प्रेषक,

## शत्रुन्जय कुमार सिंह, विशेष सचिव

उत्तर प्रदेश, शासन।

सेवा में,

1-प्रमुख सचिव, चिकित्सा शिक्षा विभाग, उ०प्र० शासन।

2-महानिदेशक, चिकित्सा एवं स्वास्थ्य सेवाएं, उ०प्र०, लखनऊ।

चिकित्सा अनुभाग—5 लखनऊ :दिनांक : 24 अप्रैल, 2020

विषयः—कोविड—19 जॉच की हेतु प्रयोगशाला की क्षमता बढाये जाने के संबंध में। महोदय.

उपर्युक्त विषयक सचिव, पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार / चेयरमैन, एम्पावर्ड ग्रुप–2 के अर्द्ध शास0पत्र संख्या–7 / कोविड / ईजी–2 / 2020 दिनांक 12.04.2020 (छायाप्रति) तथा उसके साथ संलग्न डा0 बलराम भार्गव महानिदेशक, आई0सी0एम0आर0 के अर्द्ध शास0पत्र संख्या–ई0सी0डी0 / कोविड–19 / मिसलीनियस / 2020 दिनांक 12.04.2020 की छायाप्रति संलग्न कर प्रेषित करते हुए मुझे यह कहने का निदेश हुआ है कि कृपया कोविड–19 की जॉच हेतु प्रयोगशालाओं की क्षमता बढाये जाने के संबंध में निर्देशानुसार अग्रतर कार्यवाही करने का कष्ट करें।

संलग्नकः यथोपरि।

( शत्रुन्जय कुमार सिंह ) विशेष सुचिव।

# संख्या–886(1)/पाँच–5–2020 तददिनांक

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषितः-

- 1. निदेशक, संचारी रोग, उ०प्र० लखनऊ।
- 2. गार्ड बुक।

आंज्ञा ( वैद प्रकेशि राय ) अन् सचिव।

vikas/go.

#### arding Scaling up Testing for COVID-19

#### From : secy-moef < secy-moef@nic.in>

bject : Regarding Scaling up Testing for COVID-19

To:cs-ap <cs@ap.gov.in>, cs-arunachal@nic.in, Kumar Sanjay Krishna IAS <cs-assam@nic.in>, Chief Secretary Bihar <csbihar@nic.in>, Chief Secretary Office <csoffice.cg@gov.in>, Chief Secretary <cs-goa@nic.in>, chiefsecretary@gujarat.gov.in, Keshni Anand Arora <cs@hry.nic.in>, Shri Anil Kumar Khachi <cshp@nic.in>, cs-jandk <cs-jandk@nic.in>, bharatbhushanvyasias@gmail.com, Shri Sukhdev Singh <csjharkhand@nic.in>, cs@karnataka.gov.in, officeofcs@gmail.com, Chief Secretary, Government of Kerala <chiefsecy@kerala.gov.in>, cs <cs@mp.nic.in>, chiefsecretary@maharashtra.gov.in, csmanipur <cs-manipur@nic.in>, cso-meg <cso-meg@nic.in>, cs miz <cs miz@redifmail.com>, Chief Secretary Nagaland <csngl@nic.in>, Chief Secretary Odisha <csori@nic.in>, Chief Secretary, Punjab <cs@punjabmail.gov.in>, csraj@rajasthan.gov.in, Prakash <cs-skm@nic.in>, cs@tn.gov.in, tnstateeoc@gmail.com, Chief Secretary <cs@telangana.gov.in>, cs-tripura <cs-tripura@nic.in>, CHIEF SECRETARY GoUP <csup@nic.in>, chief secretary <cs-uttarakhand@nic.in>, cswestbengal <cs-westbengal@nic.in>, Chief Secretary Andamans <cs-andaman@nic.in>, Manoj Parida <adviser-chd@nic.in>, Administrator DD & DNH <administrator-dd-dnh@nic.in>, Shri Vijay Kumar Dev <csdelhi@nic.in>, Farooq Khan <lkadmin@nic.in>, Chief Secretary CS, Puducherry <cs.pon@nic.in>

Mon, Apr 13, 2020 11:15 AM 1 attachment

#### Sir,

As directed by Secretary, MoEF&CC, Govt of India and Chairman, Empowered Group-2, kindly find attached a scanned copy of letter written by him to all Chief Secretaries/all Administrators of States/UTs on the subject cited above.

