA undertakes the following initiatives to ensure appropriate vector control measures across the canals of New Town:



Technological interventions have been employed across the canal network, with particular attention given to identifying high-risk zones for mosquito breeding through aerial surveillance methods.

Steps have been taken to stop mosquito larvae from growing, using both spraying and manual removal, while also keeping canals free from waste and weeds.



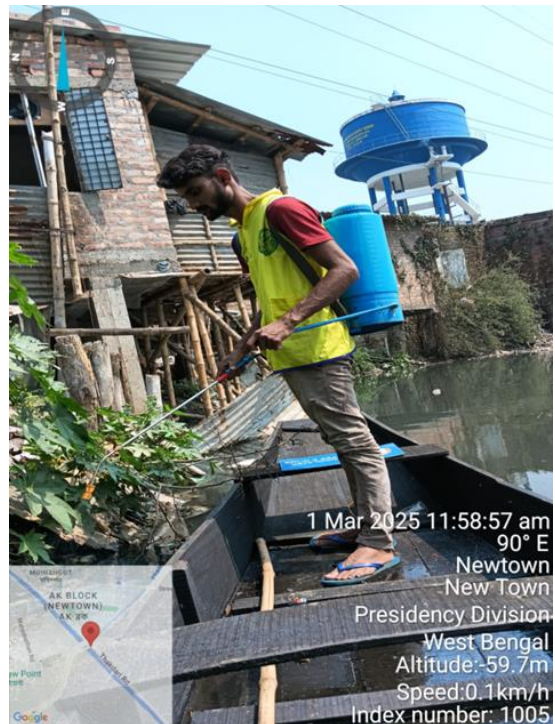
Regular cleaning and maintenance of canals have been carried out to keep the water flowing and prevent mosquito-friendly conditions.

The details of the initiatives are as follows:

a. Larvicide Spray by Boat-

To strengthen vector control along canal systems, larvicide spraying is being actively carried out using 15 manually operated wooden dinghy boats across 22 peripheral canals. The details are:

- This method allows for targeted spraying along canal banks, especially in areas that are otherwise inaccessible due to narrow or obstructed paths.
- The use of these boats is environmentally friendly, as it avoids fuel consumption and eliminates noise pollution.
- Notably, this initiative stands out as a unique and innovative approach, setting the New Town Kolkata apart as one of the few bodies in the state to adopt such eco-conscious and ground-level canal-focused vector control measures.



b. Scooping of larva and pupa using insect collecting nets-

As part of the canal-focused vector control drive, daily scooping of mosquito larva and pupa is being carried out using insect collecting nets along canal banks. The details are:



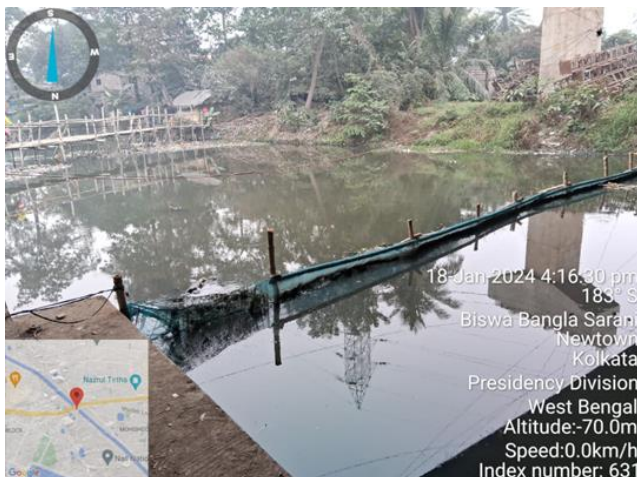
- This method has been particularly useful in areas where larvicide spraying proves less effective due to the presence of dumped garbage and floating debris.
- By manually removing the larvae, the mosquito life cycle is interrupted at an early stage, leading to a natural death of the immature stages.
- This eco-friendly and cost-effective approach allows for the removal of a significant number of larvae in a single operation, reducing the chances of adult mosquito emergence.



c. Bamboo Barricade

As part of preventive vector control efforts, temporary barricades made of bamboo and insect nets are being installed across selected stretches of canals. The details are:

- These barricades are designed to block the flow of floating garbage and water hyacinth from upstream areas—both of which are known to serve as resting places for adult mosquitoes and potential breeding sites.
- By preventing the accumulation of such debris, the barricades help maintain cleaner water channels and reduce mosquito-friendly environments.



- This low-cost and biodegradable solution is not only environmentally safe but also highly effective in limiting the spread of breeding materials across wider areas.

d. Drone Survey-

Drone survey have been introduced by NKDA as a modern surveillance tool for identifying potential mosquito breeding sites along the canal network. These aerial surveys provide a bird's-eye view of otherwise inaccessible or concealed areas, enabling quick and accurate

detection of stagnant water pockets and vegetation buildup. Once these breeding hotspots are



identified, ground teams follow up with targeted manual larvicide spraying to eliminate the larvae before they mature.

e. Release of Guppy Fish-

As part of the biological control measures, guppy fish have been released into selected stretches of the canal network. These small freshwater fish feed on mosquito larvae, helping to naturally control their population without the use of chemicals. In the last years 2.5 lakhs



guppy fish was release by NKDA. NKDA is planning to double the number this year.

f. Regular Cleaning of Canals-

In addition to periodic desilting operation, NKDA has carried out comprehensive cleaning drives for the peripheral canals. This involves systematic removal (both manual and mechanical) of jungles, bushes, water hyacinth, silt, and other obstructions from the canal beds and slopes at regular intervals.

Conclusion

Through consistent, targeted efforts, NKDA is managing its vector control activities with high efficiency on a daily basis. A combination of eco-friendly methods, technology, and manual intervention ensures thorough coverage across the canal network. With continued focus, NKDA aims to further reduce mosquito breeding and related health risks.

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