

সুডা

রাজ্য নগর উন্নয়ন সংস্থা

SUDA

STATE URBAN DEVELOPMENT AGENCY

"ইলগাস ভবন", এইচ-সি ব্লক, সেক্টর-৩, বিধাননগর, কলকাতা-৭০০ ১০৬, পশ্চিমবঙ্গ

"ILGUS BHAVAN", H-C Block, Sector - III, Bidhannagar, Kolkata - 700 106, West Bengal

SUDA-Health/359/18/ 3254

29.03.2019

ক্রমিক নং

তারিখ

From : Director, SUDA

To : The Branch Manager,
HDFC Bank Ltd.,
Salt Lake, Sector-III,
Kolkata - 700 106.

Sub : Electronic Transfer of Fund debiting this office
Current Account No. 50200011146861.

VBD / VCT

Sir,

You are requested to kindly arrange for electronic transfer of fund as per details given below debiting the amount from this office Current Account No.50200011146861 lying with your branch in respect of NUHM.

Sl. No.	Name of Payee	Amount in Rs.	Bank Details
01.	SNAAYOU HEALTHCARE & IT SOLUTIONS PVT. LTD.	46,256.00	Bank of Maharashtra, Jadavpur Branch, A/C No. 60298676413 IFS Code. MAHB0001303
(Rupees Forty Six Thousand Two Hundred Fifty Six only)			



Md. Asif Sardar
Finance Officer, SUDA

(Signature)

Petrus Anuranjan Soreng
Finance Officer, SUDA

দূরভাষ : ২৩৫৮ ৬৪০৩ / ৫৭৬৭, ফ্যাক্স : ২৩৫৮ ৫৮০০

Tel : 2358 6403/5767, Fax : 2358 5800, E-mail : wbsudadir@gmail.com

Account Section : 2358 6408

29.3.19
To be Proceed
30.3.19

29/03/19

STATE URBAN DEVELOPMENT AGENCY

Prevention & Control of Dengue

Group Summary

1-Apr-2018 to 20-Mar-2019

Particulars	Closing Balance	
	Debit	Credit
Prevention & Control of Dengue-House to House Visit	60,56,350.00	
Prevention & Control of Vector Borne Dis - SMS Ch.		54,272.00
Vector Borne Diseases - Basic Min. Ser. - IEC		21,02,883.00
Vector Borne Diseases-Basic Min. Ser. - Larvicidal		4,71,05,310.00
Vector Borne Diseases - ELISA		27,25,000.00
Vector Borne Diseases-House to House Visit		7,74,59,600.00
Vector Borne Diseases - Vector Control Team (VCT)		21,45,70,617.00
Grand Total	60,56,350.00	34,40,17,682.00

Recently Proposed fund for different VBD activities

Sl	File Number	Purpose	Amount
1	SUDA- Health/96/17 (Part-1)	Larvicide, Equipment and IEC for KMC	44780540
2	SUDA- Health/341/17	Larvicide for May and June 2019	25145091
3	SUDA- Health/65 (Pt.IV)/13	Pending fund for House to House 2018	1434225
4	SUDA- Health/357/18	Pending fund for VCT 2018	14084000
Total			85443856

Dr
95/2/19

INVOICE

INVOICE NO: SHIS/0010/UDMA/KM/10/2018-2019

DATE: 25/02/2019

 UDMA REF: NO.1225/MA/O/ESTT. (SECTT.)/O-2/2019
 UDMA W.O.REF DATED: 12th, October, 2018

INVOICED TO:

THE

THE PRINCIPAL SECRETARY

U.D.M.A

GOVERNMENT OF WEST BENGAL

NAGARAYAN, DF-8, SECTOR-I, SALT LAKE, KOLKATA - 700064

SL.NO	JOB DESCRIPTION	SUB DESCRIPTION	AMOUNT WITHOUT TAX	AMOUNT WITH TAX
1	1. Rate of Drone Surveillance Pilot in Ward 29 of Kamarhati Municipality for Vector Borne Disease Identification	Rs.20,000.00 PER DAY	Rs.40,000.00 (2 Days Have Been Considered Since Only 1 Hour Was Spent On 27/10 And Is Being Waived Off)	47,200.00
	2. Number of Days of Surveillance	3 DAYS		
	3. Dates of Surveillance	12/10, 13/10,27/10		
			Total Including 18% GST	47,200.00

SL.NO	DETAILS
LEGAL NAME	SNAAYOU HEALTHCARE & IT SOLUTIONS PVT. LTD
GSTIN	19AAZCS5058E1Z0
PAN NO	AAZCS5058E
BANK NAME	BANK OF MAHARASHTRA (01303)
IFS CODE	MAHB0001303
PTAX	192102135928

Passed for Payment Rs. 47,200/-

(Rupees Forty seven thousand two hundred only)

Only to be debited towards VBD/VCD

SNAAYOU HEALTHCARE & IT SOLUTIONS (PVT.) LTD.

Thanking You,

Director

Authorised Signatory



 Finance Officer
 State Urban Development Agency
 Govt. of West Bengal

Snaayou Healthcare & IT Solutions Pvt.Ltd.

Registered & Corporate Office : The Cambers, 503, Rajdanga Main Road, Kolkata - 700107, West Bengal, India

www.snaayou.com

 Grand Amt. 47,200/-
 Less: (2) for '944/-
 Net. Amt. 46,256/-
 25/03/19

November 14, 2018

P/O of REPORT TO CHAIRMAN
KAMARHATI MUNIC

To
Sri Gopal Saha
The Hon'bl Chairman
Kamarhati Municipality
1, MM Feeder Rd,
Rathtala, Belghoria,
Kolkata,
West Bengal 700056

Sub: Submission of Report using Drone Surveillance for Vector Borne Diseases Undertaken in Ward No 29 of Kamarhati Municipality

Respected Sir,

Greetings from Snaayou Healthcare & Healthcare Solutions Pvt. Ltd

Drawing your kind reference to above subject and the meeting held on October 9th, 2018 in the office of respected Joint Secretary Sri Saikat Kr Dutta, and in the kind presence **Sri Bimal Saha, Hon'bl Chairman-in-Council, Kamarhati Municipality** and **Sri Partha Bhattacharya Executive Engineer Kamarhati Municipality**, that a **Drone Surveillance Pilot** be carried out for Ward No 29 considering its vulnerability towards **Dengue and other vector borne diseases**.

Accordingly the same was carried out on October 12th, 13th and 27th October 2018.

In this exercise the following 2 processes have been deployed to achieve maximum effectiveness of the mission:

1. Vertical Photographs of Topography taken from Drone Camera and not angular photographs in order to better validate accuracy of threats detected.
2. Application of Proprietary Software "Akashtori" to generate and convert images of threats detected into postal addresses for a quick combat strategy by the Municipality.

Kindly find below the synopsis of the report for your kind perusal and valued opinion:

1. **Total No of Days of Surveillance – 2 days** (considering an hours work was interrupted owing to inclement weather for cyclone Titli on 13th October which got completed on October 27th, 2018)
2. **Total Distance Covered – 4.54 Kms** (considering 2 dimensional length and breadth coordinates and not radial)
3. **Total Photographs Taken – 608 pictures**
4. **Total Threats Detected – 276 pictures (Saved and Enclosed in Pen drive)**
5. **Number of Sample Letters Generated with Image Proof bearing Assessee Name, Complete Postal Address as appearing in Municipality Records, Date and Time of Image taken-25 nos.**

6. **Nature of Threats Detected**– Open Wells, Open Overhead Tanks, Plastic Sheets used as hatchment covers, Bamboo and other civil construction material stocked on rooftops, plantpots,garbage and debris lying between two houses, under construction houses, leaking overhead water tanks, rubber tyres and tubes strewn on terrace, clogged drains in between houses, vacant land, bricks lying on rooftops are some of the threats that lead to water accumulation have been considered for the study.

The details of the following are been handed in a pen drive:

1. Letters with address (Draft as shared by Joint Secretary Sri. Saikat Dutta) – 25 letters
2. Pictures of Threat as an attachment to the letter – 25

Important Note:

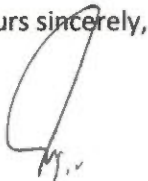
1. For Cross Validation to our software the following link - https://westbengalvaluationboard.org/home/valuation_list has been considered.
2. In order to cross validate the accuracy of the letters generated , support from the local ward councillor Ms. Rupali Sarkar's help has been solicited. We are grateful to her for extending full support, hospitality and utmost guidance.

In view of the above, we request your kind office to evaluate the report based on its merits and further oblige us by sharing your valued opinion with the competent authority.

We remain truly thankful for your kind support and earnestly hope that this ground breaking technology will help in combatting the menace of Dengue and help in adopting timely proactive steps to overcome this lethal endemic.

Thanking You,

Yours sincerely,



Somnath Dasgupta
Director
#9830270869

Government of West Bengal
Urban Development & Municipal Affairs Department
Nagarayan, Salt Lake, Sector-I,
Block-DF-8 Kolkata-700064

No.1225/MA/O/Estt.(Sectt.)/O-2/2019

dated, 12th October, 2018

From : Shri Saikat Kumar Dutta, WBCS(Exe.),
Joint Secretary to the Government of West Bengal.

To : **The Director,**
Snaayou Health Care & IT Solutions Pvt. Ltd.,
The Cambers, 503, Rajdanga Main Road,
Kolkata - 700107.

Subject : Drone Surveillance of water accumulation in Ward No.29 of Kamarhati Municipality.

Ref. : His Quotation dated 26.09.2018.

Dear Sir,

With reference to above I am directed to inform you that the rate quoted by you for the Drone Surveillance for water accumulation regarding Vector Borne diseases in Ward No.29 in Kamarhati Municipality on experimental basis has been accepted by this Deptt. being the lowest.

You are, therefore, requested to take necessary measures for such Drone Surveillance and generation of statutory notices to the owners/occupiers of the municipal holdings whether the accumulation of water would be found through the survey. You are requested to complete the work for the entire area of the Ward No.29 of Kamarhati Municipality within 3(three) days positively. Regarding the dates of operation and every logistical supports including the database of municipal holding, ward map etc. you are requested to contact the Chairman, Kamarhati Municipality immediately.

You are also requested to submit the bill immediately after completion of the work with sufficient evidence alongwith the report of the Chairman, Kamarhati Municipality regarding the achievement of the survey.

Yours sincerely,

Sd/-

Joint Secretary to the
Government of West Bengal

No.1225/1(3)MA/O/Estt.(Sectt.)/O-2/2019

dated, 12th October, 2018

Copy forwarded for information to :

1. Chairman, Kamarhati Municipality.
2. Director, SUDA.
3. PS to Principal Secretary, UD & MA Deptt.

Joint Secretary

[Handwritten Signature]
12/10/18

Government of West Bengal
Urban Development & Municipal Affairs Department
Nagarayan, Salt Lake, Sector-I,
Block-DF-8 Kolkata-700064

No.1225/MA/O/Estt.(Sectt.)/O-2/2019

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To ✓ **The Director,**
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The Cambers, 503, Rajdanga Main Road,
Kolkata - 700107.

Subject : Drone Surveillance of water accumulation in Ward No.29 of Kamarhati Municipality.

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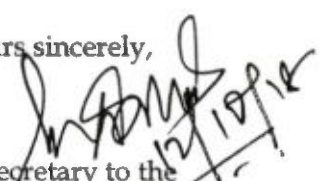
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You are also requested to submit the bill immediately after completion of the work with sufficient evidence alongwith the report of the Chairman, Kamarhati Municipality regarding the achievement of the survey.

Yours sincerely,


Joint Secretary to the
Government of West Bengal

dated, 12th October, 2018

No.1225/1(3)MA/O/Estt.(Sectt.)/O-2/2019

Copy forwarded for information to :

1. Chairman, Kamarhati Municipality.
2. Director, SUDA.
3. PS to Principal Secretary, UD & MA Deptt.

Joint Secretary



Office of the Municipal Councillors, Kamarhati

[Address:-1, M. M. Feeder Road, Rathtala, Belgharia, North 24 Parganas, Kolkata-700056]

Ph:-033-2564-9580, 033-2564-8646, Fax:-(033) 2564-1361.

Email: kamarhati_municipality@rediffmail.com

Ref. No: *708/Gxl.*

Date: 26.12.2018

To
Dr. Subrata Gupta
Principal Secretary
Department of Urban Development & Municipal Affairs
Government of West Bengal
"Nagarayon", Bidhannagar
Kolkata

Sub: Drone surveillance of water accumulation in ward no-29 in Kamarhati Municipality

Sir,

Inviting reference to your mail communication dated 10/10/2018, on the subject above by Shri. Saikat Kumar Dutta- joint secretary UDMA we wish to put on records that Snaayou Healthcare & IT solutions Pvt.Ltd, carried out the Drone surveillance project in ward no 29 on 12th, 13th and 27th October 2018. They have submitted their report dated November 14th, 2018, that they achieved the following objectives successfully:

1. Capturing of High Resolution images where water stagnation and allied threats (e.g. open overhead tanks, plastic sheets to cover roofs, civil construction material kept on rooftops etc) were detected through the Drones camera.
2. Sample notices were generated and provided to us., As per the draft shared by Joint Secretary, bearing the correct Holding Address and Name of those locations with significant threats were detected.