Regards

PPS to Secretary

C.K. Mishra Secretary M/o Environment, Forest & Climate Change Tel.No.24695262/24695265 Fax No.24695270



Lr to CSs regarding scaling up testing.pdf 3 MB संख्या 2675(9) / पी०एस०एम०एम०/2020

# 217-41- 886/412-5-2020 No. 3088

.../MS/GI/2023





comman dans सचिव भारत सरकार पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय SECRETARY **GOVERNMENT OF INDIA** MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

सी के मिश्रा C.K.Mishra

D.O.07/COVID/EG-2/2020

Dear Chief Seerebry / Adminishate, I write to you as Chairman of the Empowered Group-2.

12th April 2020

Let me express my gratitude to al of you for having worked really hard to ensure that we scale up testing. One of the critical factors in this exercise of scaling up is increasing the number of testing laborato ies, which we are continuously doing. The effort ublight of use every possible resource to collectively ensure that we are able to reach out. If we want to be successful in this effort, we will have to ensure that every laboratory is used to 1-utirits full capacity.

CM

You would appreciate that if we want to use the capacity of the lab round-the-clock, we will need additional manpower. ICMR has worked out the requirement of State-wise additional manpower that needs to be made available to run these laboratories round-the are in, we have no option and we have to rise to the occasion to face this challenge. clock. I do appreciate that this is a daunting task, but, given the current situation that we

Such manpower and resources will be available in Medical Colleges, etc. Many ख्य सचिव र प्रदेश शार्ष्याधीट labs that are co-located in Medical Colleges and Research Institutes, can redeploy technical lab staff from other departments for COVID-19 testing. These can be trained internally and deployed quickly. Apart from this, you may also like to consider getting the services of trained personnel who may have retired.

> I am enclosing the letter from Secretary, DHR / DG, ICMR along with the list of the required manpower and a list of such labcratories, which are operational across the States. I would suggest that we pick up each of these laboratories, assess the gap and then put them to full capacity.

> I seek your support in trying to explore every possible source of such manpower and attach them to these laboratories so that we can get the best results out of them.

849/15/21/2012 3017/504/20 With regards (अमित मोहन प्रसाद) DS(P)/SO-5 त्सा, स्वारथ्य दे परिवार कल्याण विमाग Yours sincerely उत्तर प्रदेश शासन K. Mishra) वन्द्व काण्डपाल ) निजी सचिव. Encl: As above (वी० हेकाली इि.मोमी) विशेष सचिव. सचिव विकित्ता स्वास्थ्य एवं चिकित्सा स्वास्थ्य एवं परिवार कल्याण विभाग परिवार कल्याण विभाग To उ०प्र० शासन छत्तर प्रदेश शासन। Chief Secretaries of all States/Administrators of all UTs इंदिरा पर्यावरण भवन, जोर बाग रोड़, नई दिल्ली-110 03 फोन : (011) 24695262, 24695265, फैक्स : (011) 24695270

INDIRA PARYAVARAN BHAWAN, JOR BAGH ROAD, NEV/ DELHI-110 003 Ph. : (011) 24695262, 2485265, Fax : (011) 24695270 E-mail : secy-moe @nic.in, Website : moef.gov.in



### प्रोफेसर (डा.) बलराम भार्गव, पतम श्री

एमडी, डीएम, एफआरसीपी (जी.), एफआरसीपी (ई.), एफएसीसी, एफएएचए, एफएएमएस, एफएएएससी, एफ.एन.ए., डी.एस.सी.

> सचिव, भारत सरकार स्वास्थ्य अनुसंधान विभाग स्वास्थ्य एवं परिवार कल्याण मंत्रालय एवं महानिदेशक, आई सी एम आर

#### Prof. (Dr.) Balram Bhargava, Padma Shri

MD, DM, FRCP (Glasg.), FRCP (Edin.), FACC, FAHA, FAMS, FNASc, FASc, FNA, DSc

#### Secretary to the Government of India Department of Health Research Ministry of Health & Family Welfare & Director-General, ICMR



## भारतीय आयुर्विज्ञान अनुसंधान परिषद

स्वास्थ्य अनुसंधान विभाग स्वास्थ्य एवं परिवार कत्याण मंत्रालय भारत सरकार वी. रामलिंगस्वामी भवन, अंसारी नगर नई दिल्ली - 110 029

#### Indian Council of Medical Research

Department of Health Research Ministry of Health & Family Welfare Government of India V. Ramalingaswami Bhawan, Ansari Nagar New Delhi - 110 029

D.O. No.ECD/COVID-19/Misc./2020 Dated: 12<sup>th</sup> April 2020

#### Dear Sir,

This is with reference to scaling up laboratory capacity for COVID-19 testing within the operational network of Government laboratories.

