



MONTHLY DENGUE UPDATE

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Ministry of Health, Sri Lanka



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Towards Sustainable and Integrated Community Engagement for Dengue Control in Sri Lanka

Community engagement is a key component of any effective Dengue control strategy. This is understandable because the control of the breeding of mosquitoes in neighborhoods demands the active participation of household members and others at community level. On the other hand, effective engagement of community members needs to be well thought out and built into an integrated national action plan to make it a significant part of the national effort. Designing of such a strategy has to be based on a good understanding of the ground realities in terms of the diversity of community members and other stakeholders and the social and economic conditions that prevent many people from playing an active role in dengue control programs.

In this short essay, an attempt is made to outline a community mobilization program that can be implemented through multi-stakeholder engagement at a local level. What is proposed is a bottom up, grass-roots level intervention involving all households and other users of land and other spaces, supported by local institutions and Community Bases Organizations (CBOs) with active participation of organized and unorganized actors such as youth societies and volunteers. The institutional context of the initiative is presented graphically in the Figure 1.

The involvement of various stakeholders and actors in dengue control programs is not new as they are often mobilized to varying extents even today. But what is needed today is a revamping of community engagement in a systematic and integrated manner to ensure that grassroots level communities remain engaged in public health campaigns in their settlements on a continuing basis, not just the Dengue control program.

As is well known, breeding of mosquitoes carrying the Dengue virus is not confined to the indoor and outdoor environment of a household but extends to many other public and private spaces such as work sites, road reservations, business premises, unused or abandoned buildings, drains, etc. These public and private spaces are as important as household premises as sites of mosquito breeding and, therefore need equal attention in a systematic fashion. So, the persons and institutions in control of such premises need to be involved in the community -based Dengue control program.

Any strategy to effectively deal with a persisting public health issue like the Dengue epidemic needs to pay serious attention to several issues, namely, continuity, sustainability and long-term effectiveness. As for continuity, many institutional intervention programs tend to deteriorate overtime and become less effective to produce the expected outcomes. Therefore,