We take this opportunity to thank you for introducing an effective idea and technology that can truly combat against the vector borne diseases and subsequently build awareness amongst our citizens.

Thanking You

Yours truly,


Chairman,
Kamarhati Municipality
Chairman
Kamarhati Municipality

Office of the Municipal Councillors Kamarhati.

Address: M. M. Feeder Road, Rathala, Belgharia, North 24 Parganas, Kolkata-700056

Ph:- (033)2564-9580/8646, Fax: (033) 2564-1361

Email:- kamarhatimunicipality@rediffmail.com

Memo No.

Date:

To
Sri/Smt: RAMAYAN SHOW (OCCUP), S/O SRIKRISHUN SHOW
Assessee No:
Para/Street/Mahalla: 191 CHOWDHURI PARA ROAD Kolkata
Pin: 700056
District—North 24 Parganas

Subject: Notice for Prevention of Mosquito Breeding u/s 333 of the West Bengal Municipal Act, 1993.

Whereas from an aerial surveillance conducted by this Municipality it has been ascertained that considerable quantum of water has been accumulated in your premises which is likely to become a breeding places of mosquitoes; and

Whereas the picture taken from such aerial survey is enclosed with this notice as a proof of above noted incident; and

Whereas such accumulation of water likely to create a breeding place of mosquitoes may cause serious Vector Borne Diseases to the inhabitants; and

Whereas in the opinion of this Municipality you as an owner or occupier of the holding is required to take the following actions immediately :

- a) to clean, or drain off or remove water therefrom, or to provide cover thereto, or
- b) to treat the same in such physical, chemical or biological method as may consider suitable in the circumstances, or
- c) to fill up unwholesome waterbody, as per law.

Therefore, in exercise of the power conferred by the above mentioned provision of the West Bengal Municipal Act, 1993, the authorities of this Municipality directs you to take up the aforesaid actions within 3(three) days from the receipt of this notice positively failing which you will be required to pay the fine which may extend to `1000/- and if you contravene the provision of this statutory actions on your part, you will be required to pay daily fine of `50/- for such continuance of such contravention from the day on which such contravention is noticed by this Municipal authority.

It may further be noted that if you fail or refuse to take the measures to prevent the breeding place of mosquitoes by clearing the accumulated water in your premises through the actions mentioned in the aforesaid para no.4, this Municipality may take such measures or adopt such treatment after 7(seven) days of completion of notice period and may recover the cost of doing so from you by way of levying charges u/s 95 or Special Contingency Charges u/s 95B of the Act, ibid.

Encl: The picture of your premises captured during aerial survey

**Chairman,
Kamarhati Municipality**

Image Date:12-10-2018, Image Time:12:05 Hrs



Office of the Municipal Councillors Kamarhati.

Address: M. M. Feeder Road, Rathala, Belgharia, North 24 Parganas, Kolkata-700056

Ph:- (033)2564-9580/8646, Fax: (033) 2564-1361

Email:- kamarhatimunicipality@rediffmail.com

Memo No.

Date:

To
Sri/Smt: SMT. RAMA DAS, W/O, SRI. LAKSHAN DAS
Assessee No:
Para/Street/Mahalla: 43129 NORTH BASUDEBPORE ROAD Kolkata
Pin: 700056
District--North 24 Parganas

Subject: Notice for Prevention of Mosquito Breeding u/s 333 of the West Bengal Municipal Act, 1993.

Whereas from an aerial surveillance conducted by this Municipality it has been ascertained that considerable quantum of water has been accumulated in your premises which is likely to become a breeding places of mosquitoes; and

Whereas the picture taken from such aerial survey is enclosed with this notice as a proof of above noted incident; and

Whereas such accumulation of water likely to create a breeding place of mosquitoes may cause serious Vector Borne Diseases to the inhabitants; and

Whereas in the opinion of this Municipality you as an owner or occupier of the holding is required to take the following actions immediately :

- a) to clean, or drain off or remove water therefrom, or to provide cover thereto, or
- b) to treat the same in such physical, chemical or biological method as may consider suitable in the circumstances, or
- c) to fill up unwholesome waterbody, as per law.

Therefore, in exercise of the power conferred by the above mentioned provision of the West Bengal Municipal Act, 1993, the authorities of this Municipality directs you to take up the aforesaid actions within 3(three) days from the receipt of this notice positively failing which you will be required to pay the fine which may extend to `1000/- and if you contravene the provision of this statutory actions on your part, you will be required to pay daily fine of `50/- for such continuance of such contravention from the day on which such contravention is noticed by this Municipal authority.

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Encl: The picture of your premises captured during aerial survey

**Chairman,
Kamarhati Municipality**

Image Date:12-10-2018, Image Time:11:35 Hrs



Office of the Municipal Councillors Kamarhati.

● Address: M. M. Feeder Road, Rathtala, Belgharia, North 24 Parganas, Kolkata-700056

Ph:- (033)2564-9580/8646, Fax: (033) 2564-1361

Email:- kamarhatimunicipality@rediffmail.com

Memo No.

Date:

To
Sri/Smt: BEDANA RANI ROY, W/O GOPAL CH ROY
Assessee No:
Para/Street/Mahalla: 1169 PASCHIM PALLY Kolkata
Pin: 700056
District-North 24 Parganas

Subject: Notice for Prevention of Mosquito Breeding u/s 333 of the West Bengal Municipal Act, 1993.

Whereas from an aerial surveillance conducted by this Municipality it has been ascertained that considerable quantum of water has been accumulated in your premises which is likely to become a breeding places of mosquitoes; and

Whereas the picture taken from such aerial survey is enclosed with this notice as a proof of above noted incident; and

Whereas such accumulation of water likely to create a breeding place of mosquitoes may cause serious Vector Borne Diseases to the inhabitants; and

Whereas in the opinion of this Municipality you as an owner or occupier of the holding is required to take the following actions immediately :

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Therefore, in exercise of the power conferred by the above mentioned provision of the West Bengal Municipal Act, 1993, the authorities of this Municipality directs you to take up the aforesaid actions within 3(three) days from the receipt of this notice positively failing which you will be required to pay the fine which may extend to `1000/- and if you contravene the provision of this statutory actions on your part, you will be required to pay daily fine of `50/- for such continuance of such contravention from the day on which such contravention is noticed by this Municipal authority.

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Encl: The picture of your premises captured during aerial survey

**Chairman,
Kamarhati Municipality**

Image Date:12-10-2018, Image Time:11:30 Hrs



Office of the Municipal Councillors Kamarhati.

Address: M. M. Feeder Road, Rathtala, Belgharia, North 24 Parganas, Kolkata-700056

Ph:- (033)2564-9580/8646, Fax: (033) 2564-1361

Email:- kamarhatimunicipality@rediffmail.com

Memo No.

Date:

To
Sri/Smt: RENU BALA SAHA, W/O NARAYAN SAHA
Assessee No:
Para/Street/Mahalla: 1020 NATUN PALLY Kolkata
Pin: 700056
District--North 24 Parganas

Subject: Notice for Prevention of Mosquito Breeding u/s 333 of the West Bengal Municipal Act, 1993.

Whereas from an aerial surveillance conducted by this Municipality it has been ascertained that considerable quantum of water has been accumulated in your premises which is likely to become a breeding place of mosquitoes; and

Whereas the picture taken from such aerial survey is enclosed with this notice as a proof of above noted incident; and

Whereas such accumulation of water likely to create a breeding place of mosquitoes may cause serious Vector Borne Diseases to the inhabitants; and

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Encl: The picture of your premises captured during aerial survey

**Chairman,
Kamarhati Municipality**

Image Date:12-10-2018, Image Time:11:29 Hrs



Office of the Municipal Councillors Kamarhati.

Address: M. M. Feeder Road, Rathtala, Belgharia, North 24 Parganas, Kolkata-700056

Ph:- (033)2564-9580/8646, Fax: (033) 2564-1361

Email:- kamarhatimunicipality@rediffmail.com

Memo No.

Date:

To
Sri/Smt: SRI. SAMBHU SAHA & OTHERS. (OCCUP), SRI. BISWANATH SAHA, S/O, LT. MANIND
Assessee No:
Para/Street/Mahalla: 1152/75 NORTH BASUDEBPORE ROAD Kolkata
Pin: 700056
District--North 24 Parganas

Subject: Notice for Prevention of Mosquito Breeding u/s 333 of the West Bengal Municipal Act, 1993.

Whereas from an aerial surveillance conducted by this Municipality it has been ascertained that considerable quantum of water has been accumulated in your premises which is likely to become a breeding places of mosquitoes; and

Whereas the picture taken from such aerial survey is enclosed with this notice as a proof of above noted incident; and

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- c) to fill up unwholesome waterbody, as per law.

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Encl: The picture of your premises captured during aerial survey

Chairman,
Kamarhati Municipality

Image Date:12-10-2018, Image Time:11:26 Hrs



Office of the Municipal Councillors Kamarhati.

Address: M. M. Feeder Road, Rathtala, Belgharia, North 24 Parganas, Kolkata-700056

Ph:- (033)2564-9580/8646, Fax: (033) 2564-1361

Email:- kamarhatimunicipality@rediffmail.com

Memo No.

Date:

To
Sri/Smt: BELGHORIA TRIVASA ACADEMY HIGH SCHOOL
Assessee No:
Para/Street/Mahalla:10 NORTH BASUDEBPORE ROAD Kolkata
Pin:700056
District--North 24 Parganas

Subject:Notice for Prevention of Mosquito Breeding u/s 333 of the West Bengal Municipal Act, 1993.

Whereas from an aerial surveillance conducted by this Municipality it has been ascertained that considerable quantum of water has been accumulated in your premises which is likely to become a breeding places of mosquitoes; and

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- c) to fill up unwholesome waterbody, as per law.

Therefore, in exercise of the power conferred by the above mentioned provision of the West Bengal Municipal Act, 1993, the authorities of this Municipality directs you to take up the aforesaid actions within 3(three) days from the receipt of this notice positively failing which you will be required to pay the fine which may extend to `1000/- and if you contravene the provision of this statutory actions on your part, you will be required to pay daily fine of `50/- for such continuance of such contravention from the day on which such contravention is noticed by this Municipal authority.

It may further be noted that if you fail or refuse to take the measures to prevent the breeding place of mosquitoes by clearing the accumulated water in your premises through the actions mentioned in the aforesaid para no.4, this Municipality may take such measures or adopt such treatment after 7(seven) days of completion of notice period and may recover the cost of doing so from you by way of levying charges u/s 95 or Special Contingency Charges u/s 95B of the Act, *ibid*.

Encl: The picture of your premises captured during aerial survey

Chairman,
Kamarhati Municipality

Image Date:12-10-2018, Image Time:11:26 Hrs





UD/00/2019/00553 PH
15/1/19

Office of the Municipal Councillors, Kamarhati

[Address:-1, M. M. Feeder Road, Rathtala, Belgharia, North 24 Parganas, Kolkata-700056]

Ph:-033-2564-9580, 033-2564-8646, Fax:-(033) 2564-1361.

Email: kamarhati_municipality@rediffmail.com

Ref. No: 708/Cm2 -

Date: 26.12.2018

To
Dr. Subrata Gupta
Principal Secretary
Department of Urban Development & Municipal Affairs
Government of West Bengal
"Nagarayon", Bidhannagar
Kolkata - 700064

Sub: Drone surveillance of water accumulation in ward no-29 in Kamarhati Municipality

Sir,

Inviting reference to your mail communication dated 10/10/2018, on the subject above by Shri. Saikat Kumar Dutta- joint secretary UDMA we wish to put on records that snayou healthcare & IT solutions Pvt.Ltd, carried out the Drone surveillance project in ward no 29 on 12th, 13th and 27th 'October 2018. They have submit their report dated November 14th, 2018, that they achieved the following objectives successfully:

1. Capturing of High Resolution images where water stagnation and allied threats (e.g.open overhead tanks, plastic Sheets to cover roofs, civil construction material kept on rooftops etc) were detected through the Drones camera.


2. Sample notices were generated and provided to us., As per the draft shared by Joint Secretary, bearing the correct Holding Address and Name of those locations with significant threats were detected.

We take this opportunity to thank you for introducing an effective idea and technology that can truly combat against the vector borne diseases and subsequently build awareness amongst our citizens.