As mentioned in a recent meeting held at PMO, additional manpower needs to be placed within the existing laboratories (N=150) to operationalize them on a 24 X 7 basis.

The estimated manpower requirements have been worked out by ICMR. Assuming manual RNA extraction procedure followed by all laboratories, the estimated total staff requirement for the network of 150 labs will be 3248 people. The calculated shortfall of staff in all categories is 1918 people. This includes 150 Lab in-charges (senior Microbiologists); 226Lab supervisors (scientists / Microbiologists); 1257 Lab Technicians and 285 Data entry operators. Detailed breakup of the shortfall in each category of staff is depicted in Table 1 of the enclosed document.

List of operational Government laboratories is also included in the enclosed document.

I request you to kindly direct the concerned States to deploy additional staff within the functioning COVID-19 testing Government laboratories, for making them operational round the clock. Kindly note that the additional staff should be deployed as per the projected requirements in each category.

With kind regards,

Yours sincerely. Polson Pla ( Bairam Bhargava )

THE P

Shri Amarjeet Sinha, Advisor to Hon'ble Prime Minister of India South Block, New Delhi.

#### Enclosed as above

Copy to:

- 1. Dr. Shrikar K. Pardeshi, IAS, Joint Secretary, PMO, South Block, New Delhi.
- 2. Shri C.K. Mishra, Secretary, Ministry of Environment, Forest & Climate Change
- 3. Principal Secretaries (Health) All Stat >s

# Manpower Requirement for Labs engaged in COVID-Testing

The testing capacity of public labs will need to be enhanced as the number of cases increase and strategy for testing changes. There is a need to optimize the utilization of the existing installed base of manual RT-PCR platforms through multiple shifts across labs. In order to run multiple shifts, trained manpower in adequate numbers needs to be deployed across all labs.

In order to ramp up utilization of existing manual RT-PCR machines and run tests in labs for 24 hrs daily, 3248 personnel (estimated) are required across all current public sector labs. It is estimated that there may be a deficit of 1918 (~60%) in the as is scenario of primarily manual RT-PCR based testing. The number of deficit personnel need to be identified and deployed at relevant labs and necessary training & logistics arrangements need to be made for them.

Based on discussions with a sample of public labs, the following is the estimated requirement & deficit in manpower across labs.

For 151 public labs		Total Manpower Requirement	Manpower Deficit (Estimated)	
Personnel Required	Per Shift/Lab	24 hrs (A)	Assuming Manual RNA Extraction	
Lab In-charge/Owner	1	302	150	
Shift Supervisor/Shift	1	453	226	
Lab Technicians/Shift	4	2040	1257	
DEO/Shift	1	453	285	
Total	7 to 10	3248	1918	

#### Table 1

For every 2nd manual RT-PCR instrument, two more teci nicians are required in every shift Lab technicians are deputed to dirty or clean room, and work simultaneously to modularize components of testing process and increase efficiency

A lab in-charge is assumed for every 12 hours

Requirement is based on manual RT-PCR capacity including 29 labs with automated RNA extraction capabilities Current estimated HR is equivalent to one shift for 151 abs

#### **Key Measures**

- As manual RNA extraction processes take up a large portion of lab technician time, . automated RNA extraction platforms and associated kits can be provided to more labs undertaking manual RNA extraction
- Many public labs that are co-located in medical colleges and research institutes, can redeploy technical lab staff from other departments for COVID-19 testing. These can be trained internally and deployed quicity.
- For data entry operators, many labs have started deploying the CSC personnel allotted to them.