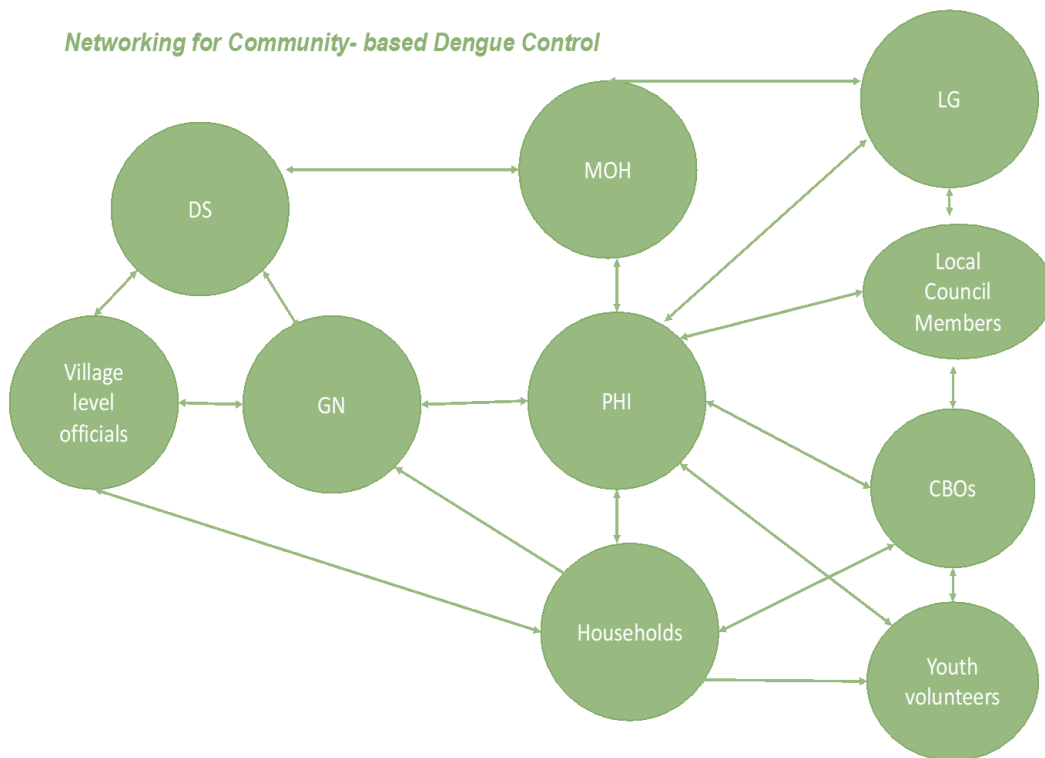


Figure 1: Network for community-based Dengue control

systematic monitoring of the functioning of the program on a regular basis is critically important to ensure its continuity. On the other hand, sustainability or otherwise of a good program depends on diverse circumstances and, therefore, there is a need to identify challenges to sustainability through a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis and take measures to overcome them. And, finally, the effectiveness of the program can be reduced over time also due to unexpected developments. Identification of such factors on a continuing basis can help mitigate them in a timely fashion.

What is implicit in the above discussion is that continuous monitoring and evaluation of the program's community engagement component are as important as the other components. However, given the fact that community engagement is a process unfolding at a grassroots level, monitoring of such a process is best done at a community level through a decentralized community-based mechanism. Deployment of trained youth volunteers for this purpose through an appropriate divisionally- based institutional mechanism can be the most effective way to do this. National Volunteering Secretariat in collaboration with the NYSC can facilitate the process of mobilizing youth volunteers but the local institutions such as Divisional Secretariat

(DS), Local Authorities (LA), Medical Officer of Health (MOH), etc. need to work together to establish and manage the local mechanism.

The Challenge of Integrating the National Dengue Control Program with Community Action

The success of any national program is usually measured in terms of national level indicators based on data drawn from around the country through the relevant network of institutions. Reports prepared on the basis of such data give us a picture of the trends at national and subnational levels, helping the relevant institutions to make improvements in the program to address persisting and emerging issues. In the case of Dengue control, improving community engagement is critically important. So, what happens at the grassroots level in terms of community mobilization needs to be systematically monitored, documented and reported on an ongoing basis. This is a practically feasible proposition in Sri Lanka as we have the necessary institutional infrastructure and human resources at different levels from national to local. As is well known, all 14,000 GN divisions are an integral part of the above institutional infrastructure. If communities are mobilized at GN level to address issues connected with the Dengue, it is also

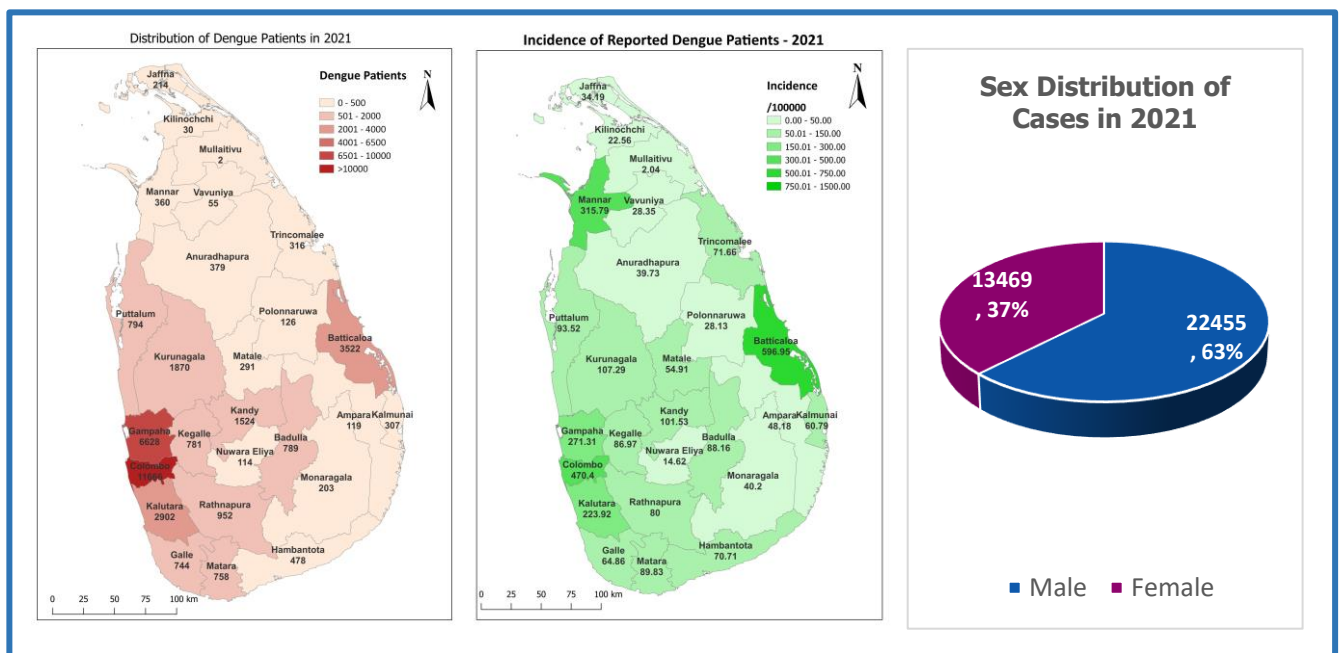
possible to generate the necessary real time data that not only can be fed into the local, regional, and national databases but also made use of for planning and intervention purposes at different levels. In this digital age, it is also possible to use modern technology for data generation and data management purposes.