Thanking You

Yours truly,


Chairman,
Kamarhati Municipality
Chairman
Kamarhati Municipality

IT
JS (ST)

14/1/2019

Office of the Municipal Councillors Kamarhati.

Address: M. M. Feeder Road, Rathala, Belgharia, North 24 Parganas, Kolkata-700056

Ph:- (033)2564-9580/8646, Fax: (033) 2564-1361

Email:- kamarhatimunicipality@rediffmail.com

Memo No

Date:

To
Sri/Smt: BELGHORIA TRIVASA ACADEMY HIGH SCHOOL
Assessee No:
Para/Street/Mahalla: 10 NORTH BASUDEBPORE ROAD Kolkata
Pin: 700056
District--North 24 Parganas

Subject: Notice for Prevention of Mosquito Breeding u/s 333 of the West Bengal Municipal Act, 1993.

Whereas from an aerial surveillance conducted by this Municipality it has been ascertained that considerable quantum of water has been accumulated in your premises which is likely to become a breeding places of mosquitoes; and

Whereas the picture taken from such aerial survey is enclosed with this notice as a proof of above noted incident; and

Whereas such accumulation of water likely to create a breeding place of mosquitoes may cause serious Vector Borne Diseases to the inhabitants; and

Whereas in the opinion of this Municipality you as an owner or occupier of the holding is required to take the following actions immediately :

- a) to clean, or drain off or remove water therefrom, or to provide cover thereto, or
- b) to treat the same in such physical, chemical or biological method as may consider suitable in the circumstances, or
- c) to fill up unwholesome waterbody, as per law.

Therefore, in exercise of the power conferred by the above mentioned provision of the West Bengal Municipal Act, 1993, the authorities of this Municipality directs you to take up the aforesaid actions within 3(three) days from the receipt of this notice positively failing which you will be required to pay the fine which may extend to 1000/- and if you contravene the provision of this statutory actions on your part, you will be required to pay daily fine of 50/- for such continuance of such contravention from the day on which such contravention is noticed by this Municipal authority.

It may further be noted that if you fail or refuse to take the measures to prevent the breeding place of mosquitoes by clearing the accumulated water in your premises through the actions mentioned in the aforesaid para no.4, this Municipality may take such measures or adopt such treatment after 7(seven) days of completion of notice period and may recover the cost of doing so from you by way of levying charges u/s 95 or Special Contingency Charges u/s 95B of the Act, ibid.

Encl: The picture of your premises captured during aerial survey

Chairman,
Kamarhati Municipality

Image Date:12-10-2018, Image Time:11:26 Hrs



Chairman,
Kamarhati Municipality

Image Date:12-10-2018, image Time:11:26 Hrs



Office of the Municipal Councillors Kamarhati.

Address: M. M. Feeder Road, Rathala, Belgharia, North 24 Parganas, Kolkata-700056

Ph:- (033)2564-9580/8646, Fax: (033) 2564-1361

Email:- kamarhatimunicipality@rediffmail.com

-- Original Message -----

Subject: Drone Survey on experimental basis at Ward No.29 of Kamarhati Municipality

From: "Saikat Kumar Dutta" <nrlandsi.udma@gmail.com>

Date: 10/10/18 3:25 am

To: kamarhati_municipality@rediffmail.com

Cc: subrataudma@gmail.com, somnath.dasgupta@snaayou.com

To

**The Chairman,
Kamarhati Municipality.**

Subject : Drone Surveillance of Water accumulation in Ward No.29 in Kamarhati Municipality.

Sir,

Kindly refer to the meeting held yesterday i.e. 09.10.2018 at the chamber of the Principal Secretary, UD & MA Deptt. regarding Surveillance of water accumulation causing Vector Borne Diseases through Drone.

Kindly also refer to the letter of M/s Snaayou Healthcare & IT Solutions Pvt. Ltd. dated 27.09.2018 addressed to the Hon'ble MIC, UD & MA Deptt., a copy of which is enclosed. As per discussion held yesterday the Drone survey for Surveillance of Vector Borne Diseases which is caused by accumulation of water in some municipal holdings will be held on experimental basis in ward No.29 of your municipality immediately. M/s Snaayou Healthcare & IT Solutions Pvt. Ltd. has been directed to contact your office and to take necessary measures for such drone surveillance and generation of notices to the owner/occupier of the holdings where the accumulation of water will be found through that survey.

I am therefore directed to request you to kindly take necessary measures to engage said agency for such drone survey in ward No.29 of your municipality and required data base of municipal holdings, ward map etc. and other logistical support may kindly be extended to the above noted agency. In this regard, it may kindly be noted that Shri Bimal Saha, CIC Member and Shri Partha Bhattacharya, Sanitary Inspector of your Municipality attended the meeting held on 09.10.2018.

I am also enclosing herewith a draft notice u/s 333 of the West Bengal Municipal Act 1993 in connection with Prevention of Mosquito Breeding through accumulation of water which is to be served to the concerned municipal holding owner/occupier of ward No.29 of your Municipality after completion such drone surveillance.

Yours faithfully,

**[Saikat Kumar Dutta, WBCS(Exe.)]
Joint Secretary to the
Government of West Bengal**

To
The Chairman,
Kamarhati Municipality.

Subject : Drone Surveillance of Water accumulation in Ward No.29 in Kamarhat Municipality.

Sir,

Kindly refer to the meeting held yesterday i.e. 09.10.20187 at the chamber of the Principal Secretary, UD & MA Deptt. regarding Surveillance of water accumulation causing Vector Borne Diseases through Drone.

Kindly also refer to the letter of M/s Snaayou Healthcare & IT Solutions Pvt. Ltd. dated 27.09.2018 addressed to the Hon'ble MIC, UD & MA Deptt., a copy of which is enclosed. As per discussion held yesterday the Drone survey for Surveillance of Vector Borne Diseases which is caused by accumulation of water in some municipal holdings will be held on experimental basis in ward No.29 of your municipality immediately. M/s Snaayou Healthcare & IT Solutions Pvt. Ltd. has been directed to contact your office and to take necessary measures for such drone surveillance and generation of notices to the owner/occupier of the holdings where the accumulation of water will be found through that survey.

I am therefore directed to request you to kindly take necessary measures to engage said agency for such drone survey in ward No.29 of your municipality and required data base of municipal holdings, ward map etc. and other logistical support may kindly be extended to the above noted agency. In this regard, it may kindly be noted that Shri Bimal Saha, CIC Member and Shri Partha Bhattacharya, Sanitary Inspector of your Municipality attended the meeting held on 09.10.2018.

I am also enclosing herewith a draft notice u/s 333 of the West Bengal Municipal Act 1993 in connection with Prevention of Mosquito Breeding through accumulation of water which is to be served to the concerned municipal holding owner/occupier of ward No.29 of your Municipality after completion such drone surveillance.

Yours faithfully,


[Saikat Kumar(Dutta,WBCS(Exe.))]
Joint Secretary to the
Government of West Bengal

~~DRAFT~~

Office of the Municipal Councillors Kamarhati

Address : 1, M.M. Feeder Road, Rathtala, Belgharia, North 24 Parganas, Kolkata - 700056

Ph:- (033) 2564-9580/8646, Fax : (033) 2564-1361,

E-mail : kamarhatimunicipality@rediffmail.com

Memo No.

Date :

To

Shri/Smt. _____

Para/Street/Mahalla _____

Pin Code _____

District - North 24 Parganas.

Subject : Notice for Prevention of Mosquito Breeding u/s 333 of the West Bengal Municipal Act, 1993.

Whereas from an aerial surveillance conducted by this Municipality it has been ascertained that considerable quantum of water has been accumulated in your premises which is likely to become a breeding places of mosquitoes; and

Whereas the picture taken from such aerial survey is enclosed with this notice as a proof of above noted incident; and

Whereas such accumulation of water likely to create a breeding place of mosquitoes may cause serious Vector Borne Diseases to the inhabitants; and

Whereas in the opinion of this Municipality you as an owner or occupier of the holding is required to take the following actions immediately :

- a) to clean, or drain off or remove water therefrom, or to provide cover thereto, or
- b) to treat the same in such physical, chemical or biological method as may consider suitable in the circumstances, or
- c) to fill up unwholesome waterbody, as per law.

Therefore, in exercise of the power conferred by the above mentioned provision of the West Bengal Municipal Act, 1993, the authorities of this Municipality directs you to take up the aforesaid actions within 3(three) days from the receipt of this notice positively failing which you will be required to pay the fine which may extend to ₹1000/- and if you contravene the provision of this statutory actions on your part, you will be required to pay

daily fine of ₹50/- for such continuance of such contravention from the day on which such contravention is noticed by this Municipal authority.

It may further be noted that if you fail or refuse to take the measures to prevent the breeding place of mosquitoes by clearing the accumulated water in your premises through the actions mentioned in the aforesaid para no.4, this Municipality may take such measures or adopt such treatment after 7(seven) days of completion of notice period and may recover the cost of doing so from you by way of levying charges u/s 95 or Special Contingency Charges u/s 95B of the Act, *ibid*.

Encl : *The picture of your premises captured during aerial survey.*

**Chairman,
Kamarhati Municipality**

Handwritten signature and date: 3/10/18

QUOTATION

NO: DTIL/WB/UDMA/QC0Z2/18-19

DATE: 22/09/2018

QUOTATION TO:

OFFICE OF THE PRINCIPAL SECRETARY
U.D.M.A, GOVT. OF WEST BENGAL.
NAGARAYAN, DF-8, SECTOR-I, SALT LAKE,
KOLKATA - 700064

SL.NO	JOB DESCRIPTION	SUB DESCRIPTION	AMOUNT WITHOUT TAX	AMOUNT WITH TAX
1	Drone Surveillance for Pilot in Kamarhati Municipality for Vector Borne Disease Identification			
2	Conversion of Image coordinates into Postal Addresses and Generation of Letters to Individual Holding numbers from the Drone Images taken.	Rs.40,000.00 per day.	Rs.40,000.00	Rs.47,200.00
			Total Including 18% GST	47,200.00

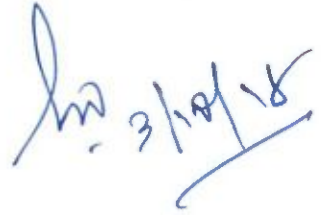
Thanking You,

Handwritten signature: R Kanu 22/09

Ritesh Kanu
Director

Zeniak Innovation India Limited

Bhaturiya, P.O. : Matyagacha,
P.S.: Barasat, Pin - 700135



QUOTATION

NO: ZIIL/WB/UDMA/011/18-19

DATE: 27/09/2018

QUOTATION TO:

OFFICE OF THE PRINCIPAL SECRETARY
U.D.M.A, GOVT. OF WEST BENGAL.
NAGARAYAN, DF-8, SECTOR-I, SALT LAKE,
KOLKATA - 700064

SL.NO	JOB DESCRIPTION	SUB DESCRIPTION	AMOUNT WITHOUT TAX	AMOUNT WITH TAX
1	Drone Surveillance for Pilot in Kamarhati Municipality for Vector Borne Disease Identification			
2	Drone Surveillance entails - 5 hours per day of operation for 200 pictures taken per hour per 2 kms covered per hour in length and breadth mode.	Rs.60,000.00 per day.	Rs.60,000.00	Rs.70,800.00
3	Conversion of Image coordinates into Approximate Postal Addresses and Generation of Letters to Individual Holding numbers from the Drone Images taken.			
			Total Including 18% GST	70,800.00

Thanking You,



Soutik Dutta
Director

Handwritten signature
3/18/18

QUOTATION

NO: SHIS/022/UDMA/01/18-19

DATE: 26/09/2018

QUOTATION TO:

OFFICE OF THE PRINCIPAL SECRETARY
U.D.M.A, GOVT. OF WEST BENGAL.
NAGARAYAN, DF-8, SECTOR-I, SALT LAKE,
KOLKATA - 700064

SL.NO	JOB DESCRIPTION	SUB DESCRIPTION	AMOUNT WITHOUT TAX	AMOUNT WITH TAX
1	Drone Surveillance for Pilot in Kamarhati Municipality for Vector Borne Disease Identification			
2	Drone Surveillance entails - 5 hours per day of operation for 260 pictures taken per hour per 4 kms covered per hour in length and breadth mode.	Rs.20,000.00 per day and as per details laid out in points no 2 & 3.	Rs.20,000.00	Rs.23,600.00
3	Conversion of Image coordinates into Postal Addresses and Generation of Letters to Individual Holding numbers from the Drone Images taken.			
			Total Including 18% GST	23,600.00

Thanking You,

Handwritten signature
Somnath Dasgupta
Director

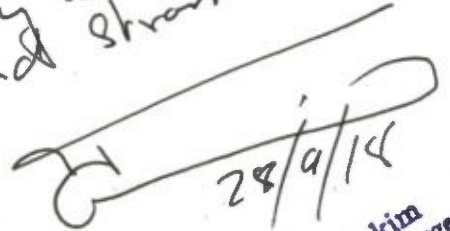
September 27th, 2018

MU/UD&MA/3122-D/2018
28/9/2018

P. Secretary UDMA
May work out details
and share.

To

Janab Firhad Hakim
Hon'bl Minister –in-Charge
Urban Development and Municipal Affairs
Government of West Bengal


28/9/18

Sub: Pilot Conducted on 15th September 2018 using Drones for Surveillance and Postal Code Conversion using Proprietary Software "Akashtori".