#### Annexures

· · · · · · · · · · · · · · · · · · ·		Shift		Data Entry	
State	Lab In-charge	Supervisor	Lab Technician	Operator	Total
Maharashtra	34	51	243	51	379
Tamil Nadu	24	36	156	36	252
Uttar Pradesh	24	36	147	36	243
Karnataka	22	33	138	33	226
Kerala	20	30	135	30	215
Gujarat	14	21	132	21	188
Rajasthan	16	24	129	24	193
West Bengal	12	18	84	18	132
Telangana	12	18	81	18	129
Andhra Pradesh	12	18	78	18	126
Delhi	14	21	75	21	131
Madhya					
Pradesh	12	18	75	18	123
Bihar	10	15	63	15	103
Odisha	8	12	60	12	92
Assam	10	15	60	15	100
Jammu and					
Kashmir	8	12	54	12	86
Jharkhand	6	9	42	9	66
Uttarakhand	4	6	36	6	52
Punjab	6	9	36	9	60
Himachal					
Pradesh	4	6	30	6	46
Chhattisgarh	4	6	30	6	46
Manipur	4	6	24	6	40
Haryana	4	6	21	6	37
Chandigarh	4	6	18	6	34
Andaman &			10	2	26
Nicobar Islands	2	3	18	3	26
Mizoram	2	3	18	3	
Goa	2	- 3	12	3	20
Dadra & Nagar			10	3	20
Haveli	2	3	12	3	20
Meghalaya	2	3	12	3	20
Puducherry	2	3	12	3	17
Tripura	2	3	9	3 453	3248
Grand Total	302	453 wovided through C	2040	455	

# A. State wise Total Manpower Requirement in 24-hour shift scenario for Government Labs

\*Date entry operators are being provided through CSCs

# INDIAN COUNCIL OF MEDICAL RESEARCH DEPARTMENT OF HEALTH RESEARCH

# Date: 11/04/2020

# Total Operational (initiated independent testing) Government Laboratories reporting to ICMR 151 + 3 collection sites:

S. No.	Names of States	Names of Med cal Colleges				
1.	Andhra Pradesh	1.	Sri Venkateswara Institute of Medical Sciences,			
	(6)		Tirupati			
		2.	Rangaraya Medical College, Kakinada			
		3. Sidhartha Medical College, Vijaywada				
		4.				
		5.	Guntur Medical College, Guntur			
		6.	Rajiv Gar dhi Institute of Medical Sciences, Kadapa			
2. Assam (5)		7.	Gauhati Medical College, Guwahati			
		8.	Regional Medical Research Center, Dibrugarh			
		9.	Jorhat Medical College, Jorhat			
		10.	Silchar Medical College, Silchar			
		11.	Fakkhruc din Ali Ahmed Medical College, Barpeta			
3.	Bihar (5)	12.	Rajendra Memorial Research Institute of Medical			
			Sciences, Patna			
		13.	Indira Gandhi Institute Medical Sciences, Patna			
		14.	Patna Medical College, Patna			
		15.	Darbhan 3a Medical College, Darbhanga			
		16.	SKMCH, Muzaffarpur			
4. Chane	Chandigarh (2)	17.	Post Graduate Institute of Medical Education &			
			Research, Chandigarh			
		18.	Govt. Medical College, Chandigarh			
5.	Chhattisgarh (2)	All India Institute of Medical Sciences, Raipur				
		20.	Late Baliram Kashyap M Govt. Medical College,			
			Jagdalpu			
6.	Delhi (7)	21.	All India Institute Medical Sciences			
		22.	Lady Har linge Medical College			
		23.	National Centre for Disease Control			
		24.	Ram Manohar Lohia Hospital			
		25.	Institute of Liver & Biliary Sciences			
		26.	Army Hospital Research & Referral			
		27.	Maulana Azad Medical College			
7.	Gujarat (7)	28.	BJ Medical College, Ahmedabad			
		29.	MP Shah Govt Medical College, Jamnagar			
		30.	Govt. Medical College, Surat			
		31.	Govt. Medical College, Bhavnagar			
		32.	Govt. Medical College, Vadodara			
		33.	Govt. Medical College, Rajkot			
		34.	NHL Medical College, Ahmedabad			
8.	Goa (1)	35.	Goa Mecical College, Goa			
9.	Haryana (2)	36.	Pt. B.D. Sharma Post Graduate Inst. Of Med. Sciences			
			Rohtak, Haryana			
		37.	BPS Gov . Medical College, Sonipat			
10.	Himachal Pradesh	38.	Indira Gandhi Medical College, Shimla			
	(2)	39.	Dr. Rajer dra Prasad Govt. Medical College, Tanda			