As the diagram given earlier in the essay indicates, an integrated local system of institutions and other stakeholders can facilitate coordinated action for grassroots level mobilization of households and other users of land, water, and other resources. Field level government officers, CBOs, youth volunteers and other potential actors can not only facilitate the above process but also contribute to other related activities such as field investigations, collection of visual and statistical data, public education, and institutional interventions. The development and deployment of an electronic data base that can also be visualized on GIS maps can be a very useful tool for program management and public education purposes.

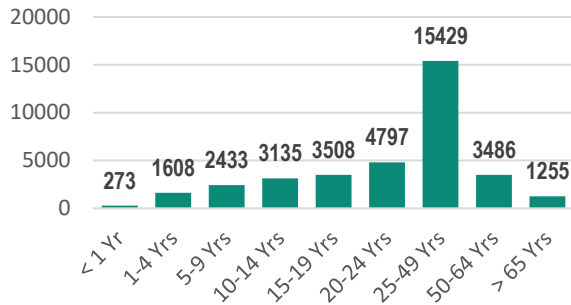
And, finally, the potential role of youth volunteers needs emphasis. Firstly, the groundwork necessary for mobilizing youth for any important national purpose has already been done in Sri Lanka over several decades. The establishment of the National Volunteering Secretariat at the Ministry of Social Services as part of a program of the UN volunteers was an important milestone. It has a mandate to mobilize citizens and other stakeholders for volunteering activities and works closely with the private sector, civil society, and state institutions. So, mobilization of youth for diverse activities connected with Dengue control in all parts of the country can be a national program involving the Ministry of health, NVS, Ministry of Education and NYSC. Given the enormous potential of such a program to not only tap the energies and skills of youth but also to create opportunities for youth to improve their skills and knowledge, it can be a win-win situation for both the youth and the wider public.

Prof. Siri Hettige,
Professor Emeritus Department of Sociology, University of Colombo