Respected Sir,

Greetings from Snaayou Healthcare & IT Solutions Pvt. Ltd.

Firhad Hakim
Minister-in-Charge
Department of Urban Development
& Municipal Affairs
Government of West Bengal

We tender our sincere gratitude on behalf of Team Snaayou and express our humblecourtesy to you Sir, for consenting to attend the Pilot,that can greatly benefit the society at large, jeopardised with this fatal threat.

We are equally jubilant to record your satisfaction that the pilot achieved the Project Objectives in your august presence. We shall be grateful and deeply obliged if your kind office can kindly consider, issuing us a Letter of Appreciation/Satisfactory Completion of Pilot using Drone Technology.

Further, we request you to kindly recollect our first meeting, we had with your esteemed self on June 29th, 2018, wherein you had expressed the desire to implement the Drone Technology throughout the State of Bangla for combatting Vector Borne Diseases, if found effective and suitable.Drawing continuation to the above, we shall be grateful and be in touch with your kind office, if a formal letter or circular can be issued to us upon your kind advise by your esteemed Department.

We also wish to put on records, that you had expressed a desire to launch the project at Kamarhati in the presence of media persons since the application of "Akashtori" would be the first such initiative in India towards Vector Borne Threat Detection and Postal Address Synchronisation. We would be grateful if this project is inaugurated under your kind auspices for the State of Bangla from **Kamarhati** itself.

As directed by you Sir, we are ready to start our work in Kamarhati Municipality and are accordingly in touch with the office of the Principal Secretary – M.A.U.D and Valuation Board, to obtain the Holding database of Kamarhati Municipality before commencement of work:

~~Signature~~
JS/shaiket anta
4/10/2018

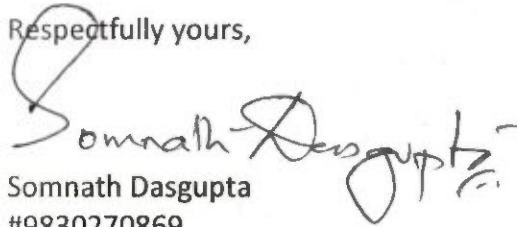
Further, on direction of the respected Principal Secretary, we also submitted a Technical and Commercial Proposal to SUDA on August 3rd, 2018 and are awaiting their valued opinion to finalise the Technical and Commercials.

The magnified images along with the Identified Postal Addresses, where threats were detected during the pilot, are enclosed for your kind records and perusal.

In view of the above, we await your valued direction and blessings to start this first innovation project from where we were born and belong to – Bangla.

Thanking you,

Respectfully yours,



Somnath Dasgupta
#9830270869

West Bengal Municipal Corporation Act, 2006

Section 243. Prevention of mosquito-breeding.—(1) If, in the opinion of the Corporation, any pool, ditch, tank, well, pond, swamp, quarry, hole, drain, cesspool, watercourse, pit, cistern, desert or air-cooler, or ground, underground or overhead tank, or any collection of water, or any land on which water may, at any time, accumulate, is, or is likely to become, a breeding place of mosquitoes or, in any other respect, becomes a nuisance, the Corporation may, by notice, require the owner or the person having control thereof to take all or any of the following actions:—

- (a) to clean, or drain off, or remove water therefrom, or to provide cover thereto; or
- (b) to treat the same in such physical, chemical or biological method as may consider suitable in the circumstances, or
- (c) to fill up any unwholesome waterbody:

Provided that any unwholesome waterbody can be filled up only after compliance with the provisions of section 4C of the West Bengal Land Reforms Act, 1955 (West Ben. Act X of 1956.), by the owner or the person having control thereof.

(2) No person shall keep, or permit to be kept or maintained, within any premises or land, any collection of stagnant or flowing water which, in the opinion of the Corporation, is, or is likely to be, a breeding place for mosquitoes, unless such collection of water is treated in such manner as may effectively prevent the breeding of mosquito.

(3) All borrow pits dug in the course of construction and repair of buildings, roads, or embankments, shall be deep and connected with each other in the formation of a drain directed towards the lowest level and properly sloped for discharge into a river, stream, channel, or drain, and no person shall create any isolated borrow pit which is likely to cause accumulation of water which again, in turn, may breed mosquito.

(4) The owner or the occupier of any premises shall not keep therein any bottle, tyre (old or new), vessel, can, container or receptacle in such manner as may allow it to collect, or to retain water which may breed mosquito, and shall clean and dry such bottle, tyre (old or new), vessel, can, container or receptacle at the interval of seven days.

(5) The owner or the occupier of any premises shall wrap the openings of the ventpipes and the outlets of septic tanks with proper mosquito-proof nets and shall maintain covering slabs of septic tanks to prevent entry and exit of mosquitoes.

(6) The owner or the occupier of any premises shall seal the overhead tanks, cisterns or water-receptacles to prevent mosquito-breeding, and shall provide safe ladder for making the overhead tanks or cisterns or water-receptacles approachable in order to facilitate inspection of the water in the container by the authorities of the Corporation.

(7) For construction of permanent water collections such as swimming pools, artificial fountains, or water reservoirs, constructed for the purpose of beautification,—

- (a) an application shall be submitted to the Corporation, stating therein the anti-larval measures taken by the applicant to keep the water free of mosquito larvae;
- (b) the Corporation, after considering the application, shall issue a licence to the applicant;
- (c) the applicant shall receive the said licence on payment of such fee as may be determined by the Corporation, and shall renew the said licence annually.

(8) The owners or the occupiers of all private ponds or water reservoirs shall keep such ponds or water reservoirs free from water hyacinth or allied weeds to prevent mosquito-breeding.

(9) if the owner or occupier or any person having control on whom the notice under sub-section (1) is served on fails or refuses to take the measures or to adopt the method of treatment, specified in such notice within the time specified therein or contravenes forgoing provisions of this section, the Commissioner himself or any officer duly authorized by him may take such measures or adopt such treatment, specified in such notice within the time specified therein, and

recover the cost of doing so from the owner or the occupier of the premises or any person having control, as the case may be, by way of levying administrative charges or special cleansing charges under section 106 in the manner specified therein and shall also be liable to penalty which shall not be less than rupees one thousands but which may extend to rupees one lakh only.

West Bengal Municipal Act, 1993

Sec.333. Prevention of mosquito-breeding.—(1) If, in the opinion of the Chairman-in-Council, any pool, ditch, tank, well, pond, swamp, quarry, hole, drain, cesspool, watercourse, pit, cistern, desert or air-cooler, ground, underground, or overhead tank or any collection of water, or any land on which water may, at any time, accumulate, is or likely to become a breeding place of mosquitoes or, in any other respect, becomes a nuisance, the Chairman-in-Council may by notice require the owner or the person having control thereof to take all or any of the following actions :—

- (a) to clean, or drain off or remove water therefrom, or to provide cover thereto, or
- (b) to treat the same in such physical, chemical or biological method as may consider suitable in the circumstances, or
- (c) to fill up unwholesome waterbody :

Provided that any unwholesome waterbody may be filled up only after compliance with the provisions of section 4C of the West Bengal Land Reforms Act, 1955, (West Ben. Act X of 1956), by the owner or the person having control thereof.

(2) No person shall keep, or permitted to be kept or maintained, within any premises or land any collection of stagnant or flowing water which, in the opinion of the Chairman-in-Council, is, or is likely to be, a breeding place for mosquitoes, unless such collection of water is treated in such manner as may effectively prevent the breeding of mosquitoes.

(3) All borrow pits dug in the course of construction and repairs of buildings, roads, or embankments shall be deep and connected with each other in the formation of a drain directed towards the lowest level and properly sloped for discharge into a river, stream, channel, or drain, and no person shall create any isolated borrow pit which, is likely to cause accumulation of water which again, in turn, may breed mosquito.

(4) The owner or occupier of any premises shall not keep therein any bottle, tyre (old or new), vessel, can, container or receptacle in such manner as may allow it to collect, or to retain, water which may breed mosquito, and shall clean and dry such bottle, tyre (old or new), vessel, can, container or receptacle at the interval of seven days.

(5) The owner or occupier of any premises shall wrap the openings of the vent-pipes and the outlets of septic tanks with proper mosquito-proof nets and shall maintain covering slabs of septic tanks to prevent entry and exit of mosquitoes.

(6) The owner or occupier of any premises shall seal the overhead tanks, cisterns or water receptacles to prevent mosquito breeding, and shall provide safe ladder for making the overhead tanks or cisterns or water receptacles approachable in order to facilitate inspection of the water in the container by the municipal authorities.

(7) For construction of permanent water collections such as swimming pools, artificial fountains, or water reservoirs, constructed for the purpose of beautification,—

- (a) an application shall be submitted to the Municipality, stating therein the anti-larval measures, which shall be taken by the applicant to keep the water free of mosquito larvae;
- (b) the Board of Councillors, after considering the application, shall issue a license to the applicant;
- (c) the applicant shall receive the said license on payment of such fee as may be determined by the Board of Councillors, and the license shall be renewed annually.

(8) The owner or the occupier of any private pond or water reservoir shall keep such pond or water reservoir free from water hyacinth or allied weeds to prevent mosquito breeding.

(9) If any person contravenes any provision of this section or fails to comply with any requirement under this section, he shall be punished with fine which may extend to one thousand rupees, and a daily fine of fifty rupees in the case of continuance of such contravention commences from the day on which such contravention is brought to the notice of such person by the municipal authority.

(10) If any person on whom the notice under sub-section (1) is served on fails or refuses to take the measures, or adopt the method of treatment, specified in such notice within the time specified therein, the Chairman himself or any officer duly authorized by him may take such measures or adopt such treatment, specified in such notice within the time specified therein, and recover the cost of doing so from the owner or the occupier of the premises, as the case may be, by way of levying charges under section 95 or special conservancy charges under section 95B in the manner specified therein.

HMC Act, 1980

Sec. 159A. Prevention of mosquito-breeding.—(1) If, in the opinion of the Mayor-in-Council, any pool, ditch, tank, well, pond, swamp, quarry, hole, drain, cesspool, watercourse, pit, cistern, desert or air-cooler, ground, underground, or overhead tank or any collection of water, or any land on which water may, at any time, accumulate, is or likely to become a breeding place of mosquitoes or, in any other respect, becomes a nuisance, the Mayor-in-Council may by notice require the owner or the person having control thereof to take all or any of the following actions :—

(a) to clean, or drain off or remove water therefrom, or to provide cover thereto, or

(b) to treat the same in such physical, chemical or biological method as may consider suitable in the circumstances, or

(c) to fill up unwholesome waterbody :

Provided that any unwholesome waterbody may be filled up only after compliance with the provisions of section 4C of the West Bengal Land Reforms Act, 1955, (West Ben. Act X of 1956), by the owner or the person having control thereof.

(2) No person shall keep, or permitted to be kept or maintained, within any premises or land any collection of stagnant or flowing water which, in the opinion of the Mayor-in-Council, is, or is likely to be, a breeding place for mosquitoes, unless such collection of water is treated in such manner as may effectively prevent the breeding of mosquitoes.

(3) All borrow pits dug in the course of construction and repairs of buildings, roads, or embankments shall be deep and connected with each other in the formation of a drain directed towards the lowest level and properly sloped for discharge into a river, stream, channel, or drain, and no person shall create any isolated borrow pit which, is likely to cause accumulation of water which again, in turn, may breed mosquito.

(4) The owner or occupier of any premises shall not keep therein any bottle, tyre (old or new), vessel, can, container or receptacle in such manner as may allow it to collect, or to retain, water which may breed mosquito, and shall clean and dry such bottle, tyre (old or new), vessel, can, container or receptacle at the interval of seven days.

(5) The owner or occupier of any premises shall wrap the openings of the vent-pipes and the outlets of septic tanks with proper mosquito-proof nets and shall maintain covering slabs of septic tanks to prevent entry and exit of mosquitoes.

(6) The owner or occupier of any premises shall seal the overhead tanks, cisterns or water receptacles to prevent mosquito breeding, and shall provide safe ladder for making the overhead tanks or cisterns or water receptacles approachable in order to facilitate inspection of the water in the container by the municipal authorities.