1 0 0 2 6

S. No.	Names of States	Name	es of Medical Colleges
11.	Jammu & Kashmir	40.	Govt. Me lical College, Jammu
1997 (Servi)	(4)	41.	Command Hospital (NC) Udhampur
	1 13 10	42.	Sher-i-Kashmir Institute of Medical Sciences, Srinagar
		43.	Govt. Medical College, Srinagar
12.		44.	MGM Medical College & Hospital, Jamshedpur
	97 77	45.	Rajendra Institute of Medical Sciences, Ranchi
		46.	Patliputra Medical College & Hospital, Dhanbad
13.	Karnataka (11)	47.	Hassan Ir st. Of Med. Sciences, Hassan
19.	Kallialaka (11)	48.	Mysore Medical College & Research Institute, Mysore
		49.	Shivamor ga Institute of Medical Sciences, Shivamogga
		49. 50.	Comman I Hospital (Air Force), Bengaluru
		51.	Bangalor: Medical College & Research Institute,
		51.	Bengaluru
		52.	National Institute of Virology, Bangalore Field Unit, Bengalur 1
		53.	Gulbarga Institute of Medical Sciences, Gulbarga
		54.	Vijaynager Institute of Medical Sciences, Bellary
		55.	National Institute of Mental Health and Neuro-
			Sciences, Bangalore
		56.	Wenlock District Hospital, Mangalore
		57.	Karnataka Institute of Medical Sciences, Hubli
14.	Kerala (10)	58.	National nstitute of Virology, Field Unit, Allapuzzha
		59.	Govt. Medical College, Thiruvanathapuram
		60.	Govt. Medical College, Kozhikode
		61.	Govt. Medical College, Thrissur
		62.	Rajiv Gandhi Center for Biotechnology
			Thiruvanathapuram
		63.	Sree Ch tra Tirunal Institute of Medical Sciences Thiruvanathapuram
		64.	State Public Health Laboratory, Trivandrum
		65.	Inter University, Kottayam
		66.	Malabar Cancer Center, Thalassery
		67.	Central University of Kerala, Periye, Kasaragod
			National Institute of Virology, Pune
15.	Maharashtra (17)		Seth GS Medical College & KEM Hospital, Mumbai
		69.	Kasturba Hospital for Infectious Diseases, Mumbai
		70.	National Institute of Virology Field Unit, Mumbai
		71.	
		72.	Armed Forces Medical College, Pune
		73.	BJ Medical College, Pune
		74.	Indira Gandhi Govt. Medical College, Nagpur
		75.	Grant Medical College & Sir JJ Hospital, Mumbai
		76.	Govt. Medical College, Aurangabad
		77.	V. M. Government Medical College, Solapur
1		78.	Haffkine Institute, Mumbai
		79.	
	and the first of the second	80.	Government Medical College, Miraj
		81.	All India Institute of Medical Sciences, Nagpur
		82.	ACTOC Number
		83.	*Tata Memorial Centre ACTREC, Mumbai