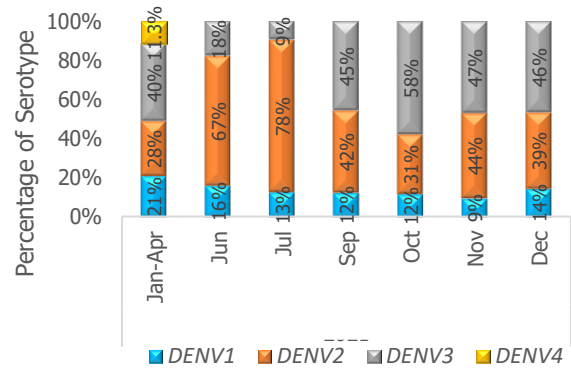
2. HIGHLIGHTS OF 2021



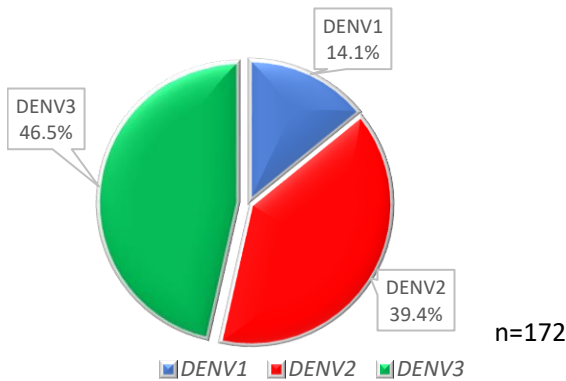
Age Distribution of Cases in 2021



DENGUE VIRUS SEROTYPE SURVEILLANCE-2021



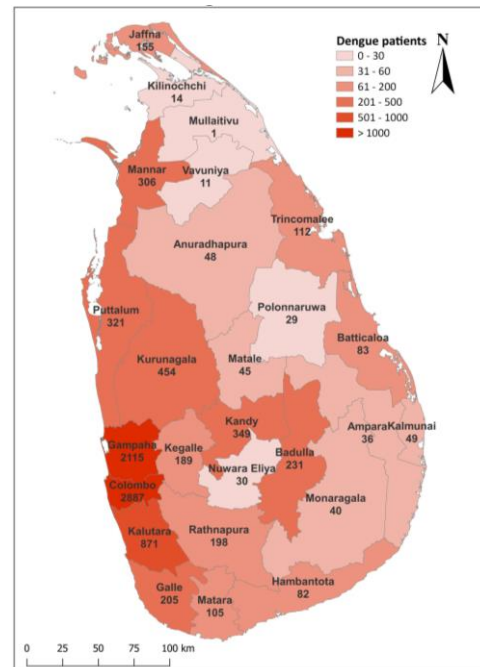
3. VIRUS SURVEILLANCE DATA – DECEMBER 2021



The Circulating Dengue Virus Serotypes in December 2021 from major hospitals in Sri Lanka

Source: Department of Virology, MRI and Centre for Dengue Research, Universit Jayewardenepura