(7) For construction of permanent water collections such as swimming pools, artificial fountains, or water reservoirs, constructed for the purpose of beautification,—

(a) an application shall be submitted to the Corporation, stating therein the anti-larval measures, which shall be taken by the applicant to keep the water free of mosquito larvae;

(b) the Corporation, after considering the application, shall issue a license to the applicant;

(c) the applicant shall receive the said license on payment of such fee as may be determined by the Corporation, and the license shall be renewed annually.

(8) The owner or the occupier of any private pond or water reservoir shall keep such pond or water reservoir free from water hyacinth or allied weeds to prevent mosquito breeding.

(9) If any person on whom the notice under sub section (1) is served on fails or refuses to take the measures, or adopt the method of treatment, specified in such notice within the time specified therein or contravenes the forgoing provisions under this section, the Municipal Commissioner himself or any officer duly authorized by him may take such measures or adopt such treatment, specified in such notice within the time specified therein, and recover the cost of doing so on the owner or the occupier of the premises, as the case may be, by way of levying special conservancy charges, at such rate as may be determined by the Mayor-in-Council, and shall also be liable to a penalty which shall not be less than rupees one thousand but may extend to rupees one lakh only.

KMC Act, 1980 (New Section)

Sec.496A. Prevention of mosquito-breeding. —(1) If, in the opinion of the Municipal Commissioner, any pool, ditch, tank, well, pond, swamp, quarry, hole, drain, cesspool, watercourse, pit, cistern, desert or air-cooler, ground, underground, or overhead tank or any collection of water, or any land on which water may, at any time, accumulate, is or likely to become a breeding place of mosquitoes or, in any other respect, becomes a nuisance, the Commissioner may by notice require the owner or the person having control thereof to take all or any of the following actions :—

(a) to clean, or drain off or remove water therefrom, or to provide cover thereto, or

(b) to treat the same in such physical, chemical or biological method as may consider suitable in the circumstances, or

(c) to fill up unwholesome waterbody :

Provided that any unwholesome waterbody may be filled up only after compliance with the provisions of section 4C of the Kolkata Land Reforms Act, 1955, (West Ben. Act X of 1956), by the owner or the person having control thereof.

(2) No person shall keep, or permitted to be kept or maintained, within any premises or land any collection of stagnant or flowing water which, in the opinion of the Municipal Commissioner, is, or is likely to be, a breeding place for mosquitoes, unless such collection of water is treated in such manner as may effectively prevent the breeding of mosquitoes.

(3) All borrow pits dug in the course of construction and repairs of buildings, roads, or embankments shall be deep and connected with each other in the formation of a drain directed towards the lowest level and properly sloped for discharge into a river, stream, channel, or drain, and no person shall create any isolated borrow pit which, is likely to cause accumulation of water which again, in turn, may breed mosquito.

(4) The owner or occupier or any person having control of any premises or land shall not keep therein any bottle, tyre (old or new), vessel, can, container or receptacle in such manner as may allow it to collect, or to retain, water which may breed mosquito, and shall clean and dry such bottle, tyre (old or new), vessel, can, container or receptacle at the interval of seven days.

(5) The owner or occupier or any person having control of any premises or land shall wrap the openings of the vent-pipes and the outlets of septic tanks with proper mosquito-proof nets and shall maintain covering slabs of septic tanks to prevent entry and exit of mosquitoes.

(6) The owner or occupier or any person having control of any premises or land shall seal the overhead tanks, cisterns or water receptacles to prevent mosquito breeding, and shall provide safe ladder for making the overhead tanks or cisterns or water receptacles approachable in order to facilitate inspection of the water in the container by the municipal authorities.

(7) if the owner or occupier or person on whom the notice under sub-section (1) is served on fails or refuses to take the measures, or adopt the method of treatment, specified in such notice within the time specified therein or contravenes the forgoing provisions under this section, the Municipal Commissioner himself or any officer duly authorized by him may take such measures or adopt such treatment, specified in such notice within the time specified therein, and recover the cost of doing so from the owner or the occupier of the premises, as the case may be, by way of levying **special conservancy charges, at such rate as may be determined by the Mayor-in-Council, and shall also be liable to a penalty which shall not be less than rupees one thousand only and which may be extended to rupees one lakh only.**

Office of the Municipal Councillors Kamarhati

[Address:-1, M. M. Feeder Road, Rathtala, Belgharia, North 24 Parganas, Kolkata-700056]

Ph:-033-2564-9580, 033-2564-8646, Fax:- (033) 2564-1361. Email:

kamarhati_municipality@rediffmail.com

Memo No:

500/GWL

Date: 04/10/2018

To
The Principal Secretary
UMDA
Govt. Of WB
Kolkata

Sir,

As per telephonic discussion had with Mr Saikat Kumar Dutta Jt. Secretary of UDMA drone camera needed for our Municipality to the following wards .

Ward no -1,5,8,9,16,17,22,24,29,32,33 & 35

Thanking you,

Yours faithfully,


Chairman,

Kamarhati Municipality
Chairman
Kamarhati Municipality

August 3rd, 2018

To
The Director
SUDA
HB-305, AB Rd, HC Block, Sector III,
Salt Lake City,
Kolkata - 700106

Sub: Solutions for Vector Borne Diseases using Drone Imagery.

Respected Sir,

Greetings from Snaayou Healthcare & IT Solutions Pvt. Ltd

At the very outset, we wish to record our courtesy and best wishes by soliciting a meeting with your esteemed self on assuming the coveted role as Director -SUDA.

Regarding the above subject, we were referred to the Hon'ble MIC MA & UD Janab Firhad Hakim by Shri Malay Ghatak MIC Law & Justice, Govt. of West Bengal, as he contemplated that this solution could be very effective in Asansol Municipality and eventually for the State. The Hon'bl MIC MA & UD had in turn requested us to solicit a meeting with the respected Principal Secretary Dr. Subrata Gupta to take this forward and upon the conclusion of the said meeting, he advised us and his office to take the subject up with the respected Director of SUDA. Accordingly we met the respected Director -SUDA sometime in the 2nd week of July who further advised the CPHO Dr. Chakraborty for a Techno Commercial proposal to be submitted. Kindly find elucidated the same.

We are a Digital Healthcare Company recognised by Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Govt. of India- as a registered start-up engaged in the following key areas:

1. Public Health especially Vector Borne Diseases using Drone Technology.
2. Medical Emergency Applications
3. Health Card Solutions towards Secondary & Tertiary Care Treatments that provide financial relief to our registered customers.

Under our Public Health Initiatives, Snaayou specializes in the following areas:

1. Surveillance .

- Drones with High resolution 4K cameras are used to capture static and in-depth images with a pixel resolution of upto 3cm. These Drones are capable of flying in mild rainfall too and can cover a large area effectively say 500 sq.mtr in 6-7 hours.

Snaayou Healthcare & IT Solutions Pvt.Ltd

Registered & Corporate Office

The Chambers, # 503, 1865, Rajdanga Main Road, Kolkata -700107, West Bengal, India. Landline - 033 24412056, Mobile – 9830270869, 9903992831.

www.snaayou.com

2. **Postal Address Synchronisation Of Images Carrying Potential Vector Threats using proprietary software application – “Akashtori”**

In continuation, Snaayou had successfully conducted a Pilot Study in Kolkata for **Kolkata Municipal Corporation in the month of November 2017**, to understand the Impact Assessment caused by Vector Borne Diseases, namely Malaria and Dengue, using state of the art **Quad Copter Drones**.

- The study conducted in Borough X under KMC Jurisdiction area was significantly successful as alarming picture footages revealed, the presence of areas that are potential breeding grounds for spreading Vector Borne Diseases.
- In overview of the same, **KMC has decided in principle to undertake a round the year survey and surveillance using Quad Copter Drones for all its 144 wards under KMC jurisdiction.**
- *The letter of appreciation received from Kolkata Municipal Corporation is enclosed for your kind perusal (attached).*

TECHNICAL BENEFITS

- **SURVEILLANCE –**
 - Bring within reach inaccessible areas that pose a distinct difficulty for access by Municipal ground level staff for e.g. Roof tops, Drains, Trenches, Backyards of urban settlements, Industrial dumping grounds for wastes to name a few.
 - Enhance ground level operational efficiency of Field staff.
 - Ability to formulate quick turnaround strategies for infected sites.
- **POSTAL ADDRESS SYNCHRONISATION OF IMAGES CARRYING POTENTIAL VECTOR THREATS- “AKASHTORI” (Screen Shots attached)**
 - Background- We use Drones or UAV's to locate potential water stagnation threat. The results are amazing, since the drones bring out inaccessible images of water stagnation on rooftops, backyards, trenches with ease, which otherwise pose a serious challenge for a municipal worker. What however, was missing was that the exact postal address, pin code under the ward in which the water stagnation threat has been identified could not be generated automatically and **required human dependence again.**
 - In order to overcome the challenge of re-assigning manpower to locate the exact house where the threat has been located, we indigenously developed a software application "**Akashtori**". The role of Akashtori will be to analyse the **drone images** and **extrapolate or publish the exact Postal Address** including **Pin code and Ward no**, including a **readymade communication** to be sent to the house owner with the **picture attached as a proof.**
 - Provides readymade data for immediate action by the Municipal worker to tackle the threat.

- Inaccessible areas can now be targeted with pin pointed precision.
- Saves time and cost.

COMMERCIALS

- I. **Surveillance** – Our Service Charge for Surveillance activities if undertaken for at least 20 days a month which is sufficient to cover a mid-sized municipal area is Rs 15000/ plus taxes per day. This includes the following:
 - a. Drone Deployment
 - b. Deployment of Pilot
 - c. Training and Additional Skilling of Pilot
 - d. Maintenance of Hardware and Software Upgrades.
 - e. Travelling Charges within Municipal Area
 - f. Communication & Internet Charges
 - g. Analytical Services like analysis of images, generation of daily reports etc.

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 - e. Postage and Communication Charges for Communication mailing (if mandated).

We trust the above is aligned to our series of discussions held at various levels during the course of the last few months and shall be grateful to have your views and valued opinion to take this forward at the earliest as we clearly believe this can be a “Game Changer” in West Bengal on how Vector Borne Diseases pose a true menace and a huge burden on social costs and loss of man days.

Thanking You,

With Warm Regards

Somnath Dasgupta

Director

9830270869

Snaayou Healthcare & IT Solutions Pvt.Ltd

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www.snaayou.com

Dear Sir,

Greetings from Snaayou Healthcare & IT Solutions Pvt. Ltd

We were referred to the Honble MIC MA & UD Janab Firhad Hakim by Shri Malay Ghatak MIC Law & Justice, Govt. of West Bengal for the above subject. The Hon'ble MIC MA & UD has in turn requested us to solicit an appointment/meeting with respected Principal Secretary Shri. Subrata Gupta to take this forward as we are further given to understand that the proposal submitted to his office has been forwarded to the competent authority in SUDA mentioned by Shri. Arup Ratan Mukhopadhyay (Secy to the MIC).

A brief on the subject is enclosed below for your kind perusal.

We are a well-diversified Digital Healthcare Company recognised by Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Govt. of India- as a registered start-up engaged in the following key areas:

1. Public Health
2. Medical Emergency Applications
3. Solutions towards Secondary & Tertiary Care Treatments that provide financial relief to our registered customers.

Further, the Government of India, under National Vector Borne Disease Control Programme, has put in special focus for all the Eastern States owing to the uniqueness of the terrain and demography and how that is a primary source for proliferation of Vector Borne Diseases. In view of the same, as you know Sir, the Central Government has decided to grant assistance for combatting the menace of Vector Borne Diseases other than the States assistance towards this action area.

Also, the NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME in its ANNUAL REPORT 2014-15 published by the GOVERNMENT OF INDIA, NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME, DIRECTORATE GENERAL OF HEALTH SERVICES, MINISTRY OF HEALTH & FAMILY WELFARE emphasises the following area mentioned below as a critical step in combating Vector Borne Disease namely:

- **Surveillance - Disease and Entomological Surveillance**

Interestingly, the World Health Organisation (WHO) also lists Surveillance as a priority area for early detection of the same.

In view of the above subject, Snaayou specializes in Surveillance projects and had successfully conducted a Pilot Study in Kolkata for **Kolkata Municipal Corporation in the month of November 2017**, to understand the Impact Assessment caused by Vector Borne Diseases, namely Malaria and Dengue, using state of the art **Quad Copter Drones**.

