

IN THE SUPREME COURT OF BANGLADESH
HIGH COURT DIVISION
(SPECIAL ORIGINAL JURISDICTION)

Writ Petition No. 2369 of 2019.

In the matter of:

An application under article 102 (2) of the
Constitution of the People's Republic of
Bangladesh.

-And-

In the matter of:

Md. Tanvir Ahmed.

..... Petitioner

-Versus-

Bangladesh represented by the Secretary,
Ministry of Civil Aviation and Tourism and
others. . . . Respondents

Mr. Md. Tanvir Ahmed

. . . Petitioner in person.

Mr. Saifur Rashid, Advocate

. . For the respondent No. 2.

Ms. Rimi Nahreen, Advocate

. . . For the respondent No. 3.

Present:

Mr. Justice J. B. M. Hassan

and

Mr. Justice Razik Al Jalil

Heard and Judgment on 13.08.2023.

J. B. M. Hassan, J.

The petitioner, a learned Member of the Bangladesh Supreme Court
Bar Association has filed this writ petition in the form of Public Interest
Litigation (PIL) and obtained the Rule Nisi in the following terms:

“Let a Rule Nisi be issued calling upon the respondents to show
cause as to why the inaction and apathy to protect the
passengers, visitors and others from mosquito tortures at Hazrat
Shah Jalal International Airport Area, Dhaka should not be
declared to be without lawful authority and is of no legal effect
and as to why they should not be directed to take immediate
necessary steps to control the mosquito attacks at Hazrat Shah

Jalal International Airport Area, Dhaka and/or pass such other or further order or orders as to this Court may seem fit and proper.”

During pendency of the Rule Nisi, this Court directed the Civil Aviation Authority on different occasions to submit survey report conducted by the Directorate General of Health Service regarding the running situation and position about the mosquito nuisance within the Hazrat ShahJalal International Airport Area, Dhaka. On 03.04.2023 this Court also heard One Mr. Kabirul Bashar, PhD. Professor of Entomology, Department of Zoology, Faculty of Biological Science, Jahangirnagar University, Dhaka who appeared in person before this Court and made certain suggestions as have been reflected in the order dated 03.04.2023.

The Civil Aviation Authority (respondent No.2) has also filed affidavit in compliance affirmed on 19.06.2023 intimating last survey conducted on 3rd-8th June, 2023 by the office of the Directorate General of Health Service. In the said report, the following suggestions have been given for controlling the mosquito within the Hazrat Shah Jalal International Airport Area, Dhaka:

“Recommendations:

Special Notes:

There is 2 long canal inside the airport and some ponds, We found mosquitoes there. These places should be clean and release guppy fish/ bio-pesticides(Bti)/Novaluron.

There are several breeding places for Aedes/Culex mosquitoes in and around the airport. These breeding places should be removed and managed.

Culex and Aedes have their own flight range. We found adults and larvae half Km around the airport (Public place). These should be managed by city corporations and the Bangladesh air force.

Regular surveillance should be conducted (6 surveys/year: Jan, March, May, July, Sept, Nov)

Produce a real-time Map for forecasting the mosquitoes density and proper intervention.

INTEGRATED MOSQUITO MANAGEMENT

*** Surveillance (Jan, March, May, July, Sept, Nov)**

* Larvae and immature-stage surveillance

* Adult Surveillance

*** Mapping (mosquito aquatic habitats and adult density)**

*** Setting Action Thresholds**

* Decisions to initiate control measures are based on analyses of larval or adult mosquito population data obtained through surveillance activities.

Larval Source Reduction

*Environmental control

*Source reduction begins with a detailed larval survey

*Recommendations on large-scale environmental modifications

Biologic Control

*Larger aquatic predators such as Fish like Gambusia spp (Guppy) can naturally control mosquito.

CHEMICAL CONTROL OF LARVAL AND ADULT MOSQUITOES

***Larval management**

*Larvicides: organophosphates and oils or monomolecular films

*Microbial control agents such as Bacillus thuringiensis israelensis (Bti)

*Insect growth regulators such as methoprene and pyriproxyfen

* Chitin synthesis inhibitors such as diflubenzuron and novaluron

* Larvicides : organophosphates and oils or monomolecular films, which spread on the water surface to form a thin film that prevents gas exchange and leads to the eventual suffocation of mosquito larvae.

* Larvicides are available in various formulations, including solid granules of different shapes and sizes, water-dispersible granules applied unaltered or in the mixture, slow-release briquettes, water-soluble pouches, or pure liquid formulations. The formulation selection should be driven by carefully considering the target environment.

Adult management

*ULV space sprays are the only effective means of rapidly reducing

*Barrier and residual sprays can provide long-lasting control of adult mosquito populations

*Handheld and Area-Wide ULV Adulticides Space sprays use ULV technology (cold fogging or thermal space sprays) and are applied with specialized spray equipment mounted in aircraft, on the back of trucks, or by hand.

*Released aerosols drift through the target zone, persisting in the air and making contact with flying mosquitoes.

*The primary aim of area-wide ULV adulticide applications is to deliver an effective droplet size using the least amount of insecticide that will control target mosquitoes. Droplet sizes ranging from 5 to 25 um are most efficient. Weather conditions must be considered when planning and delivering applications; most often, adulticide applications are conducted in the evening or early morning, when a thermal inversion has occurred to keep the insecticide from dispersing upward and in light winds to aid in carrying droplets.”

From the submissions of both the parties and on perusal of the above mentioned report, we find that due to taken measures by the Airport authority, the situation has now come to a satisfactory condition. However, in disposing of the matter both the learned Advocates have drawn our attention about the current situation going on within the whole country, in particular, severe situation within the Dhaka City regarding Dengue virus and number of mortality occurring every day due to aforesaid virus. Considering this situation, learned Advocate for the petitioner has drawn our attention to the suggestions of Professor Kabirul Bashar and the Surveillance Committee. In the suggestions, Professor Kabirul Bashar has emphasized for establishment of a Vector Control Research Centre (VCRC) in order to combat the ongoing crisis due to infection of dengue mosquito. He submits that only this sort of institution (Research Centre) can combat the situation.

We are also observing on every day that a huge number of citizens are suffering from dengue virus, particularly, in the rainy season a good number

of mortality. Therefore, this sort of institution (VCRC) is necessary now being a demand of time. **In the circumstances, the respondent No.1 shall consider this observation to establish a research centre i.e Victor Control Research Centre for the betterment of the citizen at large.**

With this observation, the Rule Nisi is disposed of. The Airport Authority and the Dhaka North City Corporation shall keep themselves vigilant in controlling the mosquito within the airport area as per recommendation and suggestion made by the surveillance committee. **The writ petition shall be treated as a continuous mandamus.**

Communicate a copy of this judgment and order to the respondents at once.

Razik Al Jalil, J

I agree.