4. DISTRIBUTION OF DENGUE PATIENTS – DECEMBER 2021

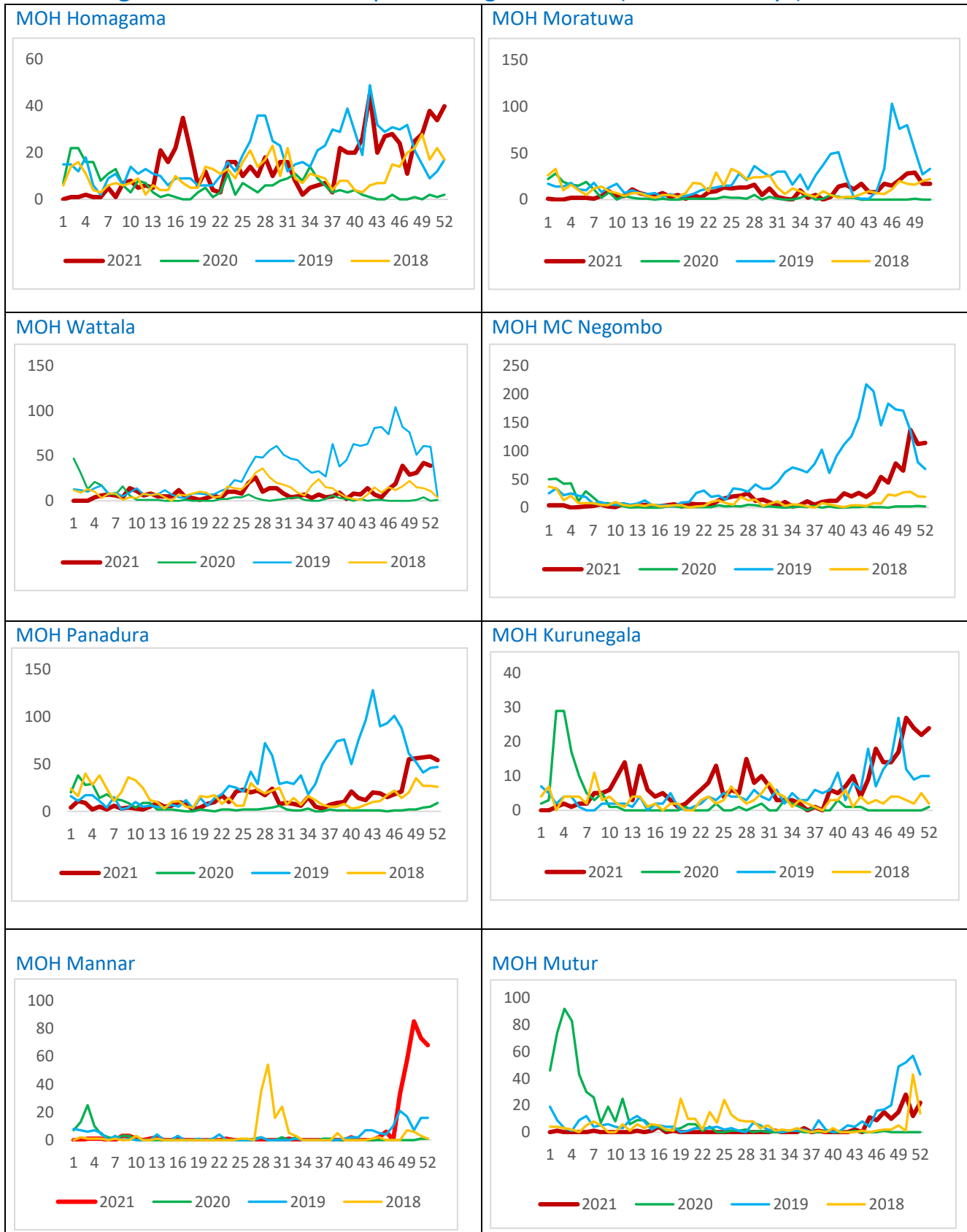


5. SUMMARY OF ENTOMOLOGICAL AND EPIDEMIOLOGICAL SURVEILLANCE DATA – DECEMBER 2021

| Summary of Adult Surveys | | | | |
|--------------------------|----------|---------------------|--------------------------------------|--|
| District | MOH | GN area | Findings | |
| Colombo | Pamunuwa | Pamunuwa | Outdoor findings (8.00 am-1.00 pm) | <i>Aedes</i> mosquitoes were not detected |
| Hambanthota | Tangalle | Kudawella | Outdoor findings (7.30 am – 2.30 pm) | <i>Aedes albopictus</i> - 03 female/ 03 male |
| Batticaloa | Eravur | GN 2 | Indoor findings (8.00 am -1.00 pm) | <i>Aedes aegypti</i> - 13 female (unfed 03, blood fed 07, semi gravid 3) |
| Kalutara | Ingiriya | 627, Kalutara South | Outdoor findings (9.00 am -5.45 pm) | <i>Aedes albopictus</i> - female 02 (Blood fed 02) |