The reasons for using Drones were primarily owing to the following:

1. Bring within reach inaccessible areas that pose a distinct difficulty for access by Municipal ground level staff for e.g. Roof tops, Drains, Trenches, Backyards of urban settlements, Industrial dumping grounds for wastes to name a few.
2. Enhance ground level operational efficiency of Field staff.
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The study conducted in Borough X under KMC Jurisdiction area was significantly successful as alarming picture footages revealed, the presence of areas that are potential breeding grounds for spreading Vector Borne Diseases.

In overview of the same, **KMC has decided in principle to undertake a round the year survey and surveillance using Quad Copter Drones for all its 144 wards under KMC jurisdiction.**

The letter of appreciation received from Kolkata Municipal Corporation is enclosed for your kind perusal.

In view of the above, we request you to kindly consider the subject for your district level nodal infrastructure. municipalities for implementing the surveillance using the latest technology.

Request your kind offices to grant us a meeting in order to proceed forward in effectively tackling the menace of Dengue. Malaria, Chikungunya to name a few, that are fatal and a pose a huge Social Cost on the exchequer.

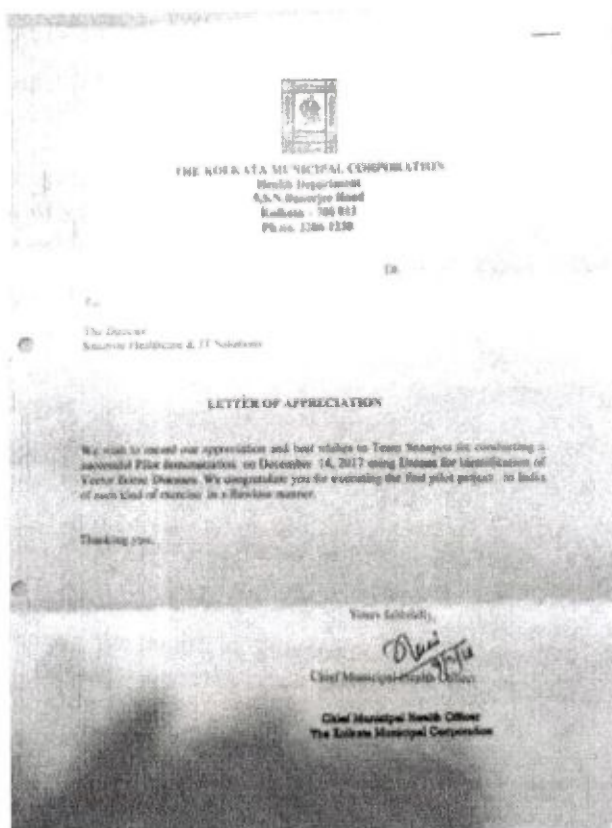
Thanking You in anticipation of an early reply.

Thanks and Warm Regards,

Somnath Dasgupta
Director
Snaayou Healthcare & IT Solutions Pvt.Ltd
The Chambers, # 503,
Rajdanga Main Road,
Kolkata 700107
West Bengal , India
M : 9830270869

Save Paper Go Green

—kmc letter of Appreciation.jpg



August 3rd, 2018

To
The Director
SUDA
HB-305, AB Rd, HC Block, Sector III,
Salt Lake City,
Kolkata - 700106

Sub: Solutions for Vector Borne Diseases using Drone Imagery.

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Thanking You,

With Warm Regards

Somnath Dasgupta

Director

9830270869

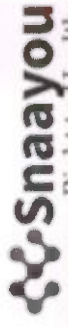
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www.snaayou.com

SCREEN SHOTS OF "AKASHTORI"



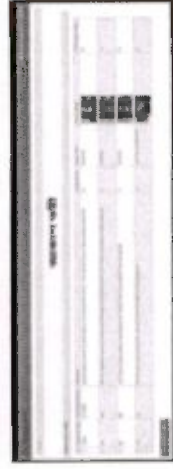
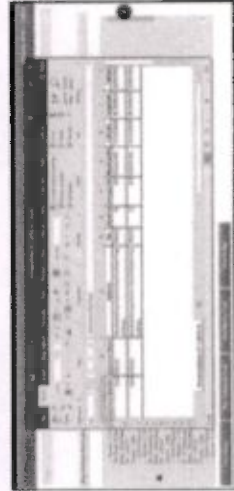
Mr. Dore

Welcome admin | Logout

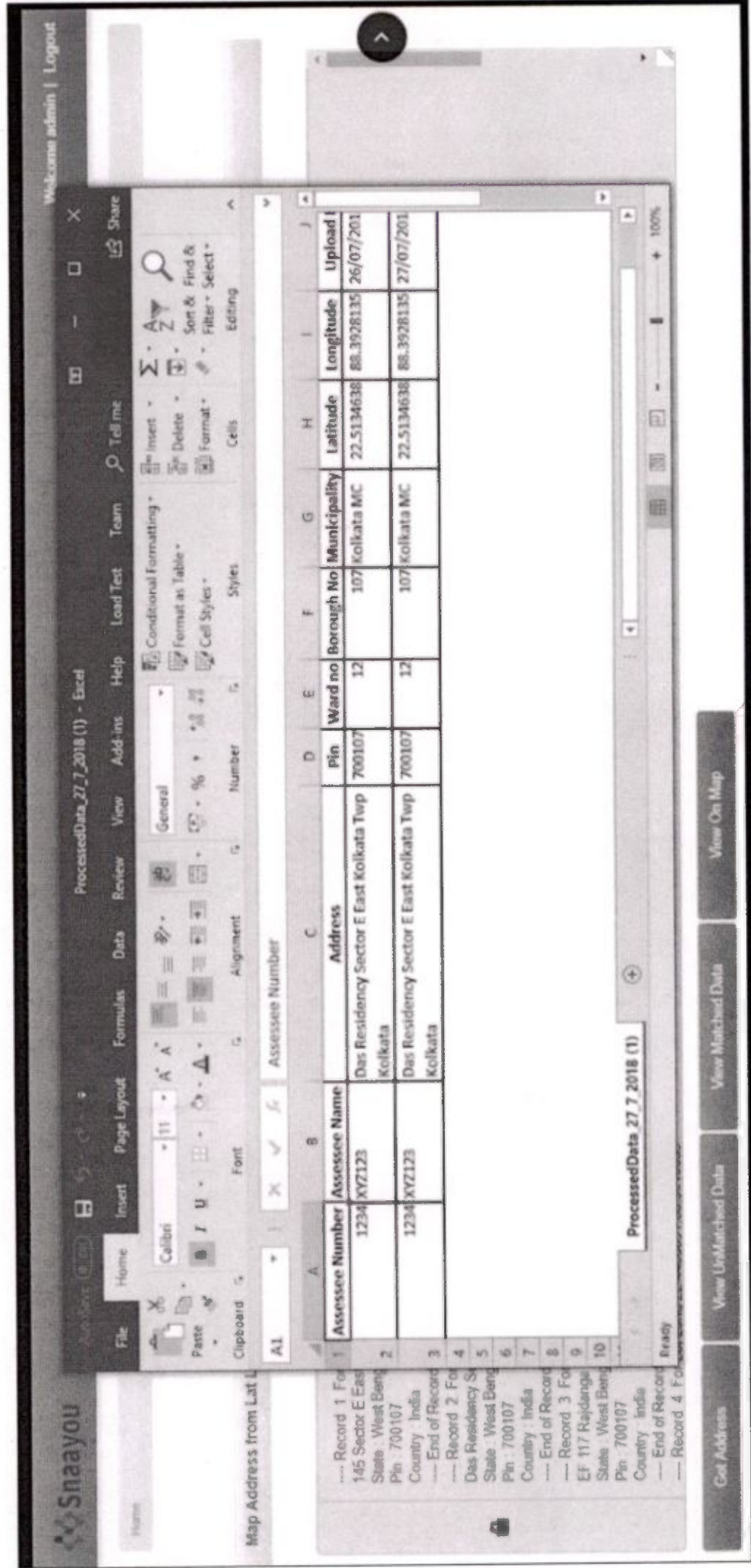
Home

আকাশ তরী

- Upload MC Data  Go
- Upload Drove Data and Image  Go
- Map Address  Go
- Generate Letter  Go



Akashtori publishes exact Postal Address



The screenshot displays a web application interface with a data table and a Microsoft Excel spreadsheet overlay. The web application header includes the Snaayou logo and the text "Welcome admin | Logout". The data table below shows the following information:

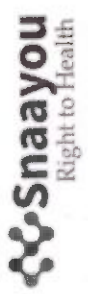
Assessee Number	Assessee Name	Address	Pin	Ward no	Borough No	Municipality	Latitude	Longitude	Upload
1234	XYZ123	Das Residency Sector E East Kolkata Twp Kolkata	700107	12	107	Kolkata MC	22.5134638	88.3928135	26/07/201
1234	XYZ123	Das Residency Sector E East Kolkata Twp Kolkata	700107	12	107	Kolkata MC	22.5134638	88.3928135	27/07/201

The Microsoft Excel spreadsheet overlay shows the same data table with columns A through J. The spreadsheet title is "ProcessedData_27_7_2018 (1) - Excel". The Excel interface includes a ribbon with tabs for File, Home, Insert, Page Layout, Formulas, Data, Review, View, Add-ins, Help, Load Test, Team, Tell me, and Share. The Home tab is active, showing options for Clipboard, Font, Alignment, Number, Styles, and Editing. The data table in Excel is as follows:

Assessee Number	Assessee Name	Address	Pin	Ward no	Borough No	Municipality	Latitude	Longitude	Upload
1234	XYZ123	Das Residency Sector E East Kolkata Twp Kolkata	700107	12	107	Kolkata MC	22.5134638	88.3928135	26/07/201
1234	XYZ123	Das Residency Sector E East Kolkata Twp Kolkata	700107	12	107	Kolkata MC	22.5134638	88.3928135	27/07/201

At the bottom of the web application, there are three buttons: "View UnMatched Data", "View Matched Data", and "View On Map".

Letter Generation Screen with Images as Proof



Staged with me > AAKASH TORI SCREENSHOTS

Welcome admin | Logout

Snaayou

Home

আকাশ তরী

Generate Letter

Sl	Assessee No	Assessee Name	Address	Image Name	Image Desc.	Drone Image	Select For Letter
1	1234	XYZ123	Das Residency Sector E East Kolkata Top Kolkata Pin:700107 Ward:107 Borough:12 Municipality:Kolkata MC	2	Photo-02		<input type="checkbox"/>
2	NF	NF	EF 117 Rajdanga Main Rd Sector E East Kolkata Top Kolkata Pin:700107 Ward:0 Borough:18 Municipality:NF	3	Photo-03		<input type="checkbox"/>
3	NF	NF	145 Sector E East Kolkata Top Kolkata Pin:700107 Ward:9 Borough:18 Municipality:NF	1	Photo-01		<input type="checkbox"/>
4	NF	NF	Tennis Court Juba Kolkata Pin:700139 Ward:9 Borough:18 Municipality:NF	75	Top view of water body		<input type="checkbox"/>

Generate Letter



THE KOLKATA MUNICIPAL CORPORATION

Health Department
K.N. Banerjee Road
Kolkata - 700 013
Ph no. 2366-1336

Dr.

To

The Director
Snapyout Healthcare & IT Solutions

LETTER OF APPRECIATION

We wish to record our appreciation and best wishes to Team Snapyout for conducting a successful Pilot demonstration on December 14, 2017 using Drones for identification of Vector Borne Diseases. We congratulate you for executing the first pilot project in India of such kind of exercise in a flawless manner.

Thanking you,

Yours Sincerely,

Chief Municipal Health Officer

Chief Municipal Health Officer
The Kolkata Municipal Corporation

রাজ্য নগর উন্নয়ন সংস্থা

STATE URBAN DEVELOPMENT AGENCY

“ইলগাস ভবন”, এইচ-সি ব্লক, সেক্টর-৩, বিধাননগর, কলকাতা-৭০০ ১০৬, পশ্চিমবঙ্গ

“ILGUS BHAVAN”, H-C Block, Sector - III, Bidhannagar, Kolkata - 700 106, West Bengal

SUDA-Health/359/18

17.07.2018

ক্রমিক নং

তারিখ

From: Director, SUDA

To: Somnath Dasgupta
Director
Snaayou Healthcare & IT Solutions Pvt. Ltd.,
The Chambers, # 503,
Ragdanga Main Road,
Kolkata-700 107,
West Bengal, India

Sub: Surveillance of Vector Borne Disease areas using Quad Copter Drones

Sir,

In reference to your proposal for conducting surveillance of Vector Borne Disease areas using Quad Copter Drones as pilot project, you are requested to submit the detailed action plan with specific timelines and budget requirement.

This is required for further processing in this regard.