S. No.	Names of States	Names of Med cal Colleges			
	Madhya Pradesh (6)	84. Govt. Mc dical College, Akola			
16.		86.	All India nstitute of Medical Sciences, Bhopal National Institute for Research on Tribal Health, Jabalpur		
			Mahatma Gandhi Memorial Medical College, Indore Gandhi Medical College, Bhopal Bhopal Memorial Hospital & research Centre, Bhopal Gajra Raja Medical College, Gwalior		
17.	Manipur (2)	91.	Jawahar al Nehru Institute of Med. Sciences, Imphal- East, Manipur		
18.	Meghalaya (1)	92. 93.	Regiona Institute of Medical Sciences, Imphal North Eastern Indira Gandhi Regional Institute of Health & Medical Sciences, Shillong, Meghalaya		
19.	Mizoram (1)	94.	Zoram Medical College		
20.	Odisha (4)	95. 96. 97. 98.	Regional Medical Research Centre, Bhubaneshwar All India Institute of Medical Sciences, Bhubaneshwar SCB Medical College and Hospital, Cuttack MKCG Medical College, Berhampur		
21.	Puducherry (1)	99.	Jawahar al Institute of Postgraduate Medical Education & Research, Puducherry		
22.	Punjab (3)	100. 101. 102.	Govt. Medical College, Amritsar Govt. Medical College, Patiala Guru Gcbind Singh Medical University, Faridkot		
23.	Rajasthan (8)	103. 104. 105. 106. 107. 108. 109. 110.	Sawai N an Singh Medical College, Jaipur Dr. Sampurnan and Medical College, Jodhpur Jhalawar Medical College, Jhalawar RNT Medical College, Udaipur SP Med cal College, Bikaner All India Institute of Medical Sciences, Jodhpur JLN Medical College, Ajmer Govt. Medical College, Kota		
24.	Tamil Nadu (12)	<ul> <li>111.</li> <li>112.</li> <li>113.</li> <li>114.</li> <li>115.</li> <li>116.</li> <li>117.</li> <li>118.</li> <li>119.</li> <li>120.</li> <li>121.</li> <li>122.</li> </ul>	King Institute of Preventive Medicine & Research Chenna Madras Medical College, Chennai Govt. Theni Medical College, Theni Tirunel eli Medical College, Tirunelveli Govt. Medical College, Tirunelveli Govt. Medical College, Thiruvarur Kumar Mangalam Govt. Medical College, Salem Coimbatore Medical College, Coimbatore Govt. Medical College, Villupuram Madurai Medical College, Madurai K A P V swanatham Govt. Medical College, Trichy Perundurai Medical College, Perundurai Govt. E harmapuri Medical College, Dharmapuri		
25.	Telangana (6)	123. 124. 125. 126.	Gandh Medical College, Secunderabad Osmania Medical College, Hyderabad Sir Ror ald Ross of Tropical & Communicable Disease Hyderabad.		

5. No.	Names of States	Names of Med cal Colleges			
		127. Institute of Preventive Medicine, Hyderabad			
		128. Centre for Cellular & Molecular Biology, Hyderabad			
26.	Tripura (1)	129. Governn ent Medical College, Agartala			
27.	Uttar Pradesh (12)	<ul> <li>130. King George Medical University, Lucknow</li> <li>131. Institute of Medical Sciences, Banaras Hindu</li> <li>University, Varanasi</li> </ul>			
		<ul> <li>132. Jawahar al Nehru Medical College, Aligarh</li> <li>133. Commar d Hospital, Lucknow</li> <li>134. Lala Lajpat Rai Memorial Medical College, Meerut</li> </ul>			
		<ol> <li>134. Lala Lajpat Kal Methonal Medical College, Meerut</li> <li>135. Sanjay Gandhi Post Graduate Institute, Lucknow</li> <li>136. MLN Medical College, Allahabad</li> </ol>			
		137. Uttar Pradesh University of Medical Sciences (Former y Uttar Pradesh RIMS), Saifai			
		138. MLB Medical College, Jhansi			
		139. Regional Medical Research Centre, Gorakhpur			
		140. SN Med cal College, Agra			
		141. RML Hogpital, Lucknow			
28.	Uttarakhand (2)	<ol> <li>Govt. Medical College, Haldwani</li> <li>All India Institute of Medical Sciences, Rishikesh</li> </ol>			
29.	West Bengal (6)	<ul> <li>144. Nationa Institute of Cholera &amp; Enteric Diseases, Kolkata</li> <li>145. Institute of Post Graduate Medical Education &amp; Research, Kolkata</li> </ul>			
		<ul> <li>146. Midnap pre Medical College, Midnapore</li> <li>147. North Bengal Medical College, Darjeeling</li> <li>148. School of Tropical Medicine, Kolkata</li> <li>149. Malda Medical College &amp; Hospital, Malda</li> </ul>			
30.	Andaman & Nicobar Islands (1)	150. Regional Medical Research Centre, Port Blair			
31.	Dadra & Nagar Haveli (1)	151. Shri Vonoba Bhave Civil Hospital, Silvassa			
		Collection sites only			
31.	Sikkim (1)	152. Sir Thutob Namgyal Memorial (STNM), Gangtok			
32.	Ladakh (1)	153 Sonam Norboo Memorial Hospital (SNMH), Len			
33.	Arunachal Pradesh (1)	154. Tomo Riba Institute of Health & Medical Science (TRIHN S), Naharlagun			

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