| SUMMARY OF ENTOMOLOGICAL AND EPIDEMIOLOGICAL SURVEILLANCE DATA | | | | | | | |
|--|--------------|---|----------------|------------|---|-----------------------------------|------------|
| Province | District | Entomological surveillance data | | | | Epidemiological surveillance data | |
| | | (Source - returns of entomology surveys received by NDCU) | | | | (Source-DenSys) | |
| | | No. of Premises | | | Main type of containers positive for larvae and percentage positivity | Month | |
| | | Inspected | Positive Found | Positive % | | December | Cumulative |
| W P | Colombo | 918 | 95 | 10.4 | Temporary Removed items (24.4%), Water storage other (22.1%), Discarded items (14.5%) | 2886 | 11666 |
| | Colombo MC | | | | Data not Received by NDCU | | |
| | Gampaha | 1815 | 132 | 7.3 | Temporary Removed items (22.4 %), Discarded items (21.7%), Ornamental items (10%) | 2115 | 6628 |
| | Kalutara | 1503 | 184 | 12.3 | Discarded items (29.5%), Temporary Removed items (23.8%), Tyres(11%) | 872 | 2902 |
| | NIHS | 901 | 167 | 18.5 | Temporary Removed items (32.9%), Discarded items (16.2%), Covering Items (14.3%) | | |
| C P | Kandy | 1607 | 100 | 6.2 | Discarded items (19.7%), Temporary Removed items (15.7%), Water storage other (15%) | 349 | 1524 |
| | Matale | 700 | 36 | 5.2 | Discarded items (35.4%), Covering Items (25%), Tyres(14.6%) | 45 | 291 |
| | Nuwara Eliya | | | | Data not Received by NDCU | 30 | 114 |
| S P | Galle | 1900 | 206 | 10.8 | Discarded items (23.6%), Temporary removed items (16.7%), Ornamental items (16.3%) | 205 | 744 |
| | Hambantota | 1124 | 127 | 11.3 | Discarded items (19.4%), Water storage other items (17.2%)Temporary Removed items (16.8%) | 82 | 478 |
| | Matara | 1400 | 134 | 9.6 | Discarded items (35.6%), Water storage other item (19.6%), Tyres (11.3%) | 105 | 758 |
| N P | Jaffna | 1709 | 238 | 13.9 | Water storage other items (23.5%), Ornamental items (21.3%), Discarded items (17.3%) | 155 | 214 |
| | Kilinochchi | 600 | 70 | 11.7 | Discarded items (30%), Tyres (23.8%), water storage items (21.3%) | 14 | 30 |
| | Mannar | 1270 | 325 | 25.6 | Discarded items (24.6%), Water storage other items (20.7%), Water storage barrels (11.1%) | 306 | 360 |
| | Vavuniya | 1875 | 195 | 10.4 | Discarded items (38.8%), Ornamental items (9.6%) Water storage other items (8.45) | 11 | 55 |
| | Mullativu | | | | Data not Received by NDCU | 1 | 2 |
| E P | Ampara | 254 | 24 | 9.5 | Discarded items (42.1%), Tyres (18.4%), Ornamental items (15.8%) | 36 | 119 |
| | Batticaloa | 1495 | 204 | 13.7 | Discarded items (22.1%), Temporary Removed items (20.2%), Other items (8.8%) | 83 | 3522 |
| | Trincomalee | | | | Data not Received by NDCU | 112 | 316 |
| | Kalmunai | 960 | 183 | 19.1 | Discarded items (19.8%), .3%) Other items (16.7%)Temporary Removed items (16.7%) | 49 | 307 |
| N W P | Kurunegala | 1963 | 237 | 12.3 | Discarded items (26%), Temporary Removed items (19.2%), Water storage other items (12.1%) | 454 | 1870 |
| | Puttalam | 1186 | 154 | 13 | Discarded items (40.6%) Water Storage other (15.1%), Ornamental items (11.5%) | 321 | 794 |
| N C P | Anuradhapura | | | | Data not Received by NDCU | 48 | 379 |
| | Polonnaruwa | 311 | 48 | 15.3 | Discarded items (21.67%), Tyres (21.67%), Temporary Removed items (18.3%) | 29 | 126 |
| U P | Badulla | 407 | 72 | 17.7 | Discarded items (28.7%), Concrete slabs (24.8%) Covering items (13.2%) | 231 | 789 |
| | Monaragala | 2308 | 321 | 13.9 | Discarded items (50.2%), Water Storage barrels (9.3%), Ornamental items (8.7%) | 40 | 203 |
| S G P | Rathnapura | 1500 | 162 | 10.8 | Discarded items (40.5%), Tyres (10.1%), Ornamental items (7.4%), | 198 | 952 |
| | Kegalle | 3672 | 319 | 8.7 | Discarded items (20.6%), Water Storage barrels (14.9%), Tyres (13.2%) | 189 | 781 |
| Sri Lanka | | 31378 | 3733 | 11.9% | Discarded items (28.9%), Temporary Removed items (11.9%), Water storage other items (10.6%) | 8966 | 35924 |