Thanking you,

Yours faithfully,

Director, SUDA

Memo No. SUDA-Health/359/18

17.07.2018

Copy forwarded to:

1. PS to Hon'ble MIC, UD & MA Department, Govt. of West Bengal
2. Sr. PS to Principal Secretary, UD & MA Department, Govt. of West Bengal

Director, SUDA



April 20th, 2018

Right to Health

To

Janab Firhad Hakim
Hon'bl Minister -in-Charge
Urban Development and Municipal Affairs
Government of West Bengal

110 25/4/18
RECEIVED
Contents not Verified
Department of Urban Development
& Municipal Affairs
Government of West Bengal

Sub: Surveillance of Vector Borne Disease areas using Quad Copter Drones.

Respected Sir,

CP/170
T

Greetings from Snaayou Healthcare & IT Solutions Pvt. Ltd.

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Further, the Government of India, under National Vector Borne Disease Control Programme, has put in special focus for all the Eastern States owing to the uniqueness of the terrain, high demographic density, which are some of the primary sources for proliferation of Vector Borne Diseases.

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- **Surveillance - Disease and Entomological Surveillance**

In view of the above subject, Snaayou specializes in Surveillance projects and had successfully conducted a Pilot Study in Kolkata for Kolkata Municipal Corporation in the month of November 2017, to understand the Impact Assessment caused by Vector Borne Diseases, namely Malaria and Dengue, using state of the art Quad Copter Drones.

April 20th, 2018

To

Janab Firhad Hakim
Hon'bl Minister –in-Charge
Urban Development and Municipal Affairs
Government of West Bengal

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2. Medical Emergency Applications
3. Solutions towards Secondary & Tertiary Care Treatments that provide financial relief to our registered customers.

Further, the Government of India, under National Vector Borne Disease Control Programme, has put in special focus for all the Eastern States owing to the uniqueness of the terrain, high demographic density, which are some of the primary sources for proliferation of Vector Borne Diseases.

Also, the NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME in its ANNUAL REPORT 2014-15 published by the GOVERNMENT OF INDIA, NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME, DIRECTORATE GENERAL OF HEALTH SERVICES, and MINISTRY OF HEALTH & FAMILY WELFARE emphasises the following area mentioned below as a critical step in combating Vector Borne Disease namely:

- **Surveillance - Disease and Entomological Surveillance**

In view of the above subject, **Snaayou specializes in Surveillance projects** and had successfully conducted a Pilot Study in Kolkata for **Kolkata Municipal Corporation in the month of November 2017**, to understand the Impact Assessment caused by Vector Borne Diseases, namely Malaria and Dengue, using state of the art **Quad Copter Drones**.

Snaayou Healthcare & IT Solutions Pvt.Ltd

Registered & Corporate Office

The Chambers, # 503, 1865, Rajdanga Main Road, Kolkata -700107, West Bengal, India. Landline - 033 24412056, Mobile – 9830270869, 9903992831.

www.snaayou.com

The reasons for using Drones were primarily owing to the following:

1. Bring within reach inaccessible areas that pose a distinct difficulty for access by Municipal ground level staff for e.g. Roof tops, Drains, Trenches, Backyards of urban settlements, Industrial dumping grounds for wastes to name a few.
2. Enhance ground level operational efficiency of Field staff.
3. Ability to formulate quick turnaround strategies for infected sites.

The study conducted in Borough X under KMC Jurisdiction area was significantly successful as alarming picture footages revealed, the presence of areas that are potential breeding grounds for spreading Vector Borne Diseases.

In overview of the same, **KMC has decided in principle to undertake a round the year survey and surveillance using Quad Copter Drones for all its 144 wards under KMC jurisdiction.**

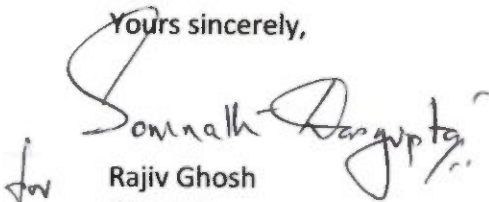
The letter of appreciation received from Kolkata Municipal Corporation is enclosed for your kind perusal.

In view of the above, we request you to kindly consider the subject for your entire district level nodal infrastructure for e.g. various Municipalities under your department for implementing the surveillance using the latest technology.

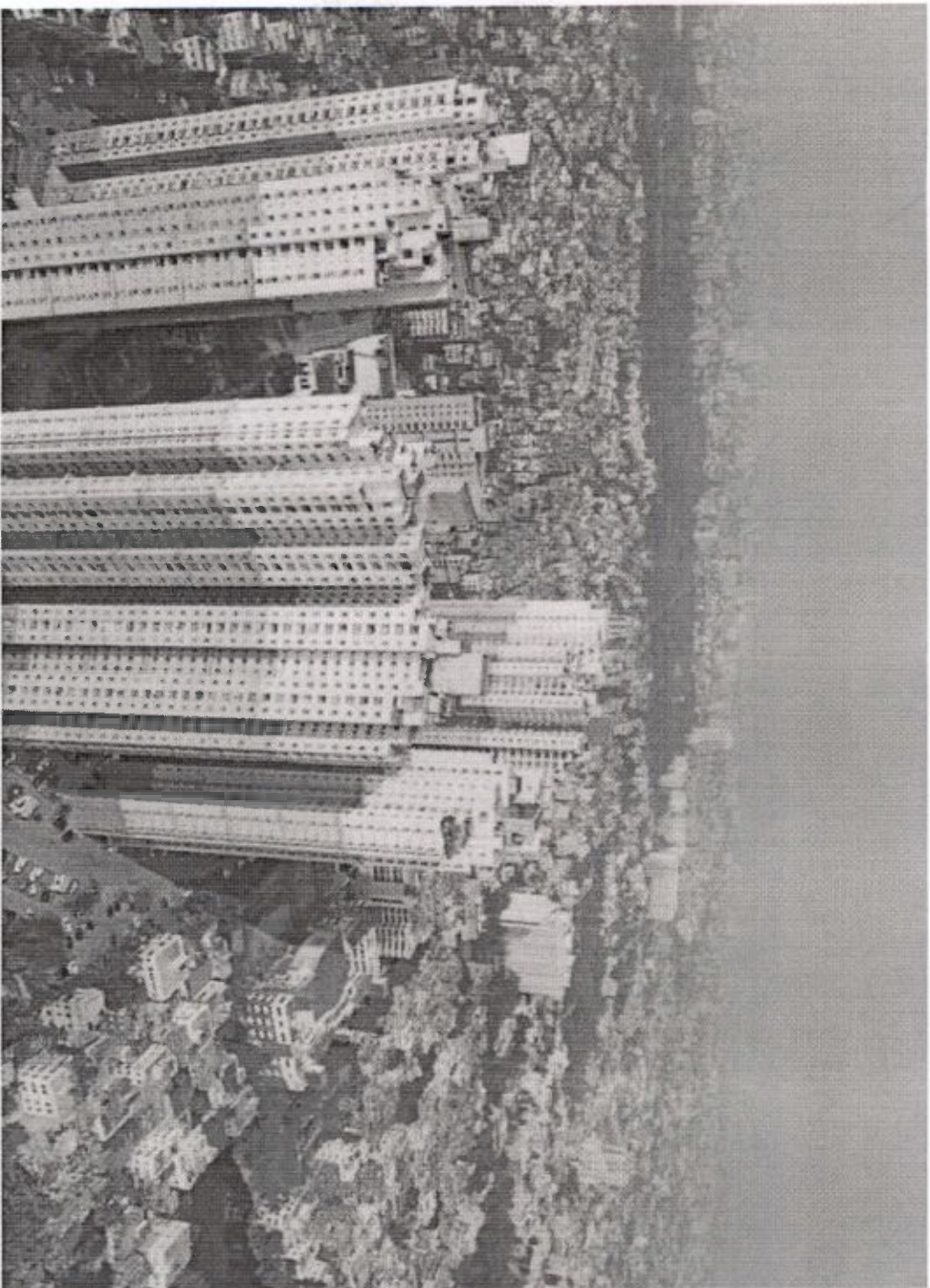
Request your Good offices to grant us a meeting in order to proceed forward in effectively tackling the menace of Dengue, Malaria and other Vector Borne Diseases, that are fatal and a pose a huge Social Cost on the exchequer.

Thanking you in anticipation of an early reply.

Yours sincerely,



Rajiv Ghosh
Director
#9830270869

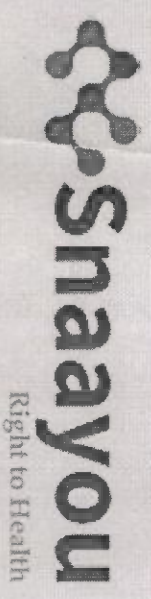


KOLKATA DANDRAMA – WESTBENGAL, INDIA

STRATEGY PRESENTATION

TO
SUDA
FOR

**SURVEILLANCE OF
VECTOR BORNE
DISEASES AND
SYNCING DRONE
IMAGERY TO
POSTAL ADDRESS**



PREPARED BY KAUSTABH GHOSH

Scope of Work

- High resolution image capture (video & static)using quad copter drones at any given altitude, that shall cover urban or semi –urban topography.
- Threats that are reasonably classified as “Threats” shall be detected by Drone for Vector Borne Disease, on any asset. This shall further be integrated with the Snaayou proprietary software application, leading to a Communication to the owner of the **Specified Asset**, from the competent authority(SUDA/Municipality), for taking immediate action for removing the threat.

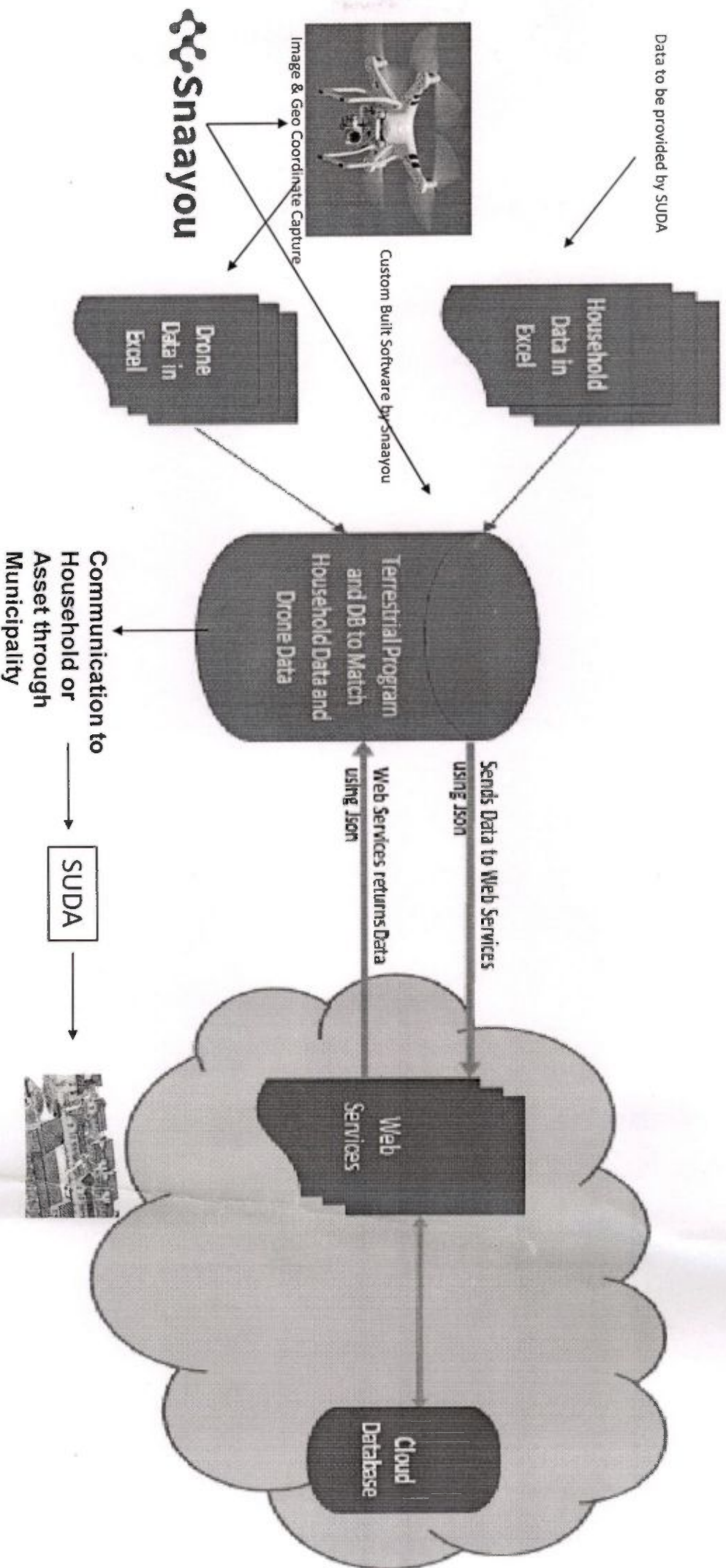
Solution

- Quad copters to be deployed by Snaayou.
- Postal Address, Name and Pin code to be provided by SUDA in excel or in a pre-discussed Database format.
- Drone will pick up the latitude and longitude of each of the assets/houses or residential areas that it passes over.
- Our custom built software application specially developed for this application, will convert the excel data containing Postal Address, Pin Code into Geo Spatial Data.
- Further the custom built software application will synchronize the geo spatial data of the excel data with the drone coordinates to match exact target acquired.

Solution

- On the target coordinates matching, SUDA or the Competent authority will be intimidated by us to further re-confirm the address.
- The images captured by drone will be stored in a database in Cloud against the concerned address.
- SUDA or the Competent authority can send letter or email to the concerned with picture as proof to take the process forward.
- Miscellaneous reports can be generated for the stored data.
- SUDA or the Competent authority can re-intimate us back if threat has been removed to be updated in Cloud or database (optional).

Proposed Solution

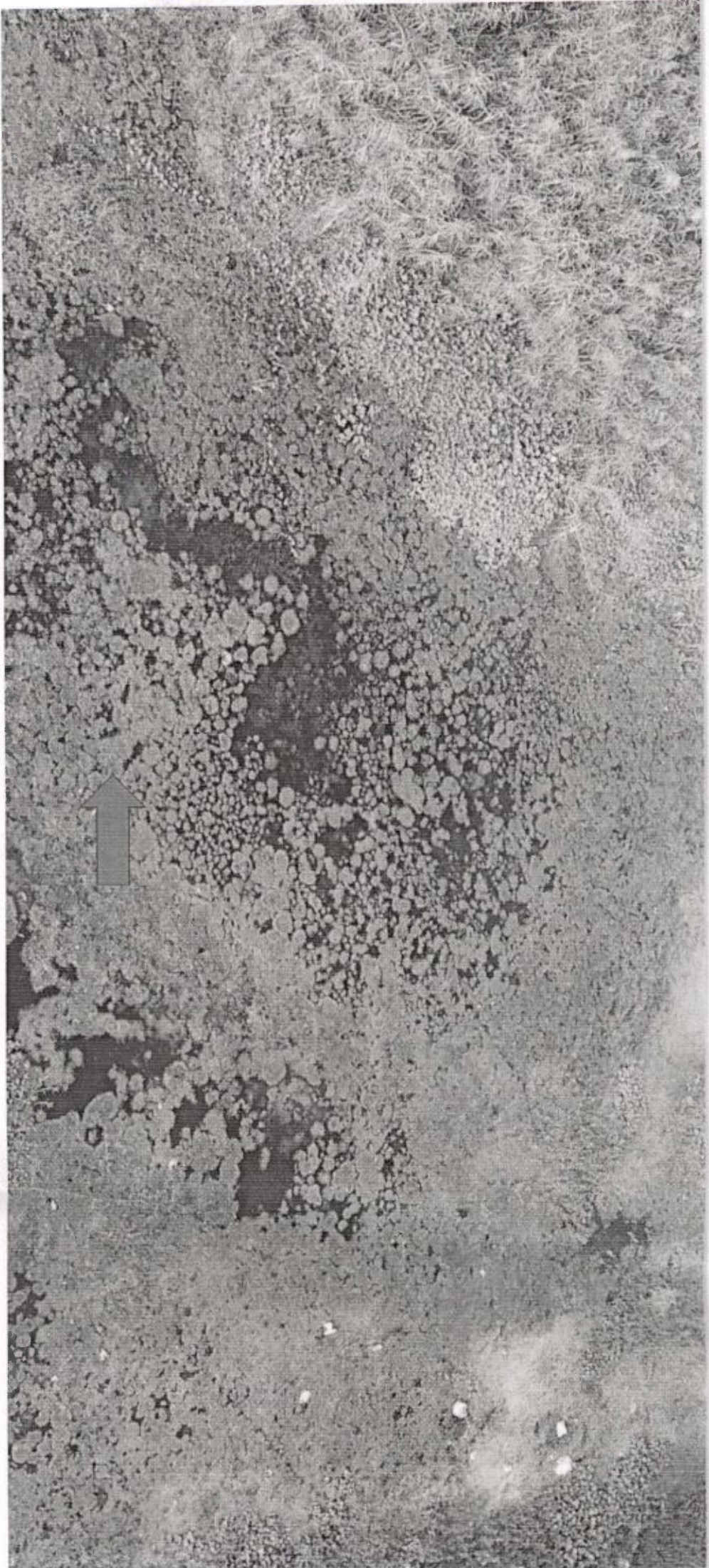


Expected Time frame to Deploy

- 2 months from receiving the confirmed Work order.

Proprietary Application Certificate (PAC)

- Since the Application will be a first in India, Snaayou wishes to patent the application for facilitating the selection criteria.
- The due application will be filed once Snaayou has satisfactorily demonstrated the application to the officials of SUDA and upon receiving a confirmed Work order.



Thank You

Respected Sir,

Greetings from Snaayou Healthcare & IT Solutions Pvt. Ltd.

UD/100/2018/05829

Drawing reference to our meeting dated June 8th, 2018 at your office and with reference to my last mail dated June 12th, 2018, we wish to seek a suitable time from you preferably on **22nd June or 25th June** for presenting and discussing the Strategy and Process that we will adopt for Integrating/automating the Threat detected by Vector Borne Diseases to the initiation of a suitable communication for a specific residential address out of the coordinates picked up by the UAV.

Since our last meeting, I also had the privilege of meeting the respected Member Secretary at his office.

We shall be grateful to have your time Sir.

DDG

PO Secy UD BMA
19.6.18

Thanks and Warm Regards,

Somnath Dasgupta
Director
Snaayou Healthcare & IT Solutions Pvt.Ltd
The Chambers, # 503,
Rajdanga Main Road,
Kolkata 700107
West Bengal, India
M : 9830270869



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Air SUDA
18/6/2018

CPHO
25/06/18



Debjit Chakraborty <cphosuda@gmail.com>

Drone Solutions Presentation at SUDA

somnath.dasgupta@snaayou.com <somnath.dasgupta@snaayou.com>

Tue, Jun 26, 2018 at 1:57 PM

To: secy.ma-wb@gov.in

Cc: secretarymember@gmail.com, cphosuda@gmail.com, kaustabhg@gmail.com, rajiv.ghosh@snaayou.com

Respected Sir,

Greetings from Snaayou Healthcare.

As directed by your esteemed office, we met Shri. S.P.Kar (Director) SUDA, yesterday to present our solutions approach for syncing the coordinates picked up by the Drone camera with the Postal Address and Pin Code leading to a communication to the asset/asset owner, in the event of a Vector Borne Disease threat detection.

Shri.S.P. Kar Sir, was kind enough to provide us with a patient audience and has assured us of looking into the subject by providing us with his views and inputs and the next steps.

I am attaching the solutions approach(ppt) for your kind perusal and consideration Sir.

Needless to say, this application, as rightly ideated by you, will be the first of its kind in India and we shall be extremely overjoyed and proud,if we can start our project from where we belong - West Bengal.

Thanks and Warm Regards,

Somnath Dasgupta
Director
Snaayou Healthcare & IT Solutions Pvt.Ltd
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Rajdanga Main Road,
Kolkata 700107
West Bengal , India
M : 9830270869

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 **UD Presentation1v2.0.pptx**
2287K



Debjit Chakraborty <cphosuda@gmail.com>

Drone Solution Presentation attached

somnath.dasgupta@snaayou.com <somnath.dasgupta@snaayou.com>

Tue, Jun 26, 2018 at 1:38 PM

To: cphosuda@gmail.com

Cc: kaustabhg@gmail.com, rajiv.ghosh@snaayou.com, tosomnath@gmail.com, ghoshrajiv555@gmail.com

Dear Dr. Bhattacharya,

Greetings from Snaayou.

As discussed , please find attached the presentation for your kind perusal.

Thanks and Warm Regards,

Somnath Dasgupta
Director
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 **UD Presentation1v2.0.pptx**
2287K



Debjit Chakraborty <cphosuda@gmail.com>

Automation of Threat Detected by UAV to a communication system for a specific residential address

somnath.dasgupta@snaayou.com <somnath.dasgupta@snaayou.com>

Mon, Jun 18, 2018 at 4:09 PM

To: secy.ma-wb@gov.in

Cc: cphosuda@gmail.com, secretarymember@gmail.com, kaustabhg@gmail.com, rajiv.ghosh@snaayou.com

Respected Sir,

Greetings from Snaayou Healthcare & IT Solutions Pvt. Ltd.

Drawing reference to our meeting dated June 8th, 2018 at your office and with reference to my last mail dated June 12th, 2018, we wish to seek a suitable time from you preferably on **22nd June or 25th June** for presenting and discussing the Strategy and Process that we will adopt for **Integrating/automating the Threat detected by Vector Borne Diseases to the initiation of a suitable communication for a specific residential address out of the coordinates picked up by the UAV.**

Since our last meeting , I also had the privilege of meeting the respected Member Secretary at his office.

We shall be grateful to have your time Sir.

Thanks and Warm Regards,

Somnath Dasgupta
Director
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Debjit Chakraborty <cphosuda@gmail.com>

Drone Surveillance for Vector Borne Disease

somnath.dasgupta@snaayou.com <somnath.dasgupta@snaayou.com>

Fri, Jun 15, 2018 at 5:06
PM

To: cphosuda@gmail.com

Cc: secy.ma-wb@gov.in, secretarymember@gmail.com, kaustabhg@gmail.com, rajiv.ghosh@snaayou.com

Dear Dr. Chakraborty,

Greetings from Snaayou Healthcare & IT Solutions Pvt. Ltd.

Drawing reference to my last mail dated June 12th, 2018, we wish to seek a suitable time preferably on 22nd June or 25th June for presenting and discussing the Strategy and Process that we will adopt for Integrating/automating the Threat detected by Vector Borne Diseases to the initiation of a suitable communication for a specific residential address out of the coordinates picked up by the UAV.

Thanks and Warm Regards,

Somnath Dasgupta
Director
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Debjit Chakraborty <cphosuda@gmail.com>

Drone Surveillance for Vector Borne Diseases

somnath.dasgupta@snaayou.com <somnath.dasgupta@snaayou.com>

Tue, Jun 12, 2018 at 4:04 PM

To: secretarymember@gmail.com

Cc: cphosuda@gmail.com, rajiv.ghosh@snaayou.com, ghoshrajiv555@gmail.com, kaustabhg@gmail.com, secy.ma-wb@gov.in

Dear Sir,

Greetings from Snaayou Healthcare & IT Solutions. Pvt. Ltd

We wish to record our thanks and courtesy extended to the undersigned and my colleague Mr. Rajiv Ghosh during our meeting at your office yesterday.

We also thank you for sharing your views on the target data.

Meanwhile , as directed by the Respected Principal Secretary Shri. Subrata Gupta, we are working out the process and modalities for identification of a target asset by Postal Address, Name and Pincode for further action to be taken up at your end.

We shall revert shortly in our next mail on the date of our next proposed meeting wherein we would like to discuss and share the ops process adopted by us and once we have your in principle approval, we shall mutually seek your consent for the date of Pilot.

Thanks and Warm Regards,

Somnath Dasgupta
Director
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West Bengal , India
M : 9830270869

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Debjit Chakraborty <cphosuda@gmail.com>

Vector Borne Disease Surveillance -Recording our Thanks (Snaayou healthcare & IT Solutions Pvt. Ltd)

somnath.dasgupta@snaayou.com <somnath.dasgupta@snaayou.com>

Fri, Jun 8, 2018 at 3:40 PM

To: secy.ma-wb@gov.in

Cc: rajiv.ghosh@snaayou.com, ghoshrajiv555@gmail.com, kaustabhg@gmail.com, drrobin.bhattacharya@gmail.com, cphosuda@gmail.com, arupratan68@gmail.com

Respected Sir,

Greetings from Snaayou Healthcare & IT Solutions Pvt. Ltd.

I wish to thank you and your colleagues for sparing the undersigned with your valuable time during our meeting today w.r.t to the above subject at your office.

We also thank you for evincing interest in Surveillance for Vector Borne Diseases using Quad Copter Drones.

As directed , I shall be in touch with Dr. Debjit Chakraborty- CPHO, SUDA, for planning the Pilot as decided or directed to us.

We are also trying to understand if we can start our Pilot with a Municipality that already has a digitised GIS metric which shall greatly enable us to carry out the survey with the desired accuracy level of locating the exact premise.

However, even in the absence of GIS data we can also locate the premises and share the information with your competent authority for a suitable strategy.

Thanks and Warm Regards,

Somnath Dasgupta
Director
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