Current high risk MOH AREAS - Epidemiological trends (Source: DenSys)



6. DENGUE ENTOMOLOGICAL FORECAST OF HIGH-RISK AREAS

| District | MOH Area | GN Division |
|----------|---------------|--------------------|
| Colombo | Ratmalana | Wedikanda |
| | Nugegoda | Welikada East |
| Gampaha | Attanagalla | Alawala |
| | Negombo | Mankuliya |
| | Negombo | Sadasarana Mawatha |
| | Ja-Ela | Ja-Ela |
| Kalutara | Beruwala | 757 |
| | Beruwala | 727 |
| | Panadura | 687-Wekada West |
| | Bulathsinhala | 812-Dewamulla |
| Kandy | Werellagama | Ratmale |
| | Kundasale | Rajawella North |
| Galle | Ambalangoda | Patabadimulla |
| | Udugama | Yatalamatta East |
| Matara | Weligama | Midigama |
| | MC Matara | Walgama |
| Jaffna | MC Jaffna | J/77 |

| District | MOH Area | GN Division |
|------------|---------------|-----------------------|
| Mannar | Mannar | Pesalai South |
| | Mannar | Periyakadai |
| | Mannar | Moorst |
| Vavuniya | Vavuniya | Vavuniya Town |
| Batticaloa | Kattankudy | 162B |
| | Chenkalady | Arumugathan Kudirippu |
| | Batticaloa | 173D |
| | Oddamavady | Nooranviya Road |
| Kurunegala | MC Kurunegala | Theliyayagama |
| | Mawathagama | Mawathagama |
| Puttalam | Chilaw | Wattakaliya |
| | Chilaw | Thilladiya |
| | Puttalam | Puttalam East |
| | Kalpitiya | Alankuda |
| Badulla | Badulla | Badulla North |
| | Badulla | Badulla Central |
| Monaragala | Monaragala | Viharamulla |
| Ratnapura | Embilipitiya | New Town |

Dengue vector surveys were conducted in 347 GN areas inspecting 31378 premises in December.

Here, the Entomological forecasting has been done by considering the districts currently recording a high number of Dengue cases that are also recorded high values for Entomological indices against their conventional threshold values.

7. SPECIAL ACTIVITIES AND EVENTS CONDUCTED BY THE NATIONAL DENGUE CONTROL UNIT

Webinar on Clinical Management of Dengue for General Practitioners and Primary Care Physicians - 04.12.2021

Resource:

Dr. Ananda Wijewickrama

Dr. Shanthini Ganeshan

Dr. Sanath Hettige

National Dengue Control Unit

Update on clinical management of Dengue for General Practitioners & Primary Care Physicians

4th December 7.00 PM

VIA ZOOM

Facebook LIVE

Register in advance for the webinar

Website: www.pncu.gov.lk

Dr. Ananda Wijewickrama
Consultant Physician
NIID

Dr. Shanthini Ganeshan
Consultant Paediatrician
CSTH

Moderated by
Dr. Sanath Hettige
CGPSL



Knowledge Sharing Sessions – 10.12.2021
Conscious consumerism towards a healthy life
Resource: Mrs. Kanchana Weerakoon



The 12th International Conference on Structural Engineering and Construction Management- 18.12.2021

NDCU Participation in the Panel Discussion and Technical Paper Presentation:
Rethinking Construction to meet the needs of Pandemic and other biological hazards



Training Programme for the NDCU staff on General Office Procedures – 27.12.2021

Resource
Mrs. Chandrika Perera
Administrative Officer
Investigation, Ministry of Health



Address

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555/5, Elvitigala Mawatha,
Colombo 05.

Any comments, suggestions, and contributions for the MDU Sri Lanka are welcome